THE UNIVERSITY OF CALGARY

Determinants of the satisfaction of the primary stakeholders with the succession process in family firms

by

Pramodita Sharma

A DISSERTATION
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

FACULTY OF MANAGEMENT

CALGARY, ALBERTA

MAY, 1997

©Pramodita Sharma 1997
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

0-612-24563-2
ABSTRACT

Although family businesses provide for a majority of jobs in most countries, their longevity across generations is tenuous and most barely outlive the tenure of their founders (Ambrose, 1983; Goldwasser, 1986). The issue of succession has received considerable attention in the literature, and a number of factors influencing succession in family businesses have been suggested. However, this work remains highly fragmented, making it difficult to draw firm conclusions. Furthermore, much of the research in this field has been clinical and descriptive. Proposed models of succession quality have not been subjected to rigorous empirical testing. This study uses a four stage approach to identify and test the relative importance of factors that determine the success of the management transition from one family member to another. First, a comprehensive literature review was conducted to get acquainted with what is already known. Second, factors that influence the succession process suggested in literature were identified, and a comprehensive model of the determinants of satisfaction with the succession process was developed. It was hypothesized that five primary determinants of the satisfaction of family members with the succession process are: (i) Acceptance of individual roles in the context of the business, (ii) Agreement to continue the business, (iii) Propensity of incumbent president to step aside (or retire), (iv) Propensity of successor to take over, and (v) Succession planning. Factors that influence each of these primary determinants were included in the model. Third, the model developed in stage two was put to a preliminary test using four case studies. This preliminary test provided initial confirmation of the validity of the model. In the last stage, a set of three questionnaires—one each for the outgoing or past president, the successor or designated successor, and other family members actively involved in the business,
was developed and sent by mail to each of the 604 member firms of the Canadian Association of Family Enterprises. A total of 310 usable questionnaires were received.

The collected data were analyzed using the techniques of Multivariate Analysis of Variance (MANOVA) to detect any systematic biases in the data, Multiple Regression to test the overall fit of the model and estimate model parameters, and Structural Equation Modeling to gain additional insights into the data and develop other propositions for future research.

Results of MANOVA indicated that the responses of presidents were significantly different from both the responses of successors and other family members. On the other hand, no significant difference was found between the responses of successors and other family members. A decision was made to split the data into two groups: (i) Successors and other family members, and (ii) Presidents, for subsequent analysis.

The results of multiple regression indicated a highly significant fit of the model for both data sets. It was found that all respondents indicated a positive influence of the acceptance of individual roles by family members in the context of the business, and succession planning, on their satisfaction with the succession process. In addition to these two variables, the presidents' satisfaction was positively influenced by the propensity of successors to take over the business, while that of successors and other family members was influenced by the propensity of the incumbent president to step aside. Interestingly, neither the presidents nor the successors indicated their own propensity to step aside or take over respectively, as being an important influencer of their satisfaction with the succession process.

Aside from the hypothesized linkages among variables, some important new linkages were suggested by the results of structural equation modeling. For example, an incumbent’s
trust in a successor's abilities and intentions was suggested to have a significant positive influence on the overall satisfaction of successors and other family members with the succession process, the propensity of a successor to take over the business, and the extent of succession planning undertaken.

The findings from this theory testing study are useful in determining the relative importance of the key determinants of the succession process. This understanding is important both for future theory development as well as for practising managers. Future researchers can build on the basic model developed in this study and other propositions suggested and test them using other populations. This would strengthen the theories developed in this study. For family business managers the clarification of the relative importance and difference in the determinants of satisfaction with the succession process for different family members in the business should help in better preparing for the generational transition of the management of their business.
DEDICATION

For,

Sanjay - who provides meaning to my life

Smita - our cherished one

My parents,

Chander and Yoginder Pal Joshi

- who ingrained in me a strong value system

Sushma and Madan Mohan Sharma

- who demonstrated to me the power of love

My siblings,

Vinodita, Aparna, and Dinkar - a lovely trio

- it’s an honour to be your sister

And finally,

To our family business - due to which this work exists.
ACKNOWLEDGEMENTS

With heartfelt thanks to four excellent academicians: Dr. Jim Chrisman, Dr. Mansour Javidan, Dr. Jess Chua, and Dr. Amy Pablo, who stood by me throughout this study. This work would not have turned out the way it has without your continuous encouragement and advice. I have been fortunate in getting an opportunity to work with all of you and cherish every moment of our interaction. Special thanks to Jim who is in my view an example of a fine person and an excellent supervisor - the best any student can ask for. I can never thank you enough Jim.

This work would never have been possible if our daughter had not been well cared for by the ladies at Panda Child Development centre. Please accept my sincere appreciation and gratitude.

The research support provided by the University of Calgary’s research services, and the Faculty of Management, and the Canadian Association of Family Enterprise - especially Ms. Kathy Rendall, is much appreciated.

And finally, I would like thank my colleagues at Dalhousie University, especially Bob Blunden and Louise Young who took the time to go through this lengthy document and helped me detect errors in language and expression used.
TABLE OF CONTENTS

Title Page ......................................................................................................................... i
Approval Page ................................................................................................................... ii
Abstract .............................................................................................................................. iii
Dedication ............................................................................................................................ vi
Acknowledgements ........................................................................................................ vii
Table of Contents ............................................................................................................. viii
List of Appendices ........................................................................................................... x
List of Tables .................................................................................................................... xi
List of Figures .................................................................................................................... xiii

CHAPTER 1: INTRODUCTION ......................................................................................... 1
  1.1. The Research Question .......................................................................................... 4
    1.1.1. Family Business .............................................................................................. 5
    1.1.2. Satisfaction of primary stakeholders with the succession process ................ 10
  1.2. The Research Process ............................................................................................ 12
    1.2.1. Exploration .................................................................................................... 13
    1.2.2. Development of a conceptual model .............................................................. 13
    1.2.3. Preliminary testing of the model .................................................................. 14
    1.2.4. Final testing and analysis ............................................................................ 14
  1.3. Scope of the research ............................................................................................. 17
  1.4. Organization of the dissertation ............................................................................ 21

CHAPTER 2. REVIEW OF LITERATURE .................................................................... 23
  2.1. Founder or owner-manager’s characteristics ....................................................... 25
    2.1a. Demographic characteristics ............................................................................ 26
    2.1b. Relationship of an owner-manager with the business ...................................... 27
  2.2. Successor’s characteristics .................................................................................... 30
    2.2a. Demographic characteristics ............................................................................ 30
    2.2b. Relationship with the owner-manager ............................................................... 32
    2.2c. Relationship with other siblings ...................................................................... 33
    2.2d. Interest and proficiency of successor/s in business ........................................... 34
  2.3. Family characteristics and influences ................................................................... 36
    2.3a. Family dynamics .............................................................................................. 37
    2.3b. Ethnicity ........................................................................................................... 38
    2.3c. Life cycle stage of family and business ............................................................. 39
    2.3d. Types of families .............................................................................................. 40
    2.3e. Culture in family firms .................................................................................... 41
  2.4. Organizational characteristics ............................................................................... 42
    2.4a. Succession planning ......................................................................................... 43
    2.4b. Role of advisory bodies .................................................................................... 46
    2.4c. Organizational stability and growth .................................................................. 48
    2.4d. Goals and objectives of family firms ............................................................... 49
  2.5. Conclusion ................................................................................................................ 52
CHAPTER 6. FINAL TESTING OF THE MODEL - THE STATISTICAL ANALYSES

6.1. Data Diagnostics ................................................................. 148
6.2. Biases in the data ............................................................... 152
6.3. Scale construction ............................................................. 153
6.3.1. The antecedent and mediating variables ......................... 153
6.3.1a. Perceived family harmony ........................................... 153
6.3.1b. Mutual acceptance of individual roles .......................... 154
6.3.1c. Payoffs from business ............................................... 156
6.3.1d. Agreement to continue the business ............................ 158
6.3.1e. Career interests of successors .................................... 160
6.3.1f. Propensity of successor to take over ............................ 161
6.3.1g. Incumbent's interests outside the business .................... 162
6.3.1h. Trust in successor's abilities and intentions .................. 163
6.3.1i. Propensity of incumbent to step aside .......................... 165
6.3.1j. Presence of an active advisory board ........................... 166
6.3.1k. Succession planning .................................................. 168
6.3.2. The dependent variable: Satisfaction with the succession process ... 172
6.4. Testing for biases in data using scales ................................ 175
6.5. Testing for regression assumptions .................................... 177
6.6. Testing of hypotheses - results of multiple regression and path analysis .... 178
6.7. Results of Structural equation modeling ................................ 206
6.8. Conclusion ....................................................................... 218

CHAPTER 7. DISCUSSION AND IMPLICATIONS .......................... 224
7.1. Principal findings ............................................................. 230
7.2. Limitations of the study ................................................... 240
7.3. Theoretical contributions .................................................. 242
7.4. Implications for managerial practice ................................... 248
7.5. Conclusion ........................................................................ 254

REFERENCES ........................................................................ 255

LIST OF APPENDICES
Appendix A. Questionnaire items for variables ............................ 275
Appendix B. Cover letter for the first mailing .............................. 289
Appendix C. The fax reminder .................................................. 290
Appendix D. Cover letter for the second mailing ........................ 291
Appendix E. Copy of summary results sent to the respondents .... 292
Appendix F. Additional analysis conducted ............................... 296
Appendix G. Copies of programs used for Structural Equations Modeling (EQS) .... 333
Appendix H. Testing for the regression assumption of Linearity ..... 338
Appendix I. Testing for the regression assumption of Normality ... 387
Appendix J. Testing for the regression assumption of Homoscedasticity ... 420
LIST OF TABLES

Table 1.1. Definitions of Family Business in the literature.................................................. 6
Table 2.1. Factors that influence a succession process (as suggested in the literature)......... 54
Table 4.1. Details of responses received.............................................................................. 100
Table 5.1. Gender, generation, and type of succession experienced by family members in
the four cases studied........................................................................................................ 121
Table 5.2. Preliminary testing of the hypotheses developed................................................ 143
Table 5.3. Overall results of the preliminary analysis - Percentages.................................. 144
Table 5.4. Overall results of the preliminary analysis - Chi-square tests.......................... 145
Table 5.5. Calculations for chi-square tests.......................................................................... 146
Table 6.1a. Frequencies and valid percentages for the variable - TIMING.......................... 149
Table 6.1b. Frequencies and valid percentages for the variable - RESPONSE...................... 149
Table 6.1c. Frequencies and valid percentages for the variable - RESPONDENTS............. 149
Table 6.1d. Frequencies and valid percentages for the variable - REVENUES.................... 150
Table 6.1e. Frequencies and valid percentages for the variable - GENDER......................... 150
Table 6.1f. Frequencies and valid percentages for the variable - GENERATION................ 151
Table 6.1g. Frequencies and valid percentages for the variable - ETHNIC......................... 151
Table 6.2. Results of the preliminary testing of biases in data using MANOVA.................. 152
Table 6.3a. Perceived family harmony: Results of scale reliability tests.......................... 153
Table 6.3b. Perceived family harmony: Results of factor analysis..................................... 154
Table 6.4a. Mutual acceptance of individual roles: Results of scale reliability tests............ 155
Table 6.4b. Mutual acceptance of individual roles: Results of factor analysis.................. 155
Table 6.5a. Payoffs from business: Results of scale reliability tests.................................. 156
Table 6.5b. Payoffs from business: Results of factor analysis........................................... 157
Table 6.6a. Agreement to continue the business: Results of scale reliability tests............. 158
Table 6.6b. Agreement to continue the business: Results of factor analysis...................... 158
Table 6.6c. Extent of Presidents’ commitment to continue the business: Results of scale
reliability tests................................................................................................................... 160
Table 6.6d. Agreement of other family members to continue the business: Results of scale
reliability tests................................................................................................................... 160
Table 6.7a. Career interests of successors: Results of scale reliability tests....................... 161
Table 6.7b. Career interests of successors: Results of factor analysis............................... 161
Table 6.8a. Propensity of successor to take over: Results of scale reliability tests.............. 162
Table 6.8b. Propensity of successor to take over: Results of factor analysis..................... 162
Table 6.9a. Incumbents’ interests outside the business: Results of scale reliability tests..... 163
Table 6.9b. Incumbents’ interests outside the business: Results of factor analysis.............. 163
Table 6.10a. Trust in successors’ abilities and intentions: Results of scale reliability tests.... 164
Table 6.10b. Trust in successors’ abilities and intentions: Results of factor analysis........... 164
Table 6.11a. Propensity of incumbent to step aside: Results of scale reliability tests......... 165
Table 6.11b. Propensity of incumbent to step aside: Results of factor analysis................ 165
Table 6.12a. Presence of an active advisory board: Results of scale reliability tests........... 167
Table 6.12b. Presence of an active advisory board: Results of factor analysis.................. 167
Table 6.12c. Presence of a formal active advisory board: Results of scale reliability tests... 168
Table 6.13a. Succession planning: Results of scale reliability tests.................................... 170
Table 6.13b. Succession planning: Results of factor analysis .......................................................... 171
Table 6.14a. Satisfaction with the succession process: Results of scale reliability tests ............... 173
Table 6.14b. Satisfaction with the succession process: Results of factor analysis .......................... 174
Table 6.15. Results of testing for RESPONDENT bias in the constructed scales using MANOVAs .......................................................... 176
Table 6.16. Means and standard deviations for variables in the model ......................................... 179
Table 6.17. Regression results of the mediating variables on the satisfaction with the succession process (SwSP - dependent variable) .......................................................... 183
Table 6.18. Regression results of the perceived family harmony (PFH) on mutual acceptance of individual roles (AIR - dependent variable) .................................................. 185
Table 6.19a. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on extent of commitment of presidents to continue the business (ACBa - dependent variable) .................................................. 186
Table 6.19b. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on agreement of family members to continue the business (ACBb - dependent variable) .................................................. 187
Table 6.20. Regression results of the payoffs from business (PFB), career interests of successors (CI), and acceptance on individual roles (AIR) on the propensity of successor to take over (PSTO - dependent variable) .................................................. 188
Table 6.21. Regression results of the trust in successor capabilities and intentions (TSAI), and incumbent’s interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable) .... 190
Table 6.22. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on ‘succession planning’ (SP - dependent variable) .................................................. 192
Table 6.23. Regression results of the seven antecedent variables on satisfaction with succession process (SwSP - dependent variable) .......................................................... 194
Table 6.24. Calculations for the indirect effects of the antecedent variables on SwSP - the main dependent variables (for PRESIDENTS) .................................................. 196
Table 6.24a. Calculations for the indirect effects of the antecedent variables on SwSP - the main dependent variables (for SUCCESSORS & OTHER FAMILY MEMBERS) .................................................. 197
Table 6.25. Direct and Indirect effects of the antecedent variables on Satisfaction with succession process (SwSP) for PRESIDENTs data set .................................................. 198
Table 6.25a. Direct and Indirect effects of the antecedent variables on Satisfaction with succession process (SwSP) for SUCCESSORs AND OTHER FAMILY MEMBERs data set .................................................. 198
Table 6.26. R² values for the just identified models ........................................................................ 200
Table 6.27. R² values for the over-identified models used in this research .................................. 201
Table 6.28. Overall testing of the path model for the two data sets ................................................ 201
Table 6.29. Calculation of Bayesian Information Criteria for the two data sets - antecedent variables vs mediating variables .................................................. 203
Table 6.30. Calculation of Bayesian Information Criteria (BIC) for the two data sets - the five mediating variables, PFB, and TSAI for presidents data set, and the mediating variables, PFH, and TSAI for successors .................................................. 204
Table 6.31. A comparison of models using Bayesian Information Criteria (BIC) .......................... 205
Table 6.32. Results of Wald’s test for the President’s data set ......................................................... 207
Table 6.32a. Results of Wald’s test for the Successors’ and other family members data set ... 207
Table 6.33. Results of LM test - the paths that need to be freed to improve the model fit for the Presidents data set ................................................................................ 208
Table 6.33a. Results of LM test - the paths that need to be freed to improve the model fit for the Successors and other family members data set ............................................. 208
Table 6.34. Results of structural equation modeling (using EQS) for the Presidents data set 213
Table 6.34a. A comparison of the two model (M1 - developed in Chapter 3) and M2 (with 2 paths freed based on the results of LM test), using BIC statistics ... 214
Table 6.35. Results of structural equation modeling (using EQS) for the Successors and other family members data set ................................................................. 216
Table 6.35a. A comparison of the two model (M1 - developed in Chapter 3) and M2 (with 3 paths freed based on the results of LM test), using BIC statistics ... 217
Table 6.36. Summary of the alpha values and number of indicators for all variables .......... 219
Table 6.37. Summary of results of Multiple Regression, Path Analysis, and Structural Equation Modeling analyses for both data sets ......................................................... 221

LIST OF FIGURES

Figure 3.1. Determinants of the satisfaction with the succession process in family businesses ... 61
Figure 7.1. Results of hypotheses testing for presidents data set .......................................................... 228
Figure 7.2. Results of hypotheses testing for successors and other family members data set ................................................................. 229
Figure 7.3. Key relationships suggested by the study ........................................................................... 239
CHAPTER 1
INTRODUCTION

Why should family businesses form the focus of a major research investigation? More specifically, why should the issue of succession in these firms receive any more attention than it already has? This study starts by addressing these two basic questions.

Family businesses represent a significant portion of the world economy. Although there are no national statistics available, estimates of the number of these businesses vary from 80% (Ward, 1987) to over 90% (Alcorn, 1982; Beckhard & Dyer, 1983a) of all businesses in the US, 65% in Canada (CAFE - Canadian Association of Family Enterprise estimates), and 67% in the UK (Donckels & Frohlick, 1991). Recently, using data available from government, private, and academic resources, Shanker & Astrachan (1995) concluded that, depending on how one defines family business, the number of family firms in the US varies from 4.1 million to 20.3 million, accounting for 12% to 49% of the total GDP, and employing between 15% to 59% of the US work force. They concluded that their economic impact ranges from ‘very large to overwhelming’.

Although these businesses represent a significant portion of the world economy, their longevity across generations is tenuous and most barely outlive the tenure of their founder (Ambrose, 1983; Goldwasser, 1986). It has been estimated that only 30% of the family firms survive the transition to the second generation, and only 10% make it to the third generation (Beckhard & Dyer, 1983a, 1983b; Ward, 1987; Sonnenfeld & Spence, 1989).

Another factor that contributes to the need for focusing an investigation on the issue of succession in family firms is changing demographic trends in North America. Statistics Canada
has predicted an inversion of the age pyramid with individuals 65 years and over constituting the fastest growing sector of the Canadian population. According to Statistics Canada, there were 3 million Canadians over the age of 65 (11.3% of the total population) in 1989. It is estimated that by the year 2036, this number will increase to 8 million individuals or 24.3% of the total population (Statistics Canada). A similar trend has been predicted for the US (Lansberg, Perrow, & Rogolsky, 1988). With this aging of the population, the number of business owners confronting the realities of succession and retirement will accelerate in the coming decades (Sonnenfeld, 1986; Lansberg, Perrow, & Rogolsky, 1988).

With the downsizing of corporate North America, and the challenging economic climate of the 1990s, the number of individuals starting their own businesses is rapidly increasing. This trend has received considerable attention in the popular press. In an article titled "Kissing off Corporate America", Kenneth Labich suggests that large corporations have lost their luster as places to work among business school students, many of whom prefer to pursue entrepreneurial careers (Fortune, Feb.20, 1995). Many of these new ventures will be family businesses (Davis, 1983) and will eventually face the challenging task of transition from one generation to the next (Churchill & Hatten, 1987).

More broadly, succession imposes a wide variety of significant changes simultaneously on the family, ownership, and management structures of family firms (Handler, 1989; Lansberg, Perrow, and Rogolsky, 1988). The cumulative effect of a large number of such transitions occurring throughout the society will be significant both in terms of the number of individuals involved in such transitions, and the effect on the economy as a whole. This explains the need for focusing a major investigation on succession in family businesses.
However, the issue of succession has received considerable attention in the literature to an extent that Wortman (1994:3) has commented that "currently the field is based largely on the succession literature, where the number of conceptual and empirical studies has doubled in the past five years". Thus the question arises — Do we really need another study on this issue?

Some authors (e.g., Malone & Jenster, 1992) have argued that although the literature has emphasized the issue of succession, this event occurs only once every 20-30 years. They suggest that more emphasis should be placed on finding ways to revitalize the business, perhaps several times during the tenure of one generation, to make it even worthwhile to transfer it to the next generation. While this is a valid argument, the reverse can be argued too; that is, if the business is extremely profitable and is running smoothly, but the succession from one generation to the next is not properly carried out, it can threaten the very survival of the business as a family business (Christensen, 1953). This argument becomes evident from the disruption caused by mismanaged succession processes in large family organizations such as McCains Foods Ltd. (net worth over $3.2 billion US and 12,500 employees) and Value Line Inc. (net worth of $340 million US). Therefore, while it is worth the effort of researchers to find ways to improve the performance of a business, it is equally important to determine the factors that lead to successful management transitions whether they be from one generation to the next or between family members of the same generation.

The family business literature has widely recognized that succession is both critical to, and problematic for, the survival of family firms (Barnes & Hershon, 1976; Beckhard & Dyer, 1983a, 1983b; Churchill & Hatten, 1987; Handler & Kram, 1988; Stempler, 1988; Lane, 1989; Goldberg, 1991; Welsch, 1993). In fact, according to Peter Davis, "succession in family
businesses is probably the most complex management challenge anybody faces" (Handler & Kram, 1988: 361). In a similar vein, Barnes and Hershon (1976) have described the transition from one generation to the next as one of the most agonizing experiences that any (family) business faces. Due to the sheer numbers of such businesses, and the impact that succession has on these firms, it is important to understand factors that influence the succession process.

Although a number of factors influencing succession in family businesses have been suggested in the literature, this work remains highly fragmented, and no unified perspective exists. This fragmentation makes it difficult to draw firm conclusions. Furthermore, much of the research in this field has been clinical and there has been a heavy reliance on case studies and consultants' accounts (Wortman, 1994). Although valuable insights have been gained by such accounts, it is difficult to generalize conclusions based on this work. The findings are largely descriptive and proposed models of succession quality have not been subjected to the kind of rigorous empirical testing which will allow for explanation, prediction, or generalization. There is a need for a broad based conceptual model that incorporates the critical factors influencing succession suggested in the literature. Furthermore, such a model needs to be empirically tested to determine the relative importance of each of these factors. This study is directed towards this end, that is, to identify and empirically test the relative importance of factors that determine the successful managerial transition from one family member to another.

1.1. The Research Question

This study is designed to determine the factors that influence a succession process from the perspective of various family members actively involved in the business (referred to as stakeholders). More specifically, the research question to be examined is:
What are the factors that influence the satisfaction of primary stakeholders (presidents', successors, and other family members) with the succession process in family firms?

In order to completely understand the research question it becomes necessary to provide clear definitions and explanations of some of the terms used in the research question. This task is undertaken next.

1.1.1. Family Business. Definitions of family business abound in the literature (Desman & Brush, 1991), and definitional ambiguities are present (Upton, Vinton, Seaman, & Moore, 1993). In the literature review conducted for this study, thirty-four alternative definitions of family business were identified. Depending on their interests and perspective, various authors have emphasized different aspects to be included in the definition. Although various calls have been made for finding the commonalties in the proposed definitions (Lansberg, Perrow, & Rogolsky, 1988; Wortman, 1994), few attempts have been made towards this end. Noteworthy are two systematic attempts towards consolidating the existing definitions and providing definitional clarity to the term 'family business'. The first such attempt was made by Handler (1989), who identified four foci used for defining family firms—degree of ownership and management of family members, interdependent sub-systems, generational transfer, and multiple conditions. This categorization is used to organize the definitions identified in the literature in Table 1.

---

Throughout this study the terms president, past president, or predecessor are used to describe the family member who is handing over management control of the business to another family member. The individual taking over this role has been referred to as a successor or designated successor depending on whether that person has assumed the role of president or is being groomed to do so.
<table>
<thead>
<tr>
<th>NAME &amp; YEAR</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OWNERSHIP-MANAGEMENT FOCUS</strong></td>
<td></td>
</tr>
<tr>
<td>Alcorn, 1982</td>
<td>'a profit-making concern that is either a proprietorship, a partnership, or a corporation......If part of the stock is publicly owned, the family must also operate the business' (p.230).</td>
</tr>
<tr>
<td>Babicky, 1987</td>
<td>'is the kind of small business started by one or a few individuals who had an idea, worked hard to develop it, and achieved, usually with limited capital, growth while maintaining majority ownership of the enterprise' (p.25)</td>
</tr>
<tr>
<td>Barnes &amp; Hershon, 1976</td>
<td>'controlling ownership is rested in the hands of an individual or of the members of a single family' (p.106).</td>
</tr>
<tr>
<td>Barry, 1975</td>
<td>'an enterprise which, in practice, is controlled by the members of a single family' (p.42)</td>
</tr>
<tr>
<td>Carsrud, 1994</td>
<td>'firm's ownership and policy making are dominated by members of an &quot;emotional kinship group&quot; whether members of that group recognize the fact or not' (p. 40)</td>
</tr>
<tr>
<td>Covin, 1994</td>
<td>'a business owned and operated by a family that employs several family members' (p.288)</td>
</tr>
<tr>
<td>Davis &amp; Taguiri, 1985</td>
<td>'a business in which two or more extended family members influence the direction of the business' (quoted in Rothstein, 1992; p.398)</td>
</tr>
<tr>
<td>Donckels &amp; Frohlich, 1991</td>
<td>'if family members own at least 60 percent of the equity' (p.152)</td>
</tr>
<tr>
<td>Dreux, 1990</td>
<td>'are economic enterprises that happen to be controlled by one or more families' (p. 226). Control has been considered as 'a degree of influence in organizational governance sufficient to substantially influence or compel action' (p. 226)</td>
</tr>
<tr>
<td>Dyer, 1986</td>
<td>'in which decisions regarding its ownership or management are influenced by a relationship to a family (or families)' (p.xiv)</td>
</tr>
<tr>
<td>Fiegener, Brown, Prince, &amp; File, 1994</td>
<td>'a firm that is both family owned and managed' (p.318)</td>
</tr>
<tr>
<td>Gallo &amp; Sveen, 1991</td>
<td>'a business where a single family owns the majority of stock and has total control' (p.181)</td>
</tr>
<tr>
<td>Holland &amp; Oliver, 1992</td>
<td>'any business in which decisions regarding its ownership or management are influenced by a relationship to a family or families' (p. 27)</td>
</tr>
<tr>
<td>Lansberg, Perrow, Rogolsky 1988</td>
<td>'a business in which members of a family have legal control over ownership' (p.2)</td>
</tr>
<tr>
<td>Lansberg, Astrachan, 1994</td>
<td>'a company that is owned or controlled by a family and in which one or more relatives is involved with management' (p. 39)</td>
</tr>
<tr>
<td>NAME &amp; YEAR</td>
<td>DEFINITION</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Leach, et al 1990</td>
<td>'a company in which more than 50 percent of the voting shares are controlled by one family, and/or a single family group effectively controls the firm, and/or a significant proportion of the firm's senior management is members from the same family' (quoted by Astrachan, 1993, pp 341-342)</td>
</tr>
<tr>
<td>Lyman, 1991</td>
<td>'the ownership had to reside completely with family members, at least one owner had to be employed in the business, and one other family member had either to be employed in the business or to help out on a regular basis even if not officially employed' (p. 304)</td>
</tr>
<tr>
<td>Pratt &amp; Davis, 1986</td>
<td>'one in which two or more extended family members influence the direction of the business through the exercise of kinship ties, management roles, or ownership rights' (chap.3, p2)</td>
</tr>
<tr>
<td>Stern, 1986</td>
<td>'owned and run by the members of one or two families' (p.xxi)</td>
</tr>
<tr>
<td>Upton &amp; Sexton, 1987</td>
<td>'one that includes two or more relatives and has at least two generations working together in an operating capacity' (p.316)</td>
</tr>
<tr>
<td>Ward, 1990</td>
<td>'a business in which there are two or more family members influencing the business' (p. 66)</td>
</tr>
<tr>
<td>Welsch, 1993</td>
<td>'one in which ownership is concentrated, and owners or relatives of owners are involved in the management process.' (p.40)</td>
</tr>
<tr>
<td></td>
<td><strong>GENERATIONAL TRANSFER FOCUS</strong></td>
</tr>
<tr>
<td>Churchill &amp; Hatten, 1987</td>
<td>'what is usually meant by family business.....is either the occurrence or the anticipation that a younger family member has or will assume control of the business from the elder' (p.52)</td>
</tr>
<tr>
<td>Ward, 1987</td>
<td>'one that will be passed on for the family's next generation to manage and control' (p.252)</td>
</tr>
<tr>
<td></td>
<td><strong>INTERDEPENDENT SUBSYSTEMS</strong></td>
</tr>
<tr>
<td>Beckhard &amp; Dyer, 1983</td>
<td>'the subsystems in the family firm system.....include (1) the business as an entity, (2) the family as an entity, (3) the founder as an entity, and (4) such linking organizations as the board of directors' (p.6)</td>
</tr>
<tr>
<td>Davis, P. 1983</td>
<td>'It is the interaction between two sets of organization, family and business, that establish the basic character of the family business and defines its uniqueness' (p.47)</td>
</tr>
<tr>
<td></td>
<td><strong>MULTIPLE CONDITIONS</strong></td>
</tr>
<tr>
<td>Astrachan &amp; Kolenko, 1994</td>
<td>'family ownership of more than 50% of the business in private firms or more than 10% of the stock in public companies; more than one family member works in the business or the owner anticipates passing the business to the next generation of family members or the owner identifies the firm as a family business....' (p.254)</td>
</tr>
<tr>
<td>Donnelley, 1964</td>
<td>'when it has been closely identified with at least two generations of a family and when this link has had a mutual influence on company policy and on the interests and objectives of the family' (p.94)</td>
</tr>
<tr>
<td>Handler, 1989</td>
<td>'an organization whose major operating decisions and plans for leadership succession are influenced by family members serving in management or on the board' (p.262)</td>
</tr>
</tbody>
</table>
A closer look at the definitions in the table reveals that although there is a lack of consensus as to what defines a family business, authors tend to agree that it is the involvement of family in business that distinguishes family businesses from non-family businesses. However, different researchers choose to focus on different ways in which this involvement can be determined, for example, through ownership or management, generational transfer of business, linkages between the systems of family and business, or a number of these dimensions simultaneously. Furthermore, while several authors have used one dimension to define family business, they recognize the importance of other dimensions in their writings. For example, while Barry (1975) defines family business as 'an enterprise which, in practice, is controlled by the members of a single family' (p.42), he recognizes that the 'problem area is the question of management succession' (referring to the succession of the family owner-managers). Similarly, although Barnes and Hershon (1976) define family business based on an ownership-management focus, as one wherein the 'controlling ownership is rested in the hands of an individual or the members of a single family' (p.106), they describe the transition from one
generation to the next 'as one of the most agonizing experiences that any (family) business faces' (p.105). From these definitions one may therefore conclude that the critical dimension differentiating a family firm from a non-family firms is family control because without it, family influences and conflicts do not occur and the problem of management succession is no different than that facing any other firm.

In a recent attempt, Litz (1995) uses this idea of family control (the dimension of ownership and management in Handler’s (1989) classification), and combines it with another dimension of 'intentionality' to suggest that a firm can be considered a family firm 'to the extent that its ownership and management are concentrated within a family unit, and its members strive to achieve and/or maintain intra-organizational family based relatedness' (Litz, 1995: 103). This suggests that it is not the degree of family control per se that is the determining factor in classifying a firm as a family firm, but it is the intention of family members to strive towards family based relatedness that distinguishes a family from a non-family firm. An intention to continue the business as a family business leads to a particular kind of behaviour. These firms make an effort to realize the implicit or explicit vision of one or a few family members (Chua, Sharma, & Chrisman, 1996). Based on this line of reasoning the following definition is used in this research to conceptually distinguish family firms (or businesses) from non-family firms.

A family business is the one that is governed and/or managed on a sustainable, potentially cross generational basis, to shape and/or pursue the formal or implicit vision of the business held by members of the same family or a small number of families (Chua, Sharma, Chrisman, 1996).
Although the choice of definitions in behavioral sciences generally remains subject to debate (Hoy & Verser, 1994), a clearly stated definition helps to develop scientific understanding, explanation, and prediction (McKelvey, 1982), and enables researchers to build on each other's work and practitioners to decide whether research findings are applicable to their situations. Therefore, it becomes important to use concise definitions in any research conducted (Brockhaus Sr., 1994). In this context, it becomes essential to specify the family businesses that will form the focus of this study.

This study is focused on family businesses in which the management control of a firm has been transferred to a successor in the last five years or is likely to be transferred in the next five years. The successor may be part of the nuclear or extended family of the president, and may or may not belong to the same generation as the president.

The above definition suggests a number of scope dimensions of this study. For example, the study is limited in focus on transfer of management control of a business as opposed to the ownership control, and in terms of the time dimension of +/- five years from the event of transfer of management control. On the other hand, it is wide in scope with regard to the relationship of the successor and the president (nuclear or extended family members), as well as the generation represented by the two family members (same or different). The rationale for each of these decisions made is discussed in section on the scope of the research (1.3.).

1.1.2. Satisfaction of the primary stakeholders with the succession process. This section attempts to provide a clarification of the terms: succession process, primary stakeholders, and satisfaction with the succession process.
What is meant by a succession process? Specifically, what are the dimensions of this process? Even though the family business literature is extensively focused on the issue of succession, it does not provide any clear definition or time dimension of a succession process. In this study the succession process in a family firm is conceptualized as follows:

*The succession process extends from the time the first family member who is recognized as a potential successor joins the firm on a full-time basis, to the time the existing president hands over the management control of the firm to a family member successor and retires from active (full-time) involvement in the business.*

The rationale for the adoption of this definition include: (i) it extends the succession process between two discrete events that can generally be identified across different firms; and (ii) by requiring the president both to hand over the management control to a family member successor as well as retire from full-time involvement in the business, it takes into account the possible situations in which the president symbolically hands over the management control to a successor but effectively continues to operate the business on a day-to-day basis.

In the literature an effective or successful succession has been defined broadly as the transfer of ownership and control to the next generation (Churchill & Hatten, 1987; Ward, 1987; Goldberg, 1991), or more specifically as the one in which all parties to the succession process are satisfied with the outcomes of the process (Stempler, 1988). Following the second approach, the satisfaction with the succession process, in this study, refers to the degree of satisfaction with the succession process of the primary stakeholders (predecessor, successor, and other family members actively involved in the business) in family firms.
It was considered important to focus on the satisfaction of all the primary stakeholders in a succession process, i.e., the predecessor, successor, as well as other family members actively involved in the business, as opposed to any of these categories singularly. This decision was made to gain a richer multi-dimensional perspective on the issue of succession. As family members work closely together in a family firm, the satisfaction of all categories of family members with regard to an important event like the transfer of management control from one family member to another is important, and can become critical to the effective functioning of a firm. The importance of good relationships among different family members involved in a family firm has been stressed by previous researchers (e.g., Christensen, 1953—on the relationship between president and the successor; and Handler, 1989—on the relationship among siblings).

With this clarification of the terms used in stating the research question, the research process used in this study is briefly discussed next. This is followed by a discussion of the scope of this study and organization of the dissertation.

1.2. The Research Process

Runkel and McGrath (1972, p.2) stated that 'research is a continuous process made up of highly interdependent activities. Slicing the process into neat, ordered steps must be arbitrary and an oversimplification. They comment further that 'researchers do not work in strictly ordered succession of logical steps' (p.2). In this study it was found that it was necessary on several occasions to recycle through the steps deemed completed earlier. However, for the sake of simplicity in describing the research process followed in this study, the process is broadly divided into four distinct steps: (1) Exploration, (2) Development of a conceptual model, (3)
Preliminary testing of the model, and (4) Final testing and analysis. Each of the steps undertaken is described below.

1.2.1. **Exploration.** In the exploration stage a literature search was conducted to explore the literature and identify areas for possible study. An annotated bibliography was prepared that summarized the findings of over 225 articles in 32 major research journals (Sharma, Chrisman, & Chua, 1996). It was evident from this literature search that succession was an issue of interest amongst researchers. Although this issue has stayed at the core of the literature, no empirically tested, integrated framework existed. It was thus discovered that there was a need to develop such a framework of the determinants of satisfaction with the succession process.

1.2.2. **Development of a conceptual model.** Stage two involved the identification of the key variables that had been suggested in the literature to be the important determinants for the quality of the succession process. Forty factors suggested as important for a succession process were identified (listed in Table 2.1). This identification led to the development of a comprehensive model of the determinants of the satisfaction with the succession process. A preliminary version of this model was presented at the Administrative Sciences Association of Canada (Sharma & Pablo, 1995). It is suggested that five primary determinants of the satisfaction with the succession process are: (1) Acceptance of individual roles in the context of the business, (2) Agreement to continue the business, (3) Propensity of the president to step aside, (4) Propensity of the successor to take over, and (5) Succession planning. Each of these determinants, in turn, is influenced by other factors listed below:

1. Acceptance of individual roles is positively related to:
a. Perceived family harmony.

2. Agreement to continue the business is positively related to:
   a. Perceived family harmony, and
   b. Payoffs from the business.

3. Propensity of the president to step aside is positively related to:
   a. Trust in successors’ abilities and intentions, and
   b. Incumbent’s interests outside the business.

4. Propensity of the successor to take over is positively related to:
   a. Acceptance of individual roles,
   b. Payoffs from the business, and
   c. Career interests.

5. Succession planning is positively related to:
   a. Propensity of the incumbent to step aside,
   b. Presence of an active advisory board, and
   c. Agreement to continue business.

1.2.3. Preliminary testing of the model. In stage three, the model was subjected to preliminary testing using four case studies. These case studies represented four types of succession experiences and provided valuable data for preliminary testing of the model. Using this data, strong support was found for the overall validity of the model.

1.2.4. Final testing and analysis. A quantitative approach was used for the final testing of the model. A set of three questionnaires—one each for the outgoing or past president, successor or designated successor, and another family member active in the business but who
was neither the president nor the successor, was developed. This set of three questionnaires was sent by mail to each of the 604 firms who are members of the Canadian Association of Family Enterprise (CAFE). The qualifying condition for filling out the questionnaire was that the event of succession, i.e., the actual transfer of the management control of a firm to a successor should either have taken place in the last five years or be likely to take place in the next five years. Responses were received from 177 member firms out of 509 firms that qualified for the study—a response rate of 34.77%. 118 responses were received from the Presidents’ or outgoing presidents, 142 from successors or designated successors, and 50 from other family members active in the business, i.e., a total of 310 usable questionnaires were received.

The received data were analyzed using the techniques of exploratory factor analysis, multivariate analysis of variance, multiple regression, path analysis, and structural equation modeling. Exploratory factor analysis along with reliability tests were used for the purpose of scale construction. A high scale reliability was found for most variables in the model. Multivariate analysis of variance tests were conducted to detect any kind of systematic biases in the collected data. No bias was found between the responses of (1) those who had undergone succession and those who anticipate its taking place in the next five years, (2) those who sent back the questionnaires at different times in the study, (3) those who were experiencing transition between different generations or genders of family members, (4) firms of different sizes, or (5) firms that were owned by members of different ethnic backgrounds. However, the responses of presidents were found to be significantly different from both the responses of successors and other family members. On the other hand, no significant difference was found in
the responses of successors and other family members. A decision was made to split the data into two groups: (1) Successors and other family members, and (2) Presidents, for the purpose of analysis.

Multiple regression was used to determine the overall fit of the model and estimate regression parameters. The results of multiple regression indicated a highly significant fit of the model for both groups of data. All respondents indicated a positive influence of ‘the acceptance of individual roles of family members in the context of the business’, and ‘succession planning’, on their satisfaction with the succession process. In addition to these two variables, the presidents’ satisfaction was positively influenced by ‘the propensity of successors to take over the business’. Successors and other family members, on the other hand, reported a positive influence of ‘the propensity of incumbent to step aside’ on their satisfaction with the succession process. Interestingly, neither the presidents nor the successors indicated that their own propensity to step aside or take over respectively, had an important influence on their satisfaction with the succession process. Moreover, none of the responding groups of family members considered the agreement of family members to continue the business as an important influence on their satisfaction with the succession process.

Path analysis was used to detect if any of the antecedent variables (influencers of the determinants of the satisfaction with succession process) also had a direct relationship with the main dependent variable, i.e., the satisfaction with the succession process. This analysis revealed that the trust that an incumbent president had in the abilities and intentions of a successor significantly influenced the satisfaction of all respondents with the succession process. In addition, ‘perceived family harmony’ influenced the extent of satisfaction with the
succession process experienced by successors and other family members actively involved in
the business.

The last analysis undertaken was Structural Equation Modeling. This was done with a
hope to get some additional insights from the data that would enable us to develop other
hypotheses that could be tested in future studies. The most important new linkage, aside from
the ones hypothesized in the model, between variables suggested by the results of Structural
Equation Modeling was the importance of the incumbent's trust in the abilities and intentions
of the successors. Not only was this variable important in determining the overall satisfaction of
all the respondents with the succession process (as indicated by the results of path analysis), it
was an important influencer of the extent of succession planning undertaken. Other important
influencers of succession planning identified by Structural Equation Modeling are the positive
influence of: (1) the extent that the career interests of successors aligned with the opportunities
in the business, and (2) the extent of perceived family harmony, on 'succession planning'. A
detailed discussion of the population selected, development and administration of the
questionnaires, the statistical techniques used and results of the analyses are presented in
Chapters 4 and 6. The scope of this study is discussed next.

1.3. Scope of the research

This section defines the boundaries of the study. As stated earlier, this study is focused
on family businesses in which the management control of the business has either been passed to
family member successors in the last five years or is expected to be passed to family member
successors in the next five years. This study is confined in the following manner:
1. **Managerial vs. ownership control.** The focus of this study is on the transfer of managerial control (i.e., management succession) from one family member to another, as opposed to transfer of ownership. Therefore, this excludes those family businesses in which managerial control passes from family members to non-family member professionals, or in which ownership control is transferred between family members without any change in management control.

While it is recognized that in many family businesses ownership and management control are closely linked, and ownership issues can influence managerial succession (McCollom, 1992a), a transfer of ownership is not considered a necessary or sufficient condition in management succession. This choice was made because of the belief that there is a greater level of understanding regarding the mechanisms available for ownership transfer, largely due to the disciplines of law and accounting (Churchill & Hatten, 1987). Moreover, in family businesses the intellectual-analytical aspects of the succession process are so closely intertwined with ongoing socio-political processes (which generally take precedence), that sometimes economically desirable strategic options may never be adopted because of the value structures of the key actors in a firm (Hofer & Schendel, 1978). Furthermore, poor management of a business can make the transfer of property rights economically irrelevant (Churchill & Hatten, 1987). For these reasons, the focus of this study is on the transfer of managerial control through management succession.

2. **The time dimension.** The qualifying condition for firms to be included in this study is that the management control should either have been passed on to the family member successors’ in the past five years or is likely to be passed on in the next five years. This choice of timing was
made to balance the likelihood that the memory of events is still relatively fresh in the minds of the respondents, and the size of the pool of family firms that would qualify for the study. Moreover, the chances of finding both past presidents and successors to participate in the study should be higher with this. If, on the other hand, the transition is to take place in the next five years, some transition processes should already be in place. For example, the chances of having a president and potential successors/s working in the business are greater if the transition is expected in the next five years than if no transition is planned in the near future.

Another issue related to the time dimension is the cross-sectional versus longitudinal nature of the study. This is a cross-sectional study that represents a 'snap-shot' at one point of time, as opposed to being repeated over an extended period of time (longitudinal study).

3. Multiple data sources. In order to get a balanced measure of the satisfaction with the succession process, the perceptions of the three major stakeholder groups (successors, predecessors, and other family members active in the business) were studied. Although some attempts have been made to understand the succession experiences of next generation family members (e.g., Handler, 1992), this is the first attempt towards understanding the succession experience from multiple perspectives. This decision was made with a belief that different family members may have experienced different levels of satisfaction with the succession process and a richer understanding of the succession process can be gained by taking into account these different perspectives (Vancil, 1987).

4. Inter-generational versus intra-generational. Within a family, management control of a business can be passed from family members of one generation to the next generation, or within family members of the same generation (e.g., among siblings, between wife and
husband). It can be reasoned that some of the dynamics between inter-generational transfers and intra-generational transfers may differ as in the former case the transfer is amongst members who belong to different generations who may differ considerably in terms of age, or values, as compared to members of the same generation (Churchill & Hatten, 1987).

Although this study was not limited to either intra-generational or inter-generational transitions, data related to the generation represented by the president and the successor were collected. The responses were tested for any systematic biases due to the generation represented by the out-going and incoming family members.

5. Transition from founder to second vs. among later generations. It has been suggested that founders may have more difficulty than the members of the later generations in letting go of the leadership of the business. Sonnenfeld and Spence (1989) have suggested that this is because the transition process becomes institutionalized over time. This study is not limited to transitions between first or later generations, although responses were analyzed to detect any systematic biases due to the generation represented by the president and successor.

6. Gender of the president and successor. Dumas (1989) has suggested that a father-daughter relationship is more harmonious than a father-son relationship, indicating that there may be a difference in succession experiences involving family members of different genders. While this study is not limited to transitions between a specific gender of family members, the responses were examined for any systematic biases based on the relative gender of presidents and successors.

7. Population studied. All 604 member firms of the Canadian Association of Family Enterprises (CAFE) formed the population for this study.
8. Other boundaries. The study is not confined to any particular size of businesses, or any particular ethnic group. Once again, the collected data were examined to detect any systematic biases in data based on these dimensions.

9. The issue of performance. The relationship between the quality of succession and firm performance was not a focus of this study. A case can be made for a direct linkage between a higher degree of satisfaction with the succession process and the performance of the firm, as the past president would remain supportive of the successor and maintain his/her advisory role (Christensen, 1953; Sonnenfeld and Spence, 1989). On the other hand, it has been suggested that family considerations are paramount in family firms and may take precedence over the goal of profit maximization (Davis, 1968; Churchill and Hatten, 1987). However, this study remains focused on determining the factors that influence the satisfaction of family members with the succession process, and does not extend to the influence of satisfaction on the subsequent performance of a firm. The decision to limit this study in its scope with regard to the issue of performance was made to keep the study at a manageable level. However, the linkage between the quality of succession and firm performance is an interesting and important issue that deserves attention in future research.

1.4. Organization of the dissertation

This dissertation is organized into seven chapters. This first chapter has provided a description of the research topic, the research questions and definition of key terms, the research process, and the scope of the research. Following this introductory chapter, the second chapter summarizes the conceptual and empirical literature in the fields of family business and executive succession relevant to this study. The theoretical model and specific
hypotheses that will be tested in this study are developed in the third chapter. The research design used for this study is discussed in the fourth chapter. The preliminary analysis of the model using the qualitative data from the case studies is presented in the fifth chapter. Results from the statistical analyses for the survey data are presented in the sixth chapter. Chapter Seven is the concluding chapter. It summarizes the principal findings of this research, discusses the limitations of the study, its theoretical contributions, implications for the practice of management and suggests future research directions.
CHAPTER 2

REVIEW OF LITERATURE

The past few years have witnessed a significant rise in the interest in the study of family firms by academicians, researchers, and consultants. This rise is evident from the increase in the number of articles on family firms from 188 during the 14-year period between January 1971 to December 1985, to a staggering 680 from 1986-1995 \((\text{American Business Index})^2\). While the theme of 'family business as a system' dominated the Summer 1983 issue of *Organizational Dynamics*, indicating it to be an emerging area of interest, in 1988 a journal, *Family Business Review*, devoted exclusively to family businesses, was founded. This represents a short time span for an area to move from being a periphery discipline to one that warrants an independent journal.

This chapter is a product of the exploration stage of this research. In this stage a thorough search was conducted on the family business literature\(^3\) and relevant streams of literature in the areas of strategic management and sociology. The aim of this search was to take inventory of the work that has been done in order to provide a direction for this research. From this literature search, it became obvious that the issue of succession lies at the core of the family business literature, an observation underscored by Wortman (1994).

However, even before researchers focused their attention on this issue in the context of family businesses, the importance of top management succession had been recognized in the fields of sociology (e.g., Weber, 1947; Gouldner, 1954; Guest, 1962), and strategy (e.g., Christensen, 1953; Carlson, 1961; 1962). This issue has been reviewed by a number of authors

\(^3\) The 226 studies reviewed in this literature have been presented in the form of an annotated bibliography (Sharma, Chrisman, & Chua, 1996).

Top management succession has been described as one of the few management processes during which both the strategy and the structure of an organization can be redefined (Pfeffer, 1981). This is seen as a pervasive change that affects virtually every level in an organization, as well as external parties dealing with an organization (Christensen, 1953; Kesner & Sebora, 1994). Parallel to an agreement regarding the importance of the issue of succession, runs an acceptance that managing top executive transition is a difficult process. In the context of executive succession, Brady and Helmich (1984) comment that a change in top executive is a traumatic event for any organization that affects not only its members but its economic and political climate as well. While this process may be institutionalized into the forced retirement programs of established bureaucratic organizations, it becomes more difficult in the context of family businesses, because of the involvement of family dynamics with the business (Barnes & Hershon, 1987). Peter Davis (quoted in Handler & Kram, 1988) has stated that 'smooth succession (in family firms) is an oxymoron'. Lane (1989) suggests that most of the problems of family businesses relate to succession issues.

With an acceptance that succession is both an important and difficult issue to handle, there is no dearth of advice in these literatures about how it should be handled or suggestions about what factors or characteristics have an influence on it. The factors that influence succession in family firms, suggested in the literature, can be organized into four categories
depending on whether the focus is on: (1) founders or owner-managers, (2) successors, (3) family influences, and (4) organizational factors. Each of these is discussed in the sections that follow and summarized in the concluding section.

2.1. Founder or owner-manager's characteristics

Along with the widely held recognition of both the importance and difficulty of handling management succession, it is also agreed that management continuity is an issue largely in the control of the current owner-manager or CEO (Ayers, 1990; Brady & Helmich, 1984; Christensen, 1953; Friedman, 1986; Lansberg, 1988; Malone, 1989; Vancil, 1987). It comes as no surprise then, that a considerable portion of the literature has focused on the characteristics of current owner-managers who in many cases are founders. After reviewing the family business literature in 1988, Hollander & Elman stated that 'some of the most colorful explorations of the family business have focused on the motivations and characteristics of the founder' (p.148). This stream of research runs parallel to one in the entrepreneurship literature that studies entrepreneur's characteristics. However, the focus of the entrepreneurship literature is on the early life and development of a firm, while the family business literature is focused on the later period of development of a firm when the founder is nearing the end of his/her working life and succession is imminent (Brockhaus Sr., 1994; Dyer Jr., & Handler, 1994). Because of this difference in focus, the characteristics of founders that interest researchers in the two fields are different. While the characteristics of founders during the start up phase of an organization are interesting and have been reviewed in a number of places (e.g., Kent, Sexton, & Vesper, 1982), it is the characteristics of founders or incumbent owner managers that influence the succession process that are reviewed here as these relate directly to this
study. For ease of presentation and comprehension, these characteristics are discussed in two sub-sections: (1) Demographic characteristics of owner-managers, and (2) Relationship of an owner-manager with the business. These characteristics are discussed below in turn:

2.1a. Demographic characteristics. Two characteristics influencing the succession process are the age of the founder and the related issue of his/her health, and the gender of founder relative to that of the successor/s.

Proponents of life-cycle theory suggest that a 'man' passes through several stages in their lifetime, and each stage has distinct characteristics (e.g., Levinson, 1978). In their research, Davis & Taguiri, (1989) found that life stage clashes between father and son can aggravate the tensions that accompany leadership succession in family businesses. If both father and son are going through periods of identity formation, the chances of conflict are greatly enhanced. For example, children in their 20s are striving for independence and acceptance into the professional world. Meanwhile, fathers in their 40s may be confronting mid-life anxieties and doubts about their achievements up to that point, and the presence of a son eager to take over the business may be seen as threatening. This increases the chances of conflict. However, other life-stage differences can be beneficial for family firms preparing for management transition. For example, children in their 30s tend to be attentive students, while parents in their 50s or 70s are constructive teachers eager to pass on their accumulated wisdom (Davis & Taguiri, 1989; Sonnenfeld & Spence, 1989). Based on life cycle theory, the timing of entry of a successor into the business and the timing of the event of succession, can be planned to increase the chances of success (Harvey & Evans, 1994). Although it can be argued that the
specific ages at which a particular individual reaches a specific life-stage can vary, this study provides an important dimension to our understanding of the succession process.

Handler and Kram (1988) suggest that the health of an incumbent president may also influence the succession process. For an incumbent owner-manager enjoying good health, the thought of succession raises the unpleasant prospect of aging and succession planning may be postponed for psychological comfort. On the other hand, an ailing founder may not face the same degree of psychological barriers against succession planning due to his/her failing health. He/she may not be as reluctant to discuss the issue of succession.

At present, our understanding of the life-cycle stages of owner-managers and successors is largely based on studies of male samples. Dumas (1989) questions the generalizability of these results to situations involving female owners or successors. She has reviewed the empirical studies on the relationship between father and son, and compared these findings with father-daughter dyads (Dumas, 1989). She found that the father-daughter relationships are not only more harmonious than the father-son relationships, but they are also different in nature. Daughters willingly assume the role of caretakers, both of their father and the business, and do not face a conflict with their fathers over the issue of power and control, as do sons. This suggests that the gender of an incumbent relative to that of a successor may have some influence on the succession process.

2.1b. Relationship of an owner-manager with the business. Scholars who have studied the management style of founder/owners have generally reported an authoritarian style (e.g., Birley, 1986; Donckels & Frohlick, 1991; Geeraerts, 1984). Moreover, many founders have been observed to identify themselves very closely with the business (Handler & Kram,
1988), which makes it hard for them to let go of the leadership role in their business. With this style of leadership, incumbent presidents or owner-managers are found to be unwilling to share or hand over the power. Some authors, for example, Barnes and Hershon (1987), and Dreux (1990) have suggested that executive succession in public companies is a carefully monitored and anticipated event that is built into forced retirement programs. However, in a survey of 1484 corporate presidents Brady, Fulmer, and Helmich (1982) found that fewer than 50% of the responding firms engaged in succession planning. It is critical to any succession process that the incumbent be willing to step down. If this willingness is absent, transitions can be rendered ineffective, despite a succession plan (Kets de Vries, 1988).

Post and Robins (1993) have observed that in many instances the continuity of the leader may be important to the members of his or her ‘inner circle’. Members of the inner circle may try to block attempts by the leader to hand over power, as the continuation of the leader is perceived to be in their best interest. This finding is underscored by other writers such as Handler and Kram (1988) and Lansberg (1988) who appropriately calls it the ‘succession conspiracy’ (Lansberg, 1988). As leaders in family firms may be lonely (Gumpert & Boyd, 1984) or bored and plateaued (Malone & Jenster, 1992), their inner circle may have a considerable influence on the succession process.

Another related characteristic of the incumbent president suggested to influence the succession process is departure style. Sonnenfeld and Spence (1989) suggest that departure style is based on the leader's identification with the organization, and those around him. They have identified four departure styles of leaders: monarchs, generals, governors, and ambassadors. While both monarchs and generals retain close contact with the firm, the
monarchs, who have been successful in their term, find it difficult to let go. On the other hand, generals, who have been less successful in their term, spend their retirement planning a comeback. Governors have short terms in office, achieve success, and leave willingly. They do not maintain contact with the organization. According to Sonnenfeld and Spence (1989), the best form of departure style for the family business organization is that of ambassadors, who lead the organization to moderate levels of growth, and recognize the time to step down. They also maintain contact with the organization, and serve as advisors. The departure style of the predecessor has also attracted some researchers in the executive succession literature. Gephart (1978) identified five types of 'exits' of the predecessor: retirement, voluntary resignation, firing, intraorganizational movement, and death. He reiterates that the exit style of the predecessor is likely to influence both the succession process as well as its outcome.

In general, retirement can be a frightening experience both for the incumbent CEO as well as for the owner-manager as he/she is no longer in demand or control. To ease themselves into retirement, incumbent managers have been encouraged to develop interests outside the company before they retire (Christensen, 1953; Davis & Taguiri, 1989; Dyer, 1986; Sonnenfeld & Spence, 1989).

Briefly stated, the characteristics of the founders or incumbent owner-managers that have been said to influence the succession process in family firms are: their age and gender relative to that of successor/s, health, management style, extent of identity with the business, departure style, and outside business interests.
2.2. Successor's characteristics

While the owner-manager is recognized as the one who controls the succession process, the heir also has a considerable stake in the smooth completion of the process (Handler, 1989; Vancil, 1987). Thus, characteristics of successors have been the focus of attention of some researchers. These characteristics can be effectively discussed in four parts: (1) Demographic characteristics, (2) Relationship with the owner-manager, (3) Relationship with other siblings, and (4) Proficiency and interest in business. Each of these sections is presented below:

2.2a. Demographic characteristics. Besides the two characteristics of successor's age and gender relative to that of founder's, discussed in the previous section, other demographic characteristics of successors suggested to have an influence on the succession process are the number of potential successors, birth order, their relative position in the family and business, and age when introduced to the business.

Some experts have observed that it becomes easier to plan a succession when there is only one heir interested in joining the family firm (e.g., Ward, 1987). While this may be true, family firms with higher numbers of interested successors have been observed to use innovative strategies to provide for the autonomy of various family members involved in the business. One mechanism adopted by family firms with larger numbers of family members involved is to generate a new strategy for the firm, whenever a new family member joins in (Rutigliano, 1986). This aids in maintenance of good working relationships, and providing clearly defined roles and responsibilities for all family members (Handler, 1989; Rosenberg, 1991).
In terms of the birth order, while primogeniture is the most widely accepted form of transfer of power in the family-businesses in North-America, it has become less automatic than it once was (Barnes, 1988). It is now being recognized that the eldest may not always be the best (Ayers, 1990; Barnes, 1988; Kaye, 1992; Levinson, 1971), and sons are not necessarily better than daughters (Lyman, Salangicoff, and Hollander, 1985; Salangicoff, 1990). However, when a younger son or daughter takes over a family business, the dynamics of relationships change considerably as the hierarchies of the family are not reflected in the firm. This incongruence in hierarchies is said to influence the succession process. When a younger son or daughter assumes the leadership role in the business, he/she faces the dilemma of managing different levels of status in the business and the family. Options for resolving this dilemma are for the younger son or the daughter to prove himself or herself outside the family business (Barnes, 1988), or have each family member establish his/her own operation to lead (Levinson, 1971).

Holland and Boulton (1984) have provided an interesting matrix for analyzing the relative position and prerogatives of the successor in the family and the firm. They suggest that an individual with high power both in the business and the family is in a position to turn his/her thoughts into action. On the other hand, individuals with low power both in the business and the family are in a precarious position and need to use considerable interpersonal skills to generate support of others in better positions (Holland & Boulton, 1984).

The age at which a potential successor is first introduced to the family firm is said to influence his/her interest in joining the firm. Ambrose (1983) and Astrachan (1993) have suggested that inclusion of potential heirs in the business at a young age helps in developing
their interest in the business and increases the likelihood of their joining the family business as they grow up. In a study on home-based businesses, Beach (1993) observed that children in a home based business get socialized into the business at a very young age. However, the effect on these children’s attitude towards the business, has not yet been investigated.

From the existing literature, it is possible to list six demographic characteristics of successors that may influence the succession process: age and gender of successor relative to the owner-manager, birth order and position of successor in business and family, number of potential heirs, and age when these heirs were first introduced to the business.

2.2b. Relationship with the owner-manager. As the top manager’s job is difficult to define in explicit terms (Mintzberg, 1973), and administrative skills are not easily transmitted (Christensen, 1953), a good relationship between a successor and outgoing president becomes important as it should enhance the learning process of a successor. This relationship has been found to be an important determinant of the successor’s training in family firms (Lansberg & Astrachan, 1994). In her study, Handler (1989) found that the ‘mutual respect and understanding’ between next generation family members and the founders or owner-managers have important implications for the quality of succession experienced by members of the next generation.

Levinson (1971) observed that the relationship between father and son is ambivalent at best—father can’t let go, son wants to prove himself. While a son’s independence is perceived as disloyalty, his compliance is seen as a weakness (Seymour, 1993). On their part the sons may get impatient with the parents’ methods (Babicky, 1987), while the parents may want their achievements to stand as enduring monuments (Levinson, 1974). Moreover, factors unrelated
to the business may affect the relationships between the two generations (Babicky, 1987). It has been suggested that in order to help in the succession process, the successor should be sensitive to the needs of the founder (Lansberg, 1988), should exercise patience, and diplomacy (Jonovic, 1989), and should become a student of the organization's intricacies and culture (Dyer, 1986; Horton, 1982). Moreover, successors should also be prepared to deal with the residual conflicts and stress left after the event of succession (Harvey & Evans, 1995).

2.2c. Relationship with other siblings. Siblings' agreement on each other's role in the business is extremely important for an effective succession process. Handler (1989) refers to this agreement among siblings as 'sibling accommodation'. She stated that "the more siblings can accommodate rather than conflict with one another regarding the family business, the more likely it is that the individual will have a positive succession experience" (Handler, 1994: 142).

Friedman (1991) has argued that although the competition for parental love and attention spurs sibling rivalry, it is the response of parents that has a major influence on the type of relationship that develops amongst children. For example, when parents indulge in inter-sibling comparisons based on characteristics that are beyond the control of the siblings, follow equality rather then equity as the mode of justice, and interfere in sibling conflicts, they may be promoting inter-sibling rivalry (Ayers, 1990; Friedman, 1991). Children in such cases feel that they must outdo their brothers or sisters to win parents' attention. Moreover, they do not learn ways to resolve their conflicts. Some suggestions to resolve dysfunctional sibling relationships have been provided by Friedman (1991). These include encouraging open communication and discussions among the siblings about the roots of their rivalries, establishing empathy by
inviting them to imagine their roles reversed, and encouraging them to redefine current relationships.

Thus, the existing literature suggests that the extent of sibling accommodation, presence of open communications and empathy amongst siblings play an important role in the succession process.

2.2d. Interest and proficiency of successors in business. In order for an owner-manager to pass on the leadership of the business to members of the next generation, it is critical that the next generation members be interested in the business (Barry, 1975; Blotnick, 1984). Some studies (e.g., Ambrose, 1983) have indicated that next-generation members may not be interested in the business. This attitude has been attributed to the founders’ inability to build strong relationships in the family because of the demands of their businesses. A fit between the career interests and abilities of successors with the jobs available in the family firm has been found to be critical for the succession process and the satisfaction of successors with this process (Handler, 1989; Rogal, 1989).

Lansberg (1983) has suggested that although relatives should all be given opportunities to learn, only the most competent ones should be considered for the leadership roles in a firm. He further states that if the interests or competence level of relatives does not fit with the needs of the organization, the owner should provide them with a fair share of assets, and encourage them to pursue other career opportunities (Lansberg, 1983). Further elaborating on this, Ayers (1990) has suggested that ‘equity not equality’ among family members should be the goal of family businesses, and each family member should be provided with a challenge and
opportunity within the context of the business or out of it—an approach he describes as ‘rough family justice’.

The literature of executive succession has placed great emphasis on the importance of ‘fit’ between the successor’s characteristics and those of the firm and its environment (e.g., Gupta, 1984; Hambrick & Mason, 1984; Leontiades, 1982; Szilagyi & Schweiger, 1984; Wissema, Van Der Pol, & Messer, 1980). It has been suggested that such a fit leads to superior post-succession performance in organizations (Gupta & Govindarajan, 1984; Govindarajan, 1989). However, these studies do not inform the decision makers about how to execute the matching process (Kesner & Sebora, 1994), which is perhaps the most important problem for the incumbent manager.

Educational attainment, as well as experience of a successor both within the family firm as well as outside the firm, may be taken as indicative of his/her level of proficiency. While experience outside the business helps the successor to develop an identity and prepare for a wider range of problems that may confront the organization (Donnelley, 1964; Lansberg & Astrachan, 1994; Seymour, 1993), experience within the organization enables him/her to develop relationships within the company and understand the culture and intricacies of the business (Danco, 1982; Lansberg & Astrachan, 1994; Scranton, 1992). Education, on the other hand, is believed to indicate an individual’s knowledge and skill base, cognitive base, receptivity to innovation, and problem solving abilities (Cooper, Gimeno-Gason, & Woo, 1991; Hambrick & Mason, 1984). In general, successors have been advised to acquire skills that other family members do not possess (Dyer, 1986; Wong, 1993), whether they be through education or experience.
Stated briefly, the successor's characteristics that may influence a succession process include: willingness of successor/s to take over the business, alignment of career interests with the opportunities in the business, and the extent of proficiency related to the business. Educational attainment and experience, both within as well as outside business, may also influence the succession process as these are said to be indicative of the level of proficiency.

2.3. Family characteristics and influences.

Family business has often been viewed by researchers as composed of two sub-systems: family and business. This division is commonly referred to as the 'dual systems approach' (Davis & Taguri, 1985; Lansberg, 1983; Swartz, 1989). While early theorists called for rationality in the family-business system, and advocated ways to excise the two sub-systems (Cohn & Lindberg, 1974; Levinson, 1971), later theorists recognized the importance of co-existence and the relative power of the two sub-systems of family and business (Barnes and Hershon, 1986; Beckhard & Dyer, 1983; Davis & Stern, 1980; Friedman, 1991; Hollander, 1983; Hollander & Elman, 1988; Kepner, 1983; McCollom, 1988). Unlike the rational theorists, the focus of these theorists was not on finding ways to separate the two subsystems, but towards finding ways of effectively operating in this unique form of organization that interlaces the two sub-systems (Hollander & Elman, 1988). Despite some very basic differences in these two perspectives on family firms, both these approaches have recognized family as being an important sub-system of the family business system. It comes as no surprise then that a major portion of the literature has been directed towards understanding the influence of family in the business. In order to aid discussion of family characteristics that have been said to influence the succession process, this section is divided into five sub-sections: (1)
Family dynamics, (2) Ethnic background, (3) Life cycle of family and business, (4) Types of families, and (5) Culture in family firms.

2.3a. Family dynamics. Family dynamics have an important influence on family firms (Davis, 1982). A recent study by Lansberg and Astrachan (1994) was aimed towards gaining an understanding of the relationship between succession planning and family relationships. Based on a survey of 130 individuals in 109 family firms, the two family relationship variables of family cohesion and adaptability were found to be indirectly related to succession planning. The mediating factors were 'family's commitment to business' and 'quality of owner-manager's and successor’s relationship'.

Lundberg (1994) has suggested that developing the communication lines between family members is necessary to institutionalize the process of succession in family firms and to reduce the conspiracy (Lansberg, 1988) or resistance (Handler & Kram, 1988) associated with succession planning.

Malone (1989) found perceived family harmony to have a positive influence on succession planning in family firms. He has stated that "a high degree of harmony in the family business may make the continuity planning process a more tolerable task, and the harmonious relationships may reinforce the importance of continuity planning in the owner-manager's mind" (Malone, 1989: 349).

Therefore, the literature at present suggests that there are four family dynamics variables that have an influence on the succession process in family firms. These are family adaptability, family cohesion, communication links between family members, and family harmony.
2.3b. Ethnicity. Barnes and Hershon (1976) have observed that families are in business 'to stay', and the question “whether families should stay in business” is really an academic exercise. Others (e.g., Handler, 1989; Lansberg & Astrachan, 1994) have suggested that commitment of family to continue the business influences both the succession process as well as the extent of satisfaction the members of the next generation derive from this process. While this may be true for many businesses, research on some ethnic groups has indicated that succession is not a priority in these businesses, as they are viewed more as a foundation for the professionalization of children than a family legacy (Dean, 1992; Wong, McReynolds, & Wong 1992). This revelation can be used to explain the closure of family businesses among certain ethnic groups especially those owned by Chinese immigrants and African Americans (Dean, 1992; Wong, McReynolds, & Wong 1992).

The ethnic background of the owning family may have a considerable influence on the way the succession process is handled. One such example has been provided by Chau (1991). He has compared the succession approach adopted by Chinese and Japanese family businesses. While the Chinese practice coparcenary (equal division of the family assets among the male members), the Japanese practice primogeniture (succession by one male heir). This practice leads to the longevity of the Japanese businesses. Moreover, two greatly advocated principles of family business success and continuity, namely the careful planning of succession and the separation of ownership and management have been practiced in Japan since the 17th century (Fruin, 1980).

Other ethnic groups that have been studied in the literature include: Latin Americans (Lansberg & Perrow, 1991), Jews (Rothstein, 1992; McGoldrick & Troast, 1993), Italians,
African Americans, Irish, Anglo Saxons (McGoldrick & Troast, 1993; Dean, 1992), and American Indians (Stallings, 1992). Ethnicity has been said to have a great influence on many characteristics of family firms, which may indirectly influence the succession process such as the patterns of communication, modes of conflict resolution, importance given to education, divorce or separation rate, and the position of women. Therefore, the ethnic background of the owning family has a considerable influence on the succession process.

2.3c. Life cycle stage of family and business. While some researchers attempt to sort out the different behaviors exhibited by members of different ethnic backgrounds, others have attempted to understand the complexities in family firms using a life-cycle approach. From this perspective family firms are viewed as passing through various stages in their development process (Handler, 1994). Various attempts have been made in the literature to sort out the complexities of the family businesses by suggesting evolutionary models of developmental stages. These models attempt to understand and describe the temporal changes that occur in the businesses, and the specific tasks that need to be addressed in different stages of the model. Hollander & Elman (1988) have provided an excellent review of the prevailing models in the literature. The following discussion on life cycle approaches is limited to those models that have been suggested to influence the succession process.

Hershon (1975) has traced the development of three management patterns of close supervision, collaborative management, and collective management, with three generations of the founding family. He suggests that there may be distinct differences in management patterns between members of different generations. Related to the difference in management between family members of different generations, Sonnenfeld and Spence (1989) and Hansen et al.
(1990) have suggested that transition from the first generation to the next may be considerably different from that between subsequent generations, as the transfer process becomes institutionalized and the rules of succession become clearer (Davis & Stern, 1988). This suggests that family firms may go through different types of management styles under family members of different generations, and the transition pattern may vary depending on whether it is between founder and second generation members or amongst subsequent generations.

2.3d. Types of families. Another family related characteristic that may have an influence on the succession process is the type of family. A categorization based on core assumptions of families has been provided by Reiss (1982). According to this categorization families have been classified as consensus-sensitive, interpersonal distance-sensitive, and environment-sensitive. The consensus-sensitive families view the environment as hostile, and feel a great need to be in agreement with each other. There is a constant tension to maintain an uninterrupted agreement, and members avoid confronting difficult issues that may cause conflict. In the interpersonal distance-sensitive families, each member has his/her area of expertise, and attends to that only. The environment is viewed as split into different parts, each of which can be best handled by a particular member. Each member is concerned about demonstrating his/her individual mastery, not at improving joint performance. The environment-sensitive families form an effective group, as family members are successful in balancing individual needs with family needs (Reiss, 1982). It has been suggested that while excessively consensus-sensitive families become 'enmeshed' under stress, the interpersonal distance-sensitive families become 'disengaged' (Davis, 1983). In an enmeshed family the connections between the family members are so extensive that individual actions are difficult to
take. On the other hand, the connections between family members are too loose in a disengaged family, and they cannot act in concert (Olson, Russell, & Sprenkle, 1988). These two extremes can be viewed as two ends of a continuum (Hoffman, 1981), neither of which provides a congenial atmosphere for a family business. It has been suggested that the environment-sensitive families provide an ideal background for the success of a family business (Davis, 1983). However, in her research on three department stores, McCollom (1988) found that families can demonstrate different relationships at work and home. A family that displayed an 'enmeshed' relationship at home, was found to 'disengage' or differentiate in the work environment, and achieved stability both at work and at home. This finding prompted McCollom (1988) to caution against concluding there is one best system for a family business, as stability may be achieved using different combinations at home and at work. While additional research is required to understand the relationship between types of families and their relative success in managing the succession process in the context of the business, at this point it can be suggested that appropriate family relationships as well as the mechanisms used to achieve stability in these relationships may vary in different families.

2.3e. Culture in family businesses. Closely related and in some ways quite inseparable from the issue of types of families, is the subject of culture in family firms. Both the type of family as well as the culture in family firms, determines the basic assumptions of these firms. An analysis of the prevailing culture in a family firm may provide some understanding of the mechanisms used for running the business as well as for succession planning (Dyer, 1988; Hollander & Bukowitz, 1990; Schein, 1983). Dyer (1988) has identified four distinct cultures in the family firms: paternalistic, laissez-faire, participative, and professional. Each of these
cultures is based on different assumptions about human nature and relationships, and the
nature of truth and environment. While paternalistic culture is based on the assumption that
human beings are basically untrustworthy and only family members are to be trusted, the laissez
faire and participative cultures treat people as trustworthy, and the employees are given varying
degrees of autonomy. The professional culture, on the other hand, is neutral regarding the
nature of people, and professional rules are trusted. Dyer (1988) suggests that the most
common culture amongst the first generation family businesses is the paternalistic culture. In
this culture there is a great reliance on the leader, and the training of the next generation is
neglected. This may lead to a change of culture when the next generation takes over leadership
responsibilities. Using this typology it may be possible to analyze the existing culture of the
organization. This may prove useful in understanding the basic assumptions of an organization,
and planning management succession.

The discussion in this section has indicated that a number of family related variables
such as, family dynamics, ethnic background, life cycle stage of family and business, types of
families, and culture may influence the succession process. Some organizational characteristics
that have been suggested to influence the succession process in family firms are discussed next.

2.4. Organizational characteristics

Organizational characteristics of firms may also influence the succession process. Three
such characteristics that have received attention of researchers are: (1) Succession planning, (2)
Role of advisory bodies, and (3) Performance of an organization. Each of these is discussed in
the sub-sections that follow.
2.4a. Succession planning. One piece of advice that is found in all related literatures and agreed upon by scholars from early times (e.g., Weber, 1947; Christensen, 1953) is that succession planning is vital to a succession process. Max Weber (1947) referred to this process as 'institutionalization of charisma'. By carefully planning the management transition an incumbent manager can protect the interests of his/her family, heirs, employees, customers, as well as suppliers (Christensen, 1953). In more recent writings, Ayers (1990) has stated that effectively dealing with the issue of succession planning may be the single most lasting gift that one generation can bestow on the other. Although the importance of succession planning is widely recognized in the literature (Lansberg, 1985; Mahler, 1980; Rosenblatt, deMik, Anderson, Johnson, 1985), leadership succession is seldom planned (Astrachan & Kolenko, 1994; Brady, Fulmer, & Helmich, 1984; Christensen, 1953; Lansberg, 1985).

The basis for succession planning is rooted in the owner's philosophy of self, the family, and the business. Some of the issues that need to be addressed by all owner-managers in the process of succession planning are ownership continuity or change, management continuity or change, power and asset distribution, and the role of the firm in society (Beckhard & Dyer, 1983b). These basic decisions help determine the degree and pattern of involvement of both family and non-family members (Barry, 1975; Weiser, Broody, & Quarrey, 1988). For example, the choice of a family or non-family member as a successor will be based on the decision of the owner to continue or discontinue the business as family managed and controlled.

Based on whether the focus is on ownership or management transition, the literature related to succession planning can be divided broadly into two categories, one focused on
mechanisms to transfer ownership control, and the second focused on the transfer of managerial control from one generation to the next. Regarding the transfer of ownership, some detailed advice on handling taxation matters (Forbes, & Paddock, 1982; Hayes & Adams, 1990; Mastromarco, 1992; Weiser, Brody, & Quarrey, 1988) and on raising capital (Dreux, 1990), has been provided in the literature. The purpose of this advice is to suggest ways in which family firm owners can manage the complexities of taxation law, while providing the best for their company and family. In terms of raising capital, Dreux (1990) has suggested that because of the characteristics of family firms, such as investment in the long-term value of business and less bureaucratic management, many non-public financing alternatives are available. Some of these include recapitalization, private equities, joint ventures, employee stock ownership plans, and so on. Due to the disciplines of accounting, finance, and law, there seems to be a higher degree of comfort in the literature regarding the mechanisms available for ownership transition. As this research focuses on management transition rather than on ownership transition in family firms, this literature is not discussed in any further detail here.

The second aspect in succession planning of family firms is the managerial transition of the business. A question faced by many owner-managers is how to choose the successor objectively. Two views prevail in the literature. One view advocates that the choice of a successor is best left to a committee rather than the owner-manager (Levinson, 1974). This view follows from the 'rational approach', that advocates the separation of the family and the business subsystems to maintain objectivity in an organization (Cohn & Lindberg, 1974; Levinson, 1971). The second view on this issue is held by the proponents of the 'systems approach' (Hollander & Elman, 1988). These writers recognize the simultaneous existence of
the two systems and focus on finding ways to help the owner-manager objectively decide upon a successor (Barnes & Hershon, 1986; Beckhard & Dyer, 1983a; Davis & Stern, 1980; Friedman, 1991; Hollander, 1983; Hollander & Elman, 1988; Kepner, 1983; McCollom, 1988).

In recent years, some empirical research has been undertaken to understand the factors that influence succession planning. A positive relationship has been reported between succession planning and the extent of a family’s commitment to the business (Lansberg & Astrachan, 1994), perceived family harmony, percentage of outsiders on the board, and extent of strategic planning undertaken by family firms (Malone, 1989).

Seymour (1993) found no significant relationship between the extent of succession planning undertaken and the quality of the work relationship between the owner-manager and the successor. However, he did find that this relationship was positively related to the extent of successor training. Malone’s (1989) research did not find support for the relationship between the extent of succession planning undertaken and the size of the business or the age of the owner-manager. However, findings from a survey conducted by Mass Mutual (1994) indicated a positive relationship between the time when owner-managers were planning to hand down control to the next-generation and their having picked a successor. While 57% of owners who planned to relinquish control in the next 10 years had chosen a successor, only 37% of those who planned to hand over control of their businesses beyond 10 years had their successors chosen (Mass Mutual, 1994: p24). This finding indicates that it may not be the age of the owner-manager that plays a role in the extent of succession planning undertaken but on his/her intention to step down. This relationship is further developed and tested in this research.
A number of researchers have espoused the benefits of strategic planning in family firms (e.g., Barry, 1975; Jones, 1982; Ward, 1988). Strategic planning is closely associated with succession planning in family firms (Malone, 1989). Because of the integration of the family system with the business in these firms, many successful firms try to find ways of providing autonomy to various family members such as adopting a new strategy for every generation that joins the business (Rutigliano, 1986). This strategy helps to provide autonomy to the newly joining family members, thereby aiding the maintenance of good working relationships (Handler, 1989; Rosenberg, 1991). Other strategies suggested to provide this separation of roles and responsibilities in family businesses are opening a new venture or division of the business (Barach, 1984), or internationalizing (Gallo & Sveen, 1991).

2.4b. Role of advisory bodies. In family businesses, both family and business are so closely intertwined that it is virtually impossible to deny the power of feelings in the conduct of an organization (Alderfer, 1988). The quest for objectivity and rationality in the family firms has led authors to recommend the formation of an outside board. An interesting debate exists in the literature regarding the use of outsiders on the boards of family firms. The proponents argue that outsiders on the board help in the succession process by prompting the owner-manager to address this issue, acting as a sounding board for him/her to make these major decisions, and providing support to the newly elected leader (e.g., Christensen, 1953; Harris, 1989; Heidrich, 1988; Malone, 1989). Outsiders bring in fresh perspectives, provide new directions (Cabot, 1976; Christensen, 1953; Danco, 1981; Heidrick, 1984; Jain, 1980; Mace, 1948; Mueller, 1988), monitor progress, act as arbitrators (Mace, 1948; Lane, 1989), objectively analyze the perceived strengths and weaknesses of the firm (Mathile, 1988), help
reduce loneliness of the owner-manager (Gumpert & Boyd, 1984; Mathile, 1988), and act as catalysts for change (Christensen, 1953; Mueller, 1988). Moreover, they act as consultants who are available at all times for a low cost (Nash, 1988). Heidrich (1988) has described outside directors as the biggest bargain in management.

In contrast to the above arguments, Ford (1989) and Jonovic, (1984) have found outside directors to be of less value to family firms. The reasons commonly cited for this are lack of knowledge of the outsiders about the firm and its environment; lack of availability of these directors to the firm (Ford, 1989); and lack of authority and definable shareholder interest (Jonovic, 1989). Moreover, it is argued that although these directors may be free of family or firm hierarchical pressures, they are not free of all pressures (Alderfer, 1988), especially the obligation of being appointed by the owner-manager or the incumbent CEO (Mace, 1948). Since the agenda of the board's meetings is generally controlled by the owner-manager of family firms, who is also the main source of information for the board members, the effectiveness of a board may be greatly reduced in these firms (Mace, 1948).

While there is some merit in both arguments, some important variables that need to be considered before the issue is decided are the size, age and complexity of the business (Jonovic, 1989; Harris, 1989). For example, while the owner-managers of smaller firms may not be in a position of gaining from the outside boards, the firms with professional management teams, effective financial systems, and some strategic planning (Jonovic, 1989) may benefit from having outsiders on their board of directors. Studies in the executive succession literature have focused on understanding the degree of effectiveness of boards of directors depending on the composition (insiders vs. outsiders) of the board and the ownership status of the CEO. In
general, the findings suggest that although boards dominated by outsiders were more likely to initiate CEO removal when performance was not satisfactory (Weisbach, 1988), this action was moderated by the ownership position of the CEO (Boeker, 1992).

Because the managerial and ownership roles are generally intertwined in the case of family firms, the effectiveness of a board may be greatly reduced unless the board has the approval of the owner-manager. However, the owner-managers of these firms have been described as lonely (Gumpert & Boyd, 1984), and can benefit from an objective outsider perspective. For the family firms that are not yet large and complex, authors have suggested other alternatives to the classic board. These are the family council (Lansberg, 1988); the review council (Jonovic, 1989); and the advisory council (Tillman, 1988). While Ward and Handy (1988) agree that the type of board formed (outside, inside, or token) in an organization depends on the size and type of business, nature of ownership, and the personality and experience of the CEO, they observe the role and functions of the board will vary according to the type of board formed. With our present state of knowledge, the relative importance of different types of boards and their effect on the performance and succession planning of the firm, is not entirely clear. In general, however, it can be said that the presence of an advisory body has some influence on the succession planning process in family firms.

2.4c. Organizational stability and growth. Dyer (1986) has suggested that organizational growth and changes in business environment may influence the succession process. As the business grows, the owner-managers may realize that they cannot manage all facets of the business and must delegate responsibility and power. This realization helps them
to disengage from the organization and provides an organizational structure that may enhance succession (Handler & Kram, 1988).

Some factors such as technological changes and the type of industry may also influence the succession process. For example, in industries where there is a fast change in technology, the owner-managers may find their knowledge base insufficient to cope. Moreover, the requirements of an uncertain environment may prove to be physically and mentally too demanding for a maturing founder or owner-manager (Boswell, 1972). Such organizations may provide a ripe ground for successors who may have attained fresh skills, as this provides them with an opportunity to prove their capabilities both to the incumbent owner-manager as well as other employees of the firm. This would enhance the succession process (Dyer, 1986).

Autonomy of family members in the context of a family firm has been said to be important in determining the satisfaction of ‘next generation’ family members with their role in the business as well as in enhancing the succession process (e.g., Handler, 1989; Rutigliano, 1986). Peiser and Wooten (1983) have observed that some industries such as construction, consulting, and real estate may provide a ripe ground for smoothening the problems of transition as the younger family members can be given responsibility for a project, providing them with distinct roles and responsibilities in the firm.

Thus, the extent of organizational growth, extent of environmental turbulence, and type of industry have been suggested to influence the succession process.

2.4d. Goals and objectives of family firms. The goals and objectives of a firm play a critical role in the succession process. While one of the prime objectives of managing the succession process is to choose the ‘best’ successor, this choice would heavily depend on the
goals of the firm. For example, if the family is most concerned with family relationships and harmony, then the successor who will contribute most to this goal would be the ‘best’. On the other hand, if the goal of a family firm is growth and profitability of the business, another successor may be preferable (Sharma, Chrisman, & Chua, 1996).

The existence and primacy of varied goals in different family firms have been reported in the literature (Taguiri & Davis, 1992). Some have observed that the goals of family firms are quite likely to differ from the firm-value maximization assumed for the publicly held and professionally managed firms (e.g., Rosenblatt, deMik, Anderson, & Johnson, 1985), due to the involvement of family in the business. A study of 15 Scottish family firms by Dunn (1995) goes even further to suggest the primacy of family over corporate goals. Family businesses in this research, adhered to the notion of ‘job as a birthright of family members’. While many of firm managers in this research acknowledged that employing family members sometimes led to suboptimal performance, they admitted engaging in this practice willingly to maintain good family relationships. A similar finding was reported earlier by Lyman (1991), suggesting that family considerations and business performance can become competing goals in family firms as there may be family or business centered goals that are considered more important in different family firms (Singer & Donoho, 1992). Based on a survey of 183 family investment management firms, File, Prince, and Rankin (1994) found four groups of family firms in terms of their objectives: (1) firms uninvolved in issues of family dynamics (31%), (2) firms balancing family and business needs (27%), (3) firms with family concerns as the primary goal (22%), and (4) firms most concerned with adapting to changing conditions (19%). While about 50% of the responding firms (first and fourth groups) have business related performance or
environmental objectives as their primary goals, the other half of the firms (second and third groups) focus more on family goals and are more sensitive to the issues of inheriting generations. Firms falling into these two categories would be most sensitive to the issues related to succession.

If the goals and objectives of family firms differ from those of non-family firms, the mechanisms to evaluate performance in these firms may also differ. The literature on family businesses has paid scant attention to the issue of performance in family firms. A notable exception is in the area of financial control, where tax minimization is the guiding principle (e.g., Trostel & Nichols, 1982). An issue somewhat related to performance in general but plays a significant role in making decisions regarding the management transition in a firm is the productivity of family members as compared to non-family employees. In general, family members have been found to be more productive than non-family members, although this productivity does not lead to an increase in profitability as wage and salary expenses increase as a percentage of revenue (Kirchoff & Kirchoff, 1987). The feelings of family members being overworked and underpaid (Rosenblatt, deMik, Anderson, & Johnson, 1975) were not found to affect productivity.

The executive succession literature, on the other hand, has been dominated by the issue of performance and its relationship with various aspects of the succession process (e.g., insider vs. outsider succession, rate of succession). However, mixed findings are commonplace in this literature due to the usage of varied definitions of terms (e.g., performance) and samples (Kesner & Sebora, 1994). For example, insiders could be ones promoted from within the organization (Carlson, 1961; Grusky, 1963), those from the same industry (Birnbaum, 1971;
Pfeffer & Leblebici, 1973), or those belonging to the predecessors 'dominant coalition' or inner circle (Helmich & Brown, 1972). In general, however, insiders were found to be associated with fewer organizational changes. The findings regarding the effect on firm performance when successors of different origin take over have been varied. For example, while Helmich and Brown, (1972), Helmich, (1975a), Lewin and Wolf, (1975), found insiders to be associated with slower growth in performance, Shetty and Perry, (1976) found a positive association. Still others found no relationship between the origin of the successor and firm performance (e.g., Helmich, 1974).

Based on the existing literature it is difficult to draw firm conclusions regarding the relationship of firm performance with the succession process. Although it can be stated in general terms that the goals and objectives of a firm may have an influence on the succession process, the details of this relationship are not clear from the existing literatures. As this research is limited to family businesses that have either undergone a management transition in the last five years or are likely to undergo such transition in the next five years, it is automatically limited to family firms that have the transfer of management control to other family members as their objective, and the findings will be most applicable to such firms.

2.5. Conclusion

The last few years have witnessed a significant increase of interest in the field of family business particularly in the area of succession. Parallel to this interest the field of strategic management has also witnessed significant attention given to the issue of executive succession. While Wortman (1994) has stated that the issue of succession lies at the core of the family business literature, Kesner and Sebora (1994) have commented that “survey of articles which
have appeared in major management and strategy journals, reveals a 250 percent increase in the number of pieces (on executive succession) from the 1970s to the 1990s" (p.327). A review of both these literatures leads to an interesting observation regarding the methodologies used. There has been a heavy reliance on case studies and consultants' accounts in the literature of family business. In this literature search it was found that about 63% of the articles reviewed were either theoretical or based on case studies or consultant experiences (Sharma, Chrisman, & Chua, 1996). While this status may not be uncommon at the theory development stage of a field, there is clearly a need for more empirical work in order to test the propositions and arguments presented by the conceptual articles, and those based on consultants and practitioners experiences (Wortman, 1994). This approach should help both in theory generation and validation. The literature on executive succession, on the other hand, has relied heavily on archival data and use of quantitative analysis. However, at this point this literature is characterised by little comparability across studies and contradictory findings. After a review of this literature, Kesner and Sebora (1994) suggest a need for more qualitative and longitudinal studies, and theory development works. A combination of both the qualitative and quantitative techniques can be helpful for the purposes of theory development, testing, and validation. This is the approach adopted in this study.

Various factors influencing the succession process have been suggested in the literatures of family business, sociology, and strategic management. In this chapter, these factors were organized into four categories depending on whether the focus is on: (1) founders' or owner-managers, (2) successors, (3) family influences, and (4) organizational factors. Although there are other possible ways to dissect the literature, this framework was found
helpful in bringing out the areas emphasized in the literature. In each of these broad categories, the major areas of interest in the literature have been discussed, along with the contributions and controversies. The suggested factors are summarized in table 2.1 below.

TABLE 2.1: FACTORS THAT INFLUENCE A SUCCESSION PROCESS (as suggested in the literature)

<table>
<thead>
<tr>
<th>1. Founder's or owner-manager's characteristics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Demographic characteristics:</td>
</tr>
<tr>
<td>i. Age relative to that of successor's age (Davis &amp; Tagui, 1989)</td>
</tr>
<tr>
<td>ii. Gender relative to the gender of successor/s (Dumas, 1989)</td>
</tr>
<tr>
<td>iii. Health (Handler &amp; Kram, 1988)</td>
</tr>
<tr>
<td>B. Relationship with the business:</td>
</tr>
<tr>
<td>i. Management style (Birley, 1986)</td>
</tr>
<tr>
<td>ii. Extent of identity with business (Handler &amp; Kram, 1989)</td>
</tr>
<tr>
<td>iii. Presence and perceptions of the inner circle (Post and Robins, 1993)</td>
</tr>
<tr>
<td>iv. Departure style (Sonnenfeld &amp; Spence, 1989)</td>
</tr>
<tr>
<td>v. Outside business interests (Davis &amp; Tagui, 1989)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Successor's characteristics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Demographic characteristics:</td>
</tr>
<tr>
<td>i. Age of successor/s relative to that of founder's age (Davis &amp; Tagui, 1989)</td>
</tr>
<tr>
<td>ii. Gender relative to the gender of owner-managers (Dumas, 1989)</td>
</tr>
<tr>
<td>iii. Number of heirs (Ward, 1987)</td>
</tr>
<tr>
<td>iv. Birth order of successors (Barnes, 1988)</td>
</tr>
<tr>
<td>v. Relative position in family and business (Holland &amp; Boulton, 1984)</td>
</tr>
<tr>
<td>vi. Age when introduced to the business (Longnecker &amp; Schoen, 1978)</td>
</tr>
<tr>
<td>B. Relationship with the owner-manager:</td>
</tr>
<tr>
<td>i. Mutual respect and understanding (Handler, 1988)</td>
</tr>
<tr>
<td>ii. Need to exhibit patience and diplomacy (Jonovic, 1989)</td>
</tr>
<tr>
<td>iii. Sensitivity to the needs of founders / owner-managers (Lansberg, 1988)</td>
</tr>
<tr>
<td>iv. Need to become a student of the organization and understand organizational culture (Dyer, 1986; Horton, 1982)</td>
</tr>
<tr>
<td>C. Relationship with other siblings:</td>
</tr>
<tr>
<td>i. Sibling accommodation (Handler, 1988)</td>
</tr>
<tr>
<td>ii. Openness of communications (Friedman, 1991)</td>
</tr>
<tr>
<td>iii. Extent of empathy among siblings (Friedman, 1991)</td>
</tr>
<tr>
<td>D. Proficiency and interest in business:</td>
</tr>
<tr>
<td>i. Willingness of successor/s to take over the business (Barry, 1975; Blotnick, 1984)</td>
</tr>
<tr>
<td>ii. Alignment of successors' career interests with opportunities in family business (Rogal, 1989; Handler, 1989)</td>
</tr>
<tr>
<td>iii. Extent of successors' proficiency in the business (Lansberg, 1983; Scranton, 1992)</td>
</tr>
<tr>
<td>iv. Outside business experience (e.g., Donnelley, 1964; Seymour, 1993)</td>
</tr>
</tbody>
</table>
v. Within business experience (e.g., Lansberg & Astrachan, 1994)
vi. Level of educational attainment (e.g., Hambrick & Mason, 1984)

3. Family characteristics:
   A. Family dynamics:
      i. Family adaptability (Lansberg & Astrachan, 1994)
      ii. Family cohesion (Lansberg & Astrachan, 1994)
      iii. Communication links within a family (Lundberg, 1994)
      iv. Family harmony (Malone, 1989)
   B. Ethnic background of owning family (e.g., Chau, 1991):
      i. Commitment to continue the business (e.g., Lansberg & Astrachan, 1994)
   C. Life cycle stage of family and business (Hollander & Elman, 1988):
      i. Generation running the business (Davis & Stern, 1988)
   D. Types of families (e.g. Reiss, 1982)
   E. Culture in family firms (Dyer, 1988)

4. Organizational characteristics:
   A. Succession planning (e.g., Lansberg & Astrachan, 1994)
   B. Strategic planning (e.g., Rutigliano, 1986)
   C. Role of advisory bodies (e.g., Christensen, 1953; Heidrich, 1988)
   D. Stability of organizational growth (e.g., Handler & Kram, 1988)
      i. Organizational growth (Dyer, 1986)
      ii. Environmental turbulence (Boswell, 1972)
      iii. Type of industry (Peiser & Wooten, 1982)
   E. Goals and objectives of an organization (e.g., File, Prince, & Rankin, 1994)

The diversity of factors suggested to influence succession becomes evident from the above list. However, at this time no unified perspective exists and the relative importance of different factors is not understood. Based on these factors and drawing on other relevant literatures, a comprehensive model of the determinants of the quality of succession process is developed in the next chapter and empirically tested in this study.
CHAPTER 3

THEORETICAL MODEL

As mentioned in the previous chapter a number of factors that influence the succession process have been suggested in the literature, although no unified perspective exists. A closer look at the suggested factors (Table 2.1) indicates that they can be clustered into five primary determinants of the satisfaction with the succession process: (1) mutual acceptance of individual roles, (2) agreement to continue the business, (3) propensity of a successor to take over the business, (4) propensity of an incumbent to step aside, and (5) succession planning. This set of five factors forms the basis of the research model discussed in section 3.3. Furthermore, the factors that are the primary influencers of each of these five factors are presented and related hypotheses are stated. Some additional factors that may influence the quality of succession process will be treated as controls in this study. These are discussed in section 3.4. Before discussing the specific determinants, a summary of the definitions of the variables included in the model is presented in the next section (3.1). Some underlying assumptions that have been made in the development of the model as well as in operationalization of variables are clarified in section 3.2.

3.1 Summary of definitions used

Before presenting the model the definitions used in this research are summarized in this section.

Family Business. A family business is the one that is governed and/or managed on a sustainable, potentially cross generational basis, to shape and/or pursue the formal or implicit

---

4Although these definitions are also discussed either in Chapter 1 or later in this chapter, they are all listed in this section for ease of reference.
vision of the business held by members of the same family or a small number of families (Chua, Sharma, Chrisman, 1996). This study is focused on family businesses in which the management control of a firm has been transferred to a successor in the last five years or is likely to be transferred in the next five years.

The successor may be part of the nuclear or extended family of the president, and may or may not belong to the same generation as the president.

Succession process extends from the time the first family member who is recognized as a potential successor joins the firm on a full-time basis, to the time the existing president hands over the management control of the firm to a family member successor and retires from active (full-time) involvement in the business.

Satisfaction with the succession process refers to the degree of satisfaction with the succession process of the primary stakeholders (predecessor, successor, and other family members actively involved in the business) in family firms.

Mutual acceptance of individual roles refers to the extent to which family members accept their relative levels of involvement and control in the business.

Family harmony is defined as the degree of respect, trust, and understanding among family members.

Agreement to continue the business occurs when family members are committed to the perpetuation of the business and are willing to work together to ensure its future (adapted from Handler, 1989: p.171).

Payoffs from the business to family members refers to the perceived gains for family members from continuation of the family business.
Propensity of a successor to take over refers to the inclination of a successor to take over the leadership of a business.

Career interests is defined as the 'degree to which one's career needs are satisfiable in the context of the family business' (Handler, 1989: 289).

Propensity of an incumbent to step aside refers to the inclination of an incumbent family member manager to let go of the leadership of a family business to a successor.

Incumbent's interests outside the business is indicated simply by the level of interest and avocations that the outgoing or past president has outside the context of the business.

Trust in successor's intentions and capabilities is indicated by the degree of confidence that the outgoing or past president has in the abilities and integrity of a successor.

Presence of an active advisory board is indicated by the existence of an advisory board (formal or informal) that meets at regular intervals.

Succession planning refers to explicit planning for the transfer of management control from one family member to the next.

3.2. An underlying assumption

March and Simon (1958) have stated that individuals are boundedly rational, operate under conditions of uncertainty, and can assimilate only a limited amount of information. Therefore, their sense-making and actions are based largely on their perceptions of other individuals and events (Weick, 1979). Based on these arguments it is assumed that it is not the reality that is relevant in the context of decision making in organizations but what an individual perceives, regardless of whether his/her perceptions are accurate or not. This basic assumption has been made in this research and
is reflected in the development of the model, as well as the operationalization of the variables.

For example, it is assumed that it is not the number of years that a successor has undertaken education or formal training, nor the number of years he/she has worked within or outside an organization, or his/her gender or age per se that is important to an incumbent’s propensity to step aside, but it is what the incumbent perceives. If he/she has trust in the successor’s capabilities and intentions his/her willingness to step aside increases, regardless of the number of years spent by a successor in school or in work or the gender or age of the successor. While a high school dropout may be trusted by one incumbent to have the capability to run the business, another with the highest possible educational degree or extensive experience may not be trusted by another incumbent. A younger daughter may be trusted more than an eldest son in one case and the opposite may be true in another instance. So it has been hypothesized in the model that there is a positive relationship between the degree of trust that the predecessor has in the intentions and capabilities of the successor, and his/her propensity to step aside from the leadership role in a business.

Following this line of thinking the respondents were not asked questions related to the educational background, or the number of years they spent working within or outside their business. Instead, they were asked to state if they considered the work experience or educational background of the successor appropriate for their business and whether the incumbent had trust in the successor’s abilities and confidence in his/her integrity.
With a clarification of this basic assumption underlying this research, each of the determinant that forms the basis of the suggested research model is discussed in turn in the next section.

3.3. Determinants of the satisfaction with the succession process

Five primary determinants of the satisfaction with the succession process: (1) mutual acceptance of individual roles, (2) agreement to continue the business, (3) propensity of a successor to take over the business, (4) propensity of an incumbent to step aside, and (5) succession planning, form the basis of the research model developed here. Each of these determinants and elements that have an impact on them are included in the overall model of satisfaction with the succession process depicted in Figure 1. Specific hypotheses derived from this model are suggested and discussed in the following sections.
3.3.1. Mutual acceptance on individual roles. This variable refers to the extent to which family members accept their relative levels of involvement and control in the business.

The literature suggests that variables such as the number of heirs, their relative position in the family and the business, and clarification of the roles and responsibilities of family members in the context of the business may have an impact on the succession
process (Barnes, 1988; Bork, 1986; Handler, 1989; Rosenberg, 1991; Rutigliano, 1986; Scranton, 1992). While some have suggested that a greater number of heirs leads to a top heavy firm, creating difficulties in the work relationships of family members (Bork, 1986; Rutigliano, 1986; Scranton, 1992), others argue that it is not only the number of heirs, but also their relative position in the business and family hierarchy that is important in determining the ease of generational transition (Barnes, 1988; Kaye, 1992). For instance, when a younger son or daughter, presumably with a relatively lower position in a family, takes over the leadership role in a firm, it leads to an incongruence of hierarchies (Barnes, 1988). This incongruence increases the challenges being faced by these individuals as they have to manage their different status in the two systems.

Rosenberg (1991) has suggested that most individuals want clearly defined roles and responsibilities (referred to by her as 'specific territories') in the context of business. This need for clarity of roles and responsibilities helps individuals to identify with their contributions and responsibilities (Rosenberg, 1991), and perceive a sense of fairness in the employment (Organ, 1990). In order to provide these 'specific territories' and a potential for exercising personal influence for all family members (including the ones with different status in the family and business sub-systems), successful family firms have been observed to divide the areas of responsibilities amongst family members (Barach, 1984; Crane, 1982; Post, 1993; Rutigliano, 1986; Ward, 1988). This mechanism could also accommodate a large number of heirs. Although the degree of clarity of roles amongst family members may vary in different families (Davis, 1983), and different mechanisms may be adopted to provide clear roles and responsibilities for family members, it is
ultimately the acceptance amongst family members about the level of involvement (ownership as well as managerial) in the business, that determines their satisfaction with the succession process.

In her study on the perspectives of next-generation family members, Handler (1989) found that an 'agreement on their relative position of responsibility and power' (p.163), which she referred to as 'sibling accommodation', had a major effect on the quality of succession experienced by these members in family firms. While her focus remained on the role of siblings involved in the business, she recognized the importance of the comfort level of other family members not involved in the business, with the roles of those involved with the business (Handler, 1989). This recognition of the feelings of other family members is important because the family system is the key integrating mechanism in family businesses, and family feelings form a vital fabric in these firms (e.g., Alderfer, 1988; McCollom, 1988). Moreover, it has been suggested that at times not all players are 'on board', and important decisions in family firms may be made by individuals who do not actually work in the business (Babicky, 1987; Gillis-Danovan and Moynihan-Bradt, 1990). Therefore, it becomes important to incorporate the level of acceptance regarding the roles and responsibilities of all family members, in an attempt to understand their extent of the satisfaction with the succession process. Such an acceptance would make it possible for family members to work harmoniously together. Without this acceptance, however, family members would often attempt to undermine the efforts of others in order to achieve a more equitable distribution of company stock, power, or assets. This discordance might
slow down decision making with regard to the succession process dramatically (Dyer, 1986).

Therefore, it is hypothesized that it is the acceptance amongst family members regarding their individual roles in relation to the family firm that influences the extent of their satisfaction with the succession process. This first hypothesis can be stated as,

_Hypothesis 1: There is a positive relationship between the level of mutual acceptance amongst family members regarding their individual roles in the business and the satisfaction experienced by the primary stakeholders with the succession process in family firms._

While the acceptance of family members regarding their position relative to the business is an important determining factor for their satisfaction with the succession process, the literature also suggests that some family relational variables such as mutual respect, trust, and understanding amongst family members are also important for the succession process (Handler, 1989). Following the lead of Churchill and Hatten (1987) and Malone (1989) these family relational variables are referred to here as 'family harmony'. _Family harmony is defined as the degree of respect, trust, and understanding amongst family members._

Similar to the ways in which a positive social context facilitates succession from one management to another in merger and acquisition situations (e.g. Jemison & Sitkin, 1986), mutual understanding, respect, and trust among the different parties involved plays an important role in the level of acceptance of their roles in the business (Handler, 1992) and promoting decision making in a supportive climate (Dyer, 1986). Malone (1989) comments that 'a family business characterized by a high degree of harmony among family
members is one of the most valued work environments' (p.344), which can lead to a higher
degree of acceptance of individual roles of family members in the context of the business.
In his study, Malone (1989) found a positive relationship between perceived family
harmony and the extent of continuity planning undertaken.

However, Lansberg & Astrachan (1994) have argued that family cohesion and
adaptability have an indirect influence (through family’s commitment to the business, and
the quality of relationship between the owner-manager and successor) on succession
planning and training. No direct influence of these family relationship variables were found
on either succession planning or training in their study. This finding led them to suggest
that ‘the impact of family relationships on organizational behavior cannot be fully
discerned without accounting for mediating variables’ (Lansberg & Astrachan, 1994:
p.55). Consistent with their arguments it is suggested here that family harmony has an
indirect influence on satisfaction with the succession process—the mediating factor being
the extent of mutual acceptance amongst family members regarding their role in the
business5. Based on these arguments it can be hypothesized that,

\[ \text{Hypothesis 1a: There is a positive relationship between perceived family} \]
\[ \text{harmony and the extent of mutual acceptance amongst family members} \]
\[ \text{regarding their role in business.} \]

3.3.2. Agreement to continue the business. The second factor that determines the
satisfaction with the succession process in a family business is agreement among family
members to continue the business. This agreement occurs when family members are

---

5 Also consistent with the arguments of Lansberg and Astrachan (1994), the relationship of ‘perceived
family harmony’ with succession planning is hypothesized to be mediated by the extent of family’s
agreement to continue the business (Hypotheses 2b and 5d).
committed to the perpetuation of the business and are willing to work together to ensure its future (adapted from Handler, 1989: p.171).

It has generally been suggested that there is a strong commitment of family business leaders to continue family ownership and control (Davis, 1983; Lansberg, 1983; Miller and Rice, 1967). In a recent study of 1002 family business owners in the US, it was found that 57% of family business owners showed an interest in keeping their business in the family (Mass Mutual, 1994). Generational transition is most difficult when there is a disagreement among family members as to the future disposition of the business (e.g., some may wish to sell) and the satisfaction with the succession process is enhanced when family members are committed to the continuity of the business (Babicky, 1987). Therefore it follows that,

Hypothesis 2: There is a positive relationship between the level of agreement among family members to continue the business, and the satisfaction experienced by the primary stakeholders with the succession process in family firms.

The reasons for the commitment of family members to continue the business may vary from pride in the business, to the possibility of high payoffs. Malone (1989) noted that anticipated payoffs from the business is one of the important factors that strengthens family members' commitment to the continuity of the business. Research on first generation immigrant family businesses indicates that these families may view the business as a foundation of professionalization for their children instead of as a family legacy, resulting in children being pushed away from the family business (Dean, 1992; Wong,
McReynolds, and Wong, 1992). One explanation could be that the businesses started by members of first generation immigrant families are generally small and do not promise enough revenues and payoffs for the next generation family members. From a game theoretic perspective, Axelrod (1984) has suggested that for cooperation to emerge, there must be perceived gains for all parties involved. In the family business context, the possibility of high payoffs from the business can motivate family members to cooperate with each other and be committed to the continuation of the business. The findings of the Mass Mutual survey also support this argument. Specifically, it was found that 66% of owners of family businesses with gross revenues for 1992 in excess of $10M intended to pass ownership within the family as compared to 57% of owners with gross revenues of less than $10M (Mass Mutual survey, 1994). Thus it can be hypothesized that,

*Hypothesis 2a: There is a positive relationship between the possibility of high payoffs from the business, and the level of agreement among family members to continue the business.*

It has been noted in the strategic management literature, decisions made in an organization can be influenced by the personal values and aspirations of the chief executives, and at times economically desirable options may not be adopted because of the preferences of these executives (e.g., Andrews, 1980; Hofer & Schendel, 1978). While these observations were made in the context of larger public organizations, this influence of personal preferences of top managers is even more prevalent in the context of family firms as personal relationships among family members have been observed to take precedence over financial profit objectives (e.g., Davis, 1968; Lyman, 1991; Rosenblatt, deMik,
Anderson, & Johnson, 1985). Family firms have been found to employ family members in order to maintain family harmony, although this practice may lead to a suboptimal performance (Dunn, 1995). Continuity of family firms characterized by a high degree of family harmony may be important to family members, irrespective of financial performance (Malone, 1989).

Therefore, along with the possibility of high payoffs from the business, the presence of family harmony is an important determinant of the agreement among family members towards the continuity of the business. The hypothesis that follows from this line of reasoning is,

*Hypothesis 2b: There is a positive relationship between the level of perceived family harmony and the agreement among family members to continue the business.*

3.3.3. Propensity of successor to take over. Succession involves two major players: the outgoing (or past) president and the successor, both of whom should be interested in the process (Christensen, 1953). Although the role of the incumbent in influencing the succession process has been widely recognized, the role of the successor is just as vital (Handler, 1992). An important ingredient for any succession to take place is the presence and willingness of a competent successor (Dyer, 1986). In this model this is referred to as 'the propensity of successor to take over'. Webster's dictionary (1981) describes propensity to be 'an intense and urgent natural inclination'. In this context it refers to *the inclination of the successor to take over the leadership of the business*. Without a successor's willingness to take over the family business there cannot be a succession. One
of the commonly cited reasons for a problematic succession, is lack of interest on the part of a successor to join the business (Barry, 1975; Dyer, 1986; Gilbert, 1989). Successors who feel that they have been forced to join the family business are likely to project resentment towards other family members and may not co-operate in any attempt of generational transition (Bowen, 1978; Goldberg & Woolridge, 1993). Therefore it can be hypothesized that,

**Hypothesis 3: There is a positive relationship between the propensity of a successor to take over the leadership of a business, and the satisfaction experienced by the primary stakeholders with the succession process in family firms.**

What are the factors that would motivate a potential successor towards a career in family business or increase his/her propensity to take over the business? Most contemporary theories of motivation begin with individual needs (e.g. Maslow, 1954; Alderfer, 1972). Three needs of successors that have received attention in the family business literature are: the physiological needs, belongingness needs, and self-actualization needs⁶ (Maslow, 1954). These correspond roughly with the existence, relatedness, and growth (ERG theory) needs suggested by Argyris (1972).

As physiological needs refer to bodily needs such as food and shelter, they can be satisfied by receiving adequate wages. In the context of family firms, they can be referred to as pay-offs that a successor may perceive to be available from adopting a career in family firms. These expected payoffs can motivate a potential successor to join the family firms.  

---

⁶ The 'hierarchy of needs' suggested by Maslow (1954) includes the needs of physiological, security, belongingness, esteem, and self-actualization. Maslow suggested that as lower order need becomes gratified, individuals become motivated to fulfill the next higher need.
business, and induce him or her to co-operate with other family members to ensure a high quality succession process. Malone (1989) has suggested that when the company is larger and promises higher payoffs, it is more likely to be an important financial asset to the owner-manager's family and it may be easier to attract potential successors to that business. In a study by Ambrose (1983) of 53 firms, 35 out of which resulted in no family succession, it was found that the lack of attractiveness of the family business from a financial perspective was one of the factors responsible for the limited interest of next generation family members in the business. The hypothesis that follows from this argument is,

*Hypothesis 3a: There is a positive relationship between the possibility of high payoffs from the business, and the propensity of the successor to take over the business.*

The belongingness need suggested by Abraham Maslow (1954) refers to the need for affection, acceptance, and friendship, in individuals. Mutual acceptance of individual roles can provide a desirable working context in family firms that satisfy the belongingness needs of successors. The potential successors may find this to be a conducive environment to work in and be attracted towards joining the family firm as a consequence (Dyer, 1986). It follows that,

*Hypothesis 3b: There is a positive relationship between the degree of mutual acceptance amongst family members regarding their individual roles in the context of business, and the propensity of the successor to take over the business.*
Self-actualization need is the drive to become what one is capable of becoming and includes growth and achieving one's potential (Maslow, 1954). Successors can satisfy this need in the context of their family firm when their career interests align with the opportunities available in the business. Handler (1992) suggested this fit between the career interests of a successor and the opportunities available in the family firm is an important determining factor in the decision of a successor to join the business. She used the term 'career need fulfillment' to describe this degree of fit, and defined it as the "degree to which one's career needs are satisfiable in the context of the family business" (p.289). This definition is accepted to describe this variable. If a designated successor's career interests are not met by the opportunities available in the family firm, his or her propensity to take over will be reduced. One method of increasing interest in the family business is to socialize the successor into the business at an early age. This exposure to the business helps implant the idea of a career in the family business in the successor's mind at a young age (Dyer, 1986; Longnecker and Schoen, 1978). Whatever the mechanisms used to increase the interest of potential successors in the business, the following hypothesis can be suggested.

Hypothesis 3c: There is a positive relationship between the likelihood that the career interests of the successor will be satisfied in the context of the family business, and his/her propensity to take over the leadership of the business.

3.3.4. Propensity of incumbent to step aside. Similar to the definition used for the propensity of a successor to take over, the propensity of an incumbent to step aside is defined as the inclination of an incumbent family member manager to let go of the
leadership of a family business to a successor. The literature on family business emphasizes that an owner manager who fails to address critical business continuity issues, endangers the long term health or even the existence of the enterprise. It is recognized that business continuity is largely in the control of the incumbent family member (Handler and Kram, 1988; Hollander and Elman, 1988; Lansberg, 1988). However, the incumbent's inability to "let go" has been identified as the single largest problem of succession (Davis, 1982). In most cases the business remains such an integral part of the life of the family member who is in charge, that it becomes difficult for him or her to visualize a life outside the business (Kets de Vries, 1985). Besides the psychological deterrents to addressing the issue of succession, training of the next generation of leaders requires these incumbent managers to learn the new job of leadership that involves coaching and planning rather than doing it themselves. They need to be able to watch others make mistakes and learn, and eventually accept that others can become experts too, and may even be able to do a job better than themselves (Firnstahl, 1986). While addressing the issue of succession is not an easy task for the incumbents, they are in the pivotal position to initiate and handle this task. Their readiness to step aside will influence both the extent of succession planning undertaken\(^7\), as well the degree of satisfaction with the succession process experienced by the key stakeholders in family firms. Based on this reasoning it can be suggested that,

*Hypothesis 4: There is a positive relationship between the propensity of an incumbent to step aside from the leadership of a business and the satisfaction experienced by the primary stakeholders with the succession process in family firms.*

---

\(^7\) This relationship is further developed in Hypothesis 5a.
Prior research suggests that factors that may be helpful in increasing the propensity of an incumbent to retire are: trust that he/she (incumbent) has in the successor's capabilities and intentions, and his/her (incumbent’s) interests outside the organization. Each of these is elaborated below.

Thorelli (1986: 38) has defined trust as "an assumption or reliance on the part of A that if either A or B encounters a problem in the fulfillment of his implicit or explicit transactional obligations, B may be counted on to do what A would do if B's resources were at A's disposal". Trust, therefore, resolves the need to specify unforeseeable consequences (Jarillo, 1988). In this context, *trust in successor's intentions and capabilities refers to the degree of confidence that the outgoing or past president has in the abilities and integrity of a successor.* As the founder has worked hard through the years and relates closely with the firm, he/she can only "let go", if at the very least he/she can trust the intentions of the successor to operate the business in good faith (Dyer, 1986). If the predecessor's decision to retire cannot be juxtaposed with an heir's appropriateness and readiness to take over, then succession may not occur at all (Hollander and Elman, 1988). Another type of trust that the departing leader must have is in the capabilities of the successor (Sonnenfeld & Spence, 1989). Both formal educational background and experience may indicate the successor's knowledge, skills, problem-solving ability, discipline, motivation, values, and self-confidence (Cooper, Gimeno-Gascon, & Woo, 1991; Davidson III, Worrell, & Cheng, 1990; Hambrick & Mason, 1984). If the predecessor perceives the presence of these characteristics in the successor, trust in the next generation member's capabilities is greatly enhanced, thereby increasing his/her
propensity to retire (Christensen, 1953). Based on this reasoning it can be hypothesized that,

_**Hypothesis 4a: There is a positive relationship between the degree of trust that the president has in the capabilities and intentions of a successor, and his/her propensity to retire.**_

It has been suggested that in the event of succession, the founder must distance himself/herself from the successor, so as not to appear sheltering and overprotective, and to enable the successor to become comfortable in his/her new job (Christensen, 1953; Sonnenfeld & Spence, 1989). One mechanism suggested to make it easier for the founder to "let go" is the development of _interests and avocations outside the firm_ (Christensen, 1953; Dyer, 1986; Sonnenfeld & Spence, 1989). In the presence of such interests outside the organization, it becomes easier for the outgoing leader to keep himself/herself occupied in activities outside the context of the business (Christensen, 1953; Davis & Taguiri, 1989; Sonnenfeld & Spence, 1989). This reasoning leads to the following hypothesis,

_**Hypothesis 4b: There is a positive relationship between the interests of a president outside the business, and his/her propensity to retire.**_

3.3.5. **Succession planning.** Succession planning refers to the _explicit planning for the transfer of management control from one family member to the next_. The importance of succession planning as well as the difficulties involved in it have been widely recognized both in the literatures of family business and of executive succession (Beckhard & Dyer, 1983a; Christensen, 1953; Grusky, 1961; Malone, 1989; Rosenblatt, deMik, Anderson,
and Johnson, 1985; Seymour, 1993; Trow, 1961; Ward, 1987). Christensen's (1953) study indicated that in a large number of small businesses, succession planning was left to chance. While it is generally believed that large public companies carefully monitor and plan executive succession (Dreux, 1990), in a survey of 1484 corporate presidents Brady, Fulmer, and Helmich (1982) found that fewer than 50% of the responding firms engaged in such planning. However, the number of family firms engaging in succession planning may be even less. In these firms succession is an emotion-bound issue, that raises some unpleasant questions for all concerned (Beckhard & Dyer, 1983a; Dyer, 1986; Lansberg, 1988). In the Mass Mutual study (1994) it was found that nearly three-quarters of owners who intended to pass their business to other family members had no written succession plans, and only 45% indicated they had an unwritten succession plan. Lansberg, (1988) has suggested that succession planning is a topic approached with ambivalence as it imposes a wide variety of significant changes for all stakeholders connected with the business including the founder, the family members, the managers, suppliers, and customers. However, in the absence of such planning, the sudden departure of the founder-manager can cause major upheavals of power and authority, conflict among heirs, and thorny estate issues (Christensen, 1953; Hayes & Adams, 1990; Mastromarco, 1992; Lane, 1989; Lansberg, 1988). Thoughtfully developed succession plans and well-drafted documents can optimize estate tax impacts as well as maximize the likelihood of cooperation among stakeholders in the business (Hayes & Adams, 1990; Mastromarco, 1992). That is, by stipulating the conditions under which anticipated benefits will accrue to individual members of the business, succession planning enlarges the "shadow of the
future" (Axelrod, 1984) and thus enhances the quality of the succession process. Therefore it can be hypothesized that,

**Hypothesis 5:** There is a positive relationship between the degree of succession planning, and the satisfaction experienced by the primary stakeholders with the succession process in family firms.

Christensen (1953) notes that 'the first and foremost barrier that stands in the way of some provision for retirement planning, is the top manager himself' (p.129). Therefore, a strong propensity of the predecessor to retire will stimulate him or her to indulge in succession planning. In the Mass Mutual study (1994) it was found that the degree of succession planning in family firms was directly related to the owner-manager's plan to retire. While 74% of the owner-managers who planned to retire in the next five years had chosen their successor, only 37% of those who did not plan to relinquish control in the next ten years had chosen their successor (Mass Mutual, 1994). Thus, one can argue that the propensity of the predecessor to retire will be positively related to the degree of succession planning. It follows that,

**Hypothesis 5a:** There is a positive relationship between the propensity of an incumbent to retire and the degree of succession planning undertaken.

Closely associated with the role of planning in family firms, is the role of advisors in these businesses. It is generally agreed that family business managers can benefit from the objective counsel of individuals beyond the immediate management group (e.g., Christensen, 1953; Danco, 1975). As it is often difficult for an incumbent managers to initiate succession planning process due to its psychological deterrents (e.g., Lansberg,
the presence of an advisory body can aid in inducing these individuals to initiate this process and make sure that it receives continued attention (Christensen, 1953). However, the nature of the composition of this counseling group is not yet agreed upon. That is, the extent of the effectiveness of outsiders (individuals not directly involved in the business or family members of the owning family) on this group is not clearly understood at present, and two schools of thought exist. The proponents of having outsiders on the board argue that such individuals can diffuse personal conflicts, and enhance the business continuity efforts (e.g., Danco, 1981; Heidrich, 1988; Jain, 1980; Mace, 1948; Mueller, 1988), objectively evaluate potential successors, and provide support to the newly elected leader (Christensen, 1953; Harris, 1989; Mathile, 1988). In contrast to these arguments, others point to the ineffectiveness of outsiders on the board due to the obligation these directors feel towards the owner-manager who appointed them (Alderfer, 1988; Jonovic, 1989). While there is merit to both sides of this debate, variables that need to be taken into account in board decisions are the size, age, and complexity of the business. Some authors for example, Jonovic (1989) and Whisler (1988) have suggested that while smaller firms may not be in a position to gain from outsiders on the board of directors, larger firms with professional management teams may derive considerable benefit from them. For smaller firms alternatives to the "classic" board have been suggested, for example, the family council (Lansberg, 1988; Ward, 1988), the review council (Jonovic, 1989), and the advisory council (Tillman, 1988).

The empirical studies undertaken to determine the relationship between the type of board (or more specifically the percentage of outsiders on the board) and the extent of
continuity planning undertaken do not present consistent results. While Malone (1989) found a positive and significant relationship between these two variables, Ford (1988) did not find such a relationship. Because the prescriptive literature strongly suggests that the presence of an advisory board influences succession planning process, and the lack of a clear evidence from the empirical work about the extent of effectiveness of different types of board on succession planning, it is hypothesized that,

**Hypothesis 5b: There is a positive relationship between the presence of an active advisory board and the degree of succession planning undertaken.**

An active advisory board indicates a formal or an informal advisory board that meets on a regular basis and plays a role in determining the strategic direction of the business.

Another factor that may contribute to the extent of succession planning undertaken is the extent of agreement among the members of the proprietary family to continue the business. When the continuity of a business is not considered desirable by the owning family (e.g., by many first generation immigrant families), no succession planning is undertaken. In such firms, parents do not encourage their children to adopt a career in the family firms (e.g., Wong, McReynolds, & Wong, 1992). On the other hand, in families that are highly committed to the continuity of their business, parents convey a sense of excitement and potential future benefits of the firm to their children, thereby attracting them towards a career in the business. The well-being of these families is viewed as being positively related to the longevity of the business. This provides the necessary supportive environment for such families to undertake the emotionally straining process of succession planning (Lansberg & Astrachan, 1994). The presence of this relationship has
been confirmed in an empirical study undertaken by Lansberg and Astrachan (1994). According to these authors, succession planning for families highly committed to the perpetuation of the business is viewed as 'an activity that must be done for the greater good of the family' (p. 46). This hypothesis previously tested by Lansberg & Astrachan (1994) is retested in this study,

_Hypothesis 5c. There is a positive relationship between the agreement among family members to continue the business and the degree of succession planning undertaken._

### 3.4. Some additional determinants

Besides the five major determinants of the satisfaction of primary stakeholders with the succession process, four other factors suggested in the literature as having an influence on the succession process, and considered in this study are: (1) life cycle stage of the family firm, (2) ethnic background of the owners of the firm, (3) the gender of president and the successor, and (4) size of the business. Each of these is discussed below.

**1) Life cycle stage of the family firm.** Various authors have indicated that transition from the founder to the next generation is very different from that amongst succeeding generations as the process becomes institutionalized (Christensen, 1953; Hansen et al, 1990; Sonnenfeld & Spence, 1989). Specifically, it has been suggested that the succession process is influenced by the firm’s past succession practices (Lamb, 1987). The first generation owners are least likely to plan for their succession because of their close identity with the business and inexperience of planning such a succession. This first succession in leadership is crucial in determining whether the business will exist beyond
the life of a founder or not (Davis & Stern, 1988). Moreover, the family's commitment to perpetuate the business is likely to be stronger if the business has been in the family beyond one generation as other family's members also begin to identify themselves with the business. As the transitions take place from generation to generation, the rules of succession become clearer and get established as part of the family tradition.

Another issue related to the transition in family firms is that some dynamics in inter-relationships may differ between inter-generational transfers and intra-generational transfers as in the former case the transfer is amongst members who belong to different generations and may differ considerably in terms of age, or values, as compared to members of the same generation. This reasoning leads one to believe that the generation running the business and that taking over may have some significant influence on the succession process, and must be accounted for in any model of the succession process. This study tested for effects on the succession process of the generation of family represented by the outgoing family member and the successor.

(2) Ethnic background of the owning family. Studies on ethnic background reveal differences in the basic philosophy and underlying assumptions of the family members of different ethnic backgrounds (e.g., Chau, 1993; McGoldrick & Troast, 1993; Wong, 1993). As mentioned earlier, some of the first generation immigrant families may not view the business as a family legacy and encourage their children to follow careers outside the business (Dean, 1982; Wong, McReynolds, & Wong, 1992). This leads one to believe that the differences in ethnic background may have a significant influence on the expectations of family members in a transition process, and must be accounted for in any
model of the succession process. This study tested for the effects on the succession process of the ethnic background of the owning families.

(3) Gender of the president and successor. It has been suggested in the literature that the relationship between an outgoing family member and successor of the same gender may be different from that of members of different genders (Dumas, 1989). It has been argued earlier in this chapter that it is not the gender of an incumbent or a successor per se that is an important determinant of the succession process. Rather the important factors are whether the incumbent trusts a successor’s capabilities and integrity, and whether the successor has a desire to join the business. However, because the literature suggests that gender may influence these variables, the data was tested to detect effects of gender on the succession process.

(4) Size of the business. It has been suggested that larger firms were more likely to be passed on to the next generation of family members than smaller firms (e.g., Mass Mutual survey, 1994). This study tested for the effects on the succession process of the size of the business.

3.5. Conclusion

Briefly, this chapter has outlined the theoretical model of the determinants of the satisfaction with the succession process in family firms. The factors that impact the succession process were found to cluster into five major determinants: mutual acceptance of family members on individual roles in the business, commitment of family members to continue the business, propensity of a successor to take over, propensity of an incumbent to retire, and succession planning. In all, 16 hypotheses were developed. The next chapter provides the details of the research design used for this study.
CHAPTER 4
THE RESEARCH DESIGN

This chapter describes the research design used in this study. A two-stage approach was used to test the theoretical model developed in the previous chapter. The first stage used four case studies to determine the initial validity of the model in order to justify further investigation. The details on the method of case selection, mode of data collection, and analysis for this stage of the research work are discussed in section 4.1. A large scale survey was used in the second stage. The population studied, method of data collection, operationalization of variables, and method of analysis used for the survey are discussed in section 4.2. The last section summarizes the key points of this chapter.

4.1. Stage 1: Preliminary testing of the model

The conceptual model developed in the previous chapter was subjected to a preliminary test based on four case studies representing different types of succession experiences. In order to provide a comprehensive discussion of the research method used, this section is further sub-divided into three sections: the selection of cases (4.1.1), method of data collection (4.1.2), and method of analysis (4.1.3).

4.1.1. Selection of cases. In the summer of 1994, the Family Enterprise Research group at the University of Calgary, conducted a series of focus groups. A focus group is a panel of 8 to 12 respondents led by a trained moderator (Emory and Cooper, 1991). The objective of these focus groups was to understand the issues confronting family businesses, and to evaluate the needs of these businesses in Calgary. The major finding of this research effort was a confirmation that, as indicated by the literature on family
businesses, the issue of succession was a major concern for these businesses. Moreover, this effort also helped identify four family businesses (1) for whom succession was an issue of interest, (2) in which there was a high possibility of two family members participating in the study, and (3) had experienced succession processes of different quality ranging from smooth succession (high satisfaction) to problematic (low satisfaction).

4.1.2. Method of data collection. Once the four cases were identified and agreement to participate in this research project obtained from the subjects, eight in-depth semi-structured interviews ranging from one to one and one-half hours were conducted with members of these four family firms. Face to face interviews were conducted with two family members in two firms (the predecessor and successor in first, and two potential successors in the second), and one family member in each of the other two firms (son-in-law successor and third generation successor). Telephone interviews were conducted with another family member (mother-in-law who started the business, and a second generation president) in the latter two firms. The interviewees were explained the purpose of the study and asked to provide background information on their firm (to get the context), as well as information on their succession experience.

The interviews were semi-structured. While a set of pre-determined questions regarding the background of the firm and the succession process were asked, the answers sought were open-ended. This method was chosen to maintain a focus to the interview, while maximizing the insights gained from different contexts. The recorded interviews were then transcribed for easier access.
4.1.3. **Method of analysis.** The first step was to content analyze the transcribed data. In order to detect the support present for the model, the transcribed interviews were carefully read and coded with respect to their relevance to the study's hypotheses. The degree of support for each hypothesis from each case was classified into four categories: strong support for the hypothesis (SS), weak or indirect support (WS), strong evidence that the hypothesis was not supported (S-NS), and weak evidence that the hypothesis was not supported (W-NS). The support was labeled as strong support (SS) or strong non-support (S-NS) if direct evidence was found either in favor or against the hypothesis. On the other hand, if the evidence found was based on themes, hunches, or interpretations from data, the support was labeled as weak support or weak no-support (based on the direction in which the data pointed).

In order to access the overall validity of the model the level of support for each hypothesis for all the cases was tabulated. A chi-square goodness of fit test was conducted to calculate the overall fit of the model against the null hypothesis of randomness in the distribution of supporting and non-supporting data pertaining to the hypotheses. Because of the small sample size this non-parametric test was considered appropriate for the overall testing of the model. The results of the preliminary analysis are presented in Chapter 5. Although individual hypothesis could not be tested because of the limited sample size, a high degree of support was found in this initial testing of the overall model.
4.2. Stage 2: Quantitative testing and analysis

A large scale survey was conducted for the second stage of this research study. A discussion of the population studied (4.2.1), method of data collection (4.2.2), and method of analysis (4.2.3) for the survey is presented in separate sections that follow.

4.2.1. The population studied. Although it has often been stated that a large number of businesses are family businesses, there are no national statistics available on these businesses. This lack of secondary data makes it extremely difficult to determine the population of family businesses and contact these businesses. Previous researchers have followed different approaches to meet this challenge: (1) contact family businesses known to the researcher or through referrals from individuals known to the researcher (e.g., Handler, 1989), (2) use the lists of vocational or professional associations whose membership is largely family businesses (e.g., Goldberg, 1991; Lansberg and Astrachan, 1994), (3) use lists from family business consultants (e.g., Geeraerts, 1984), (4) use of data from public sources, for example, newspaper articles (e.g., Rosenberg, 1991), and (5) sending an extra questionnaire to the respondent to be filled by another individual who fit into the category intended to be studied (e.g., Davis & Taguriri, 1989).

Some of these techniques are used for this study. Specifically, the population of this study is the members of the 'Canadian Association of Family Enterprise' (CAFE). The selection of this population was particularly relevant for this study as CAFE is an association that tries to attract family firms for whom succession is an issue of interest. Moreover, the University of Calgary houses the national office of this association which

---

8 Established in 1983, CAFE is the only non-profit national organization of affiliated chapters, dedicated exclusively to the support of family businesses in Canada.
allows for easy access to the mailing list of CAFE members. There were 604 firms that were members of CAFE at the time the questionnaires were sent out for this study (February, 1996). As questionnaires were sent to all the firms that were CAFE members, no sampling techniques were used.

4.2.2. Method of data collection. For clarity of discussion this section is subdivided into four sections: (4.2.2a) instrument development, (4.4.2b) operationalization of variables, (4.2.2c) administration of the questionnaires, and (4.2.2d) response rate. Each of these is discussed in turn.

4.2.2a. Instrument development. For each firm, a set of three color coded questionnaires was developed for the following individuals: the outgoing president or retired president, the successor or potential successor, and another family member active in the firm. It was considered important to obtain responses from multiple respondents within each firm for two reasons: (1) the feelings, opinions, or perceptions of different individuals in a firm may vary, and (2) to test the convergent and discriminant validity of the multiple informants' responses (Campbell & Fiske, 1959). Although the basic questions asked in the three questionnaires were the same (Appendix A), three versions were used in order to address each individual in more personal terms. For example, a question asking respondents the extent of accuracy of the statement related to the outgoing president’s commitment to continuing the business as a family business, was presented in the three questionnaires as follows:

In the questionnaire for out-going or retired presidents it read:  

*I was deeply committed to continuing the business as a family business.*
Whereas in the other two questionnaires for successor and other family members it read:

*The outgoing president of our business was deeply committed to continuing the business as a family business.*

The developed questionnaires were subjected to a pre-test in order to ensure ease of understanding, the relevance of the items included in the questionnaire, the time taken to fill out the questionnaire, and the ease with which the questions could be answered. This pre-test was conducted using family members working in different capacities in five family businesses, three officials of the CAFE, members of the doctoral advisory committee, and four other anonymous reviewers from the University of Calgary’s ethics committee. Feedback from all these individuals was incorporated in the final set of questionnaires sent out for printing. The operationalization of variables is discussed next.

**4.2.2b. Operationalization of the variables.** As stated in the previous chapter this research is built on an assumption that due to the bounded rationality of human beings (March & Simon, 1958) their actions are based largely on their perceptions of other individuals and events (Weick, 1979). Based on this reasoning the variables were operationalized in this study with an attempt to understand the perceptions of individual respondents through a series of questions in which respondents assessed the applicability to their situation. Rating scales were used as suggested by Emory & Cooper (1991). A five point Likert-type scale was used for this study. Each anchor on the scale was named in order to assist the respondents in making their choices and with a hope of achieving consistency of interpretation of various anchors by the respondents. For example, in questions asking the extent of accuracy of the statements the five anchors were: 1 - not at
all accurate, 2 - somewhat accurate, 3 - moderately accurate, 4 - fairly accurate, and 5 - completely accurate.

In an effort to improve the construct validity of measures, multiple indicators were used to measure the variables. An attempt was made to use established scales wherever available. However, not many established scales were found in the literature and most of the indicators had to be developed for the study. The discussion below turns to the actual operationalization of the antecedent and mediating variables (4.2.2b.i), the dependent variable (4.2.2b.ii), other variables for testing of response biases (4.2.2b.iii), and the qualifying question (4.2.2b.iv). The exact questions used are listed according to the variables they act as indicators for, in Appendix A.

4.2.2b.i. Operationalization of the antecedent and mediating variables. The measures proposed for each of the six antecedent and five mediating variables are discussed here.

Perceived Family Harmony. Family harmony has been defined in this study as the degree of mutual trust, understanding and respect amongst family members. In his study Malone (1989) operationalized this variable simply by asking the respondents to characterize the degree of harmony among family members involved in the business (on a five point scale). However, family harmony is a complex multidimensional construct, and there is a need to use multidimensional measures for this variable. Therefore, in this study while a simple question asking the respondents to characterize the degree of family harmony was asked, some additional questions were asked too.
The Circumplex model that has been developed by Olson, Russell, & Sprenkle (1988), represents a synthesis of a number of theoretical approaches to studying family relationships. Three dimensions of family behavior suggested by this model are family cohesion (degree of emotional bonding family members have towards each other), degree of adaptability (the ability of family members to make internal changes in response to the situational demands), and communication, which is considered a facilitating dimension of the other two dimensions (Olson, 1988). While the dimension of family adaptability is more relevant for the 'mutual acceptance of individual roles', the two dimensions of cohesion (emotional bonding) and communication patterns are relevant indicators of family harmony (Handler, 1989; Malone, 1989; Lundberg, 1994). Four indicators used for accessing the extent of family harmony are: degree of respect, trust, emotional bonding, and openness of communication patterns among family members. These constructs were used in addition to the question asking the respondents to rate the degree of harmony amongst family members.

**Mutual acceptance of individual roles.** While perceived family harmony refers to the relationships amongst family members in general, mutual acceptance of individual roles is used to describe the relationships amongst family members, specifically in the context of the business, as opposed to in family or home situations. Some important indicators of this variable suggested by different authors and included in the scale items are clarity of roles (Rosenberg, 1991), agreement regarding ownership and managerial roles (Handler, 1989), agreement regarding day-to-day decision making, conflict resolution mechanisms, and
family adaptability (Olson, 1988; Lansberg & Astrachan, 1994). Eight indicators were used, one of which was negatively coded (Appendix A).

Payoffs from business. This variable refers to the perceived gains for family members from the business, and can be indicated by the perceptions of individuals regarding these gains as compared to pursuing other careers. While previous studies (e.g., Mass Mutual study, 1994) have used financial indicators, for example, size of business (gross revenues) to determine their relation with the intentions of owners to retain the business as a family business, the objective in this study is to understand the relationship between the perceptions of family members regarding the possibility of financial, non-financial gains, and future growth, in the family firms. Specifically, the four indicators used were related to the possibility of long term financial and non-financial gains to the family from continuation of business as opposed to its sale, potential for future expansion, and level of profitability as compared to the industry levels.

Agreement to continue the business. Agreement to continue the business refers to the degree of agreement among family members with regard to the perpetuation of business and their willingness to work together to ensure its future. This is similar to the definition used by Handler (1989) for this variable, that is, 'when family values the business and is willing to work together to ensure its future' (p. 171). Lansberg and Astrachan (1994) used this as a mediating variable to understand the relationship between family relationships and succession planning and training. They operationalized this variable with the use of a three item scale (Cronbach alpha = .70) to access the commitment of the owner-manager and other family members to continue the business. The items used by them were: the degree
of the desire of an owner-manager that his or her children should join in the business, the
degree of commitment of an owner-manager to continue the business as a family legacy,
and the degree of disappointment that would have been caused to family members if the
successor were not to join the family firm. A modification of this scale is used in this
study. In addition to the above three indicators, two additional indicators aimed towards
gauging the commitment of actively involved and non-actively involved family members
towards continuation of the family business were used.

**Career Interests.** This variable focuses on the career needs of the successor and the degree
to which there is a possibility of these needs being met in the context of family business. In
order to measure this variable respondents were asked the extent of accuracy of three
statements: (1) the successor's career needs are closely aligned with those of the business,
(2) one of the major reasons for the successor joining the family firm was the opportunities
available for personal growth in the business, and (3) opportunities available to the
successor from working in the family firm were much higher than from adopting other
available careers.

**Propensity of successor to take over.** This refers to the inclination of the successor to take
over the leadership of the family business. This variable was measured by asking the
respondents to characterize the desire of successor to take over, and his/her confidence
level for taking over the business.

**Incumbent's interests outside the business.** This variable attempts to understand the level
of the outgoing president's interest outside the context of the business. Three indicators
were used: (1) The outgoing president was looking forward to the pursuit of other
activities outside the business, (2) He/she was heavily involved in activities outside the business, and a negatively coded question that (3) He/she spent most of his/her time in work related to the business.

*Trust in successors’ capabilities and intentions.* The predecessor needs to have a trust in successor’s abilities and intentions to run the business. Without this trust he/she will find it very difficult to step down (Christensen, 1953; Goldberg & Woolridge, 1993). The items used to measure this variable were: level of trust that the predecessor has or had in successor’s capabilities, the appropriateness of the educational background and work experience of the successor, and the level of trust in the successor’s intentions in running the business in good faith.

*Propensity of an incumbent president to retire.* Five items are used to measure the degree of willingness of the incumbent president to retire. Respondents were asked to state the degree of accuracy of five statements: (1) the president was getting tired of running the business, (2) there was nothing else that the president wanted to accomplish with respect to the business, (3) the president felt that other family members should take over the leadership role for the good of the business, (4) the president did not want to let go of the leadership of the business, and (5) the president felt his/her presence in the business was necessary to keep it running (the last two items are worded negatively).

*Presence of an active advisory board.* This variable attempts to detect the presence of a formal or an informal board of advisors that plays an active role in determining the major decisions of a business. The items used are: whether there was a formal or an informal board of directors, whether the board of directors met frequently (i.e., several times a
year), whether the board played an active role in determining the strategic direction of the business, and negatively worded questions that family members made all major decisions and outsiders were not involved in such decisions.

**Succession planning.** Lansberg and Astrachan (1994) used a two item scale (Cronbach alpha 0.70) to operationalize this variable. Specifically, they asked the respondents to rate the accuracy of two statements: succession has not been explicitly planned in the family firm, and explicit selection criteria have been developed for identifying the best successor. In his research, Malone (1989) measured the extent of ‘continuity planning’ by using five indicators. He asked the respondents to rate their plans on a five-point scale describing (1) the degree to which they had a current ‘will’ that accurately reflected their wishes regarding the disposition of the business, (2) had “keyman” life insurance or a buy-sell contract to pay estate taxes, buy out other stockholders, or compensate the company for the loss of the CEO’s services, (3) possessed a recent valuation of the business, (4) had a formally designated successor who would replace the current CEO in the event of death or disability, and (5) had communicated the owner’s succession plan to heirs and employees (Malone, 1989: 346-347).

While the indicators used in both these studies capture some aspects of the succession planning process, an attempt was made to develop a more comprehensive measure of the succession planning process. Succession planning is a multi-dimensional construct that consists of at least four dimensions: (1) process used to select and train the

---

9 Because of the multi-dimensional nature of this construct and the focus of this research on management transition of business as opposed to ownership issues, a decision was made to focus mainly on the managerial aspects involved in succession planning and not on the legal or ownership issues, although a few questions on these issues were also included.
successor, (2) communication of the decision as to who the successor would be, (3) the role of outgoing president after the transfer of leadership had taken place, and (4) strategic plan for the business after transfer of leadership. Respondents were asked questions related to each of these measures.

(i) Selection and training of successor: In order to understand the degree of selection and training undertaken, respondents were asked to indicate the extent of accuracy of the following five statements: (1) a list of potential successors was developed, (2) explicit succession criteria were developed, (3) efforts were made to train the potential successors, (4) explicit attention was given to familiarize the potential successor with the employees of the business, and (5) explicit attention was given to familiarize the potential successor with the employees of the business.

(ii) Communication of the decision as to who the successor would be: As indicated by Malone (1989) another aspect of succession planning is related to the communication of who the successor would be. He used one indicator to measure the extent of the communication of owner’s succession plan to heirs and employees. Using the basic ideas from Malone’s (1989) indicator but making some changes to it, two separate indicators were used for this dimension. According to a five point scale, respondents were asked to indicate the accuracy of the following statements: (1) The decision of who the successor would be was clearly communicated to family members active in the business, and (2) The decision of who the successor would be was clearly communicated to the key employees. Thus, instead of one indicator for measuring this dimension as in Malone’s (1989) research, two separate indicators were used to measure the communication of the
decision regarding the would-be successor to family members active in the business and the key employees. Another distinction from Malone’s indicator was that the extent of communication to all family members involved in the business was measured as opposed to that of the heirs only.

(iii) Role of outgoing president after transfer of leadership: A good succession plan would indicate the roles, responsibilities, and financial package to be received by the outgoing president. Three questions were used. Specifically, respondents were asked to state whether there was a formal, or an informal, plan regarding the roles and responsibilities of the outgoing president, and whether a financial package was developed for the retirement of the outgoing president.

(iv) Strategic plan for the business: The business has to function effectively even after the transfer of leadership. In a well thought out succession plan, the direction the business would take in the future should be indicated. Three questions asked on this aspect of succession planning are: whether decisions were made as to how the ownership would be distributed after succession, what business strategy would be adopted, and whether there was an explicit plan for the business after the transfer of leadership to the successor.

Besides indicators related to each of the four measures, two questions asked the respondents to indicate whether there was a written or an unwritten succession plan for transferring the management control of the business to the successor. In all, 15 indicators were developed to understand the extent of succession planning undertaken in a firm.

---

10 This indicator was added to gauge the extent of clarity in the planning of the roles and responsibilities of the outgoing president once the leadership was passed on.
4.2.2b.ii. Operationalization of the dependent variable. The dependent variable in this study is the satisfaction of the primary stakeholders with the succession process. This is also a multi-dimensional construct that may be composed of the following three dimensions: (1) process used to select and train a successor, (2) role of the outgoing president, and (3) manner of communicating the decision as to who the successor would be. Respondents were asked to indicate the extent of their satisfaction with the succession process along each of these dimensions. The five anchors provided were: (1) not at all satisfied, (2) satisfied to some extent, (3) moderately satisfied, (4) fairly satisfied, and (5) completely satisfied. A brief discussion of indicators used to measure each dimension is presented below:

(1) Process used to select and train a successor: Respondents were asked to indicate their extent of satisfaction with the (1) process used to determine the potential candidates for succession, (2) criteria used to select the successor, (3) process used to train the successor, (4) process used to familiarize the successor with the business, (5) process used to familiarize the successor with the employees of the business, and (6) the suitability of the chosen successor.

(2) Role of out-going president: Respondents were asked to indicate their degree of satisfaction with the (1) financial arrangements for the outgoing president, and (2) the criteria used for determining the distribution of ownership after transfer of leadership to the successor.

(3) Manner of communication of the choice of successor: Respondents were asked to indicate their extent of satisfaction with the manner in which the choice of
successor was communicated to the family members active in the business, family members not active in the business, and key non-family managers.

Besides the above indicators another question to indicate the extent of satisfaction with the succession process as a whole was included. This led to the inclusion of 12 indicators for the dependent variable (Appendix A).

4.2.2b.iii. Operationalization of other variables to test for response biases. As mentioned in the previous chapter four other factors may influence the succession process: (1) life cycle stage of the family firm, i.e., the generation of family represented by the outgoing president and the successor, (2) ethnic background of the owners of the firm, (3) the gender of the president and the successor, and (4) size of the business. Data related to each of these factors were collected using simple questions. For example, respondents were asked to indicate their ethnic background, gender of the president and the successor, the generation of family represented by the president and the successor, and the gross revenue of their firm in 1995. The exact questions asked are listed in Appendix A.

4.2.2b.iv. The qualifying question. As this study is focused towards those family firms in which the management control of the business has been transferred to a successor in the past five years or is likely to be transferred in the next five years, the first question in the questionnaire asked the respondents to indicate this. If the firm did not qualify for the study they were asked not to fill out the remainder of the questionnaire and return it in the enclosed, stamped envelope. This was done to convey to the respondents the respect the researcher had for their time. An option was given to all respondents including the ones
who did not qualify for the study to get a copy of the summary results. This question is also presented in Appendix A.

4.2.2c. Administration of the questionnaires. A set of three questionnaires with a separate return envelope for each and a cover letter explaining the purpose of the study (Appendix B) was sent to the 'main contact person' in CAFE’s membership list (604 member firms) in the last week of February, 1996. This person was requested to pass on the questionnaires to other family members who fit the other two categories. Each of the three respondents was provided with a return stamped envelope to enable each family member to fill out and return his/her questionnaire without consultation with other family members. This was done in an effort to provide maximum privacy to the respondents while filling out their responses.

Three weeks after the first questionnaire was sent out, a one-page letter was faxed to all those whose responses had not been received (Appendix C). A total of 449 faxes were sent between March 21 and March 24, 1996. Previous research has indicated that faxes attract attention of individuals and are instrumental in bringing responses more quickly and in greater numbers (e.g., Dickson & MacLachlan, 1996). In this study a surge in response was noticed the week after the fax reminders were sent out.

A third contact with respondents was made in the form of an additional mail-out, three weeks after fax reminders, in the third week of April. Once again a set of three questionnaires, with three return stamped envelopes, and a cover letter (Appendix D) was sent out to each of the firms from which no response had been received.
In addition, a few other steps suggested by experts in mail surveys (e.g., Dillman, 1978) were followed in an attempt to increase the response rate. First, the endorsement of CAFE was obtained. All cover letters used in the study were sent on stationery that contained logos of both the University of Calgary and CAFE. This has been found to heighten the perception of credibility in the study, and increase the likelihood that members would complete and return the survey (e.g., Alpar & Spitzer, 1989; Handler, 1989). Besides this, the respondents were assured complete confidentiality of information provided. They were asked if they desired to receive summary results of the study and these results were sent to them (Appendix E).

4.2.2d. Response rate. An overall response rate of 34.77% was achieved. This response rate is considered satisfactory. Family firms have been considered to be reluctant in disclosing information about their businesses since this information also includes information about their families (Davis, 1983). Out of the 604 firms to whom questionnaires were sent, six could not be delivered due to either closure of the firm or its relocation, five firms returned the questionnaires stating no interest in the study (three of these were from the province of Quebec and it can be assumed that language may be an issue with them), and another 84 firms returned the questionnaire indicating that they did not qualify for the study. This left a total effective population of 509 firms that could respond. Responses were received from 177 firms giving a response rate of 34.77%.

Multiple responses were received from 97 firms - with two responses from 68 firms, three

---

11 That is, the management control of the firm had neither been passed on to another family member in the last five years nor was likely to be passed on in the next five years. Many of these firms that did not qualify for the study expressed a strong desire to get a copy of the results of the study. This indicates the interest of family firm managers in this study.
responses from 27 firms, and four responses\textsuperscript{12} from two firms. A total of 310 usable questionnaires was received. In terms of the three categories of respondents, 118 usable questionnaires were received from the presidents (23.2%), 142 from the successors (27.9%), and 50 from other family members active in the business (9.8%). Both the response rate and the responses for individual categories of respondents were considered satisfactory. While it may be argued that not many responses were received from family members, this was expected as not all firms may have members who fit into this category. This assertion was proven with a number of questionnaires sent back from firms that filled out one of the other two questionnaires stating that no one in their business fit this category. A summary of the respondents' details is provided in Table 4.1.

\textbf{TABLE 4.1. DETAILS OF RESPONSES RECEIVED.}

<table>
<thead>
<tr>
<th></th>
<th>FIRMS</th>
<th>PRESIDENTS</th>
<th>SUCCESSORS</th>
<th>FAMILY MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number sent</td>
<td>604</td>
<td>118</td>
<td>142</td>
<td>50</td>
</tr>
<tr>
<td>Number not qualified</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective total</td>
<td>509</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses recd.</td>
<td>310</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responses received</td>
<td>177</td>
<td>118</td>
<td>142</td>
<td>50</td>
</tr>
<tr>
<td>Response rate</td>
<td>34.77%</td>
<td>23.18%</td>
<td>27.90%</td>
<td>9.82%</td>
</tr>
</tbody>
</table>

Multiple responses
- 2 responses: 97 firms
- 3 responses: 68 firms
- 4 responses: 27 firms
- 5 responses: 2 firms

\textsuperscript{12}Respondents were asked to make additional copies of the appropriate questionnaire if applicable to their situation or to contact me to send them additional copies.
In order to conduct effective analysis of the data a minimum sample size is
required. While it has been stated that in general the larger the sample size, the better
(Kerlinger, 1986), the responses received were sufficient for the two main methods of
analysis: multiple regression and structural equation modeling (discussed in the next
section) used in this study.

In relation to multiple regression, Tabachnick & Fidell (1989) have stated that,
If either standard multiple or hierarchical regression is used, one would like to have 20
times more cases than IVs (independent variables). That is, if you plan to include 5 IVs, it
would be lovely to measure 100 cases. In fact, because of the width of errors of estimating
correlation with small samples, power may be unacceptably low no matter what the case-
to-IVs ratio if you have fewer than 100 cases. However, a bare minimum requirement is
to have at least 5 times more cases than IVs - at least 25 cases if 5 IVs are used (p.128-
129).

The model to be tested in this study has 6 independent variables, 5 mediating
variables, and 1 dependent variable. A maximum of 7 variables (6 independent and 1
dependent) were included in a regression model at any time (see section 4.2.4b. for
details). While there are enough responses from all three categories of respondents to
achieve the minimum criteria suggested above, the responses from presidents and
successors even meet the minimum criteria of 100 cases.

With regard to the structural equation modeling and its estimation method of
Maximum likelihood estimation, Hair, Anderson, Tatham, & Black (1996) have
suggested that,

Maximum likelihood estimation (MLE) has been found to provide valid results with
sample sizes as small as 50, but a sample this small is not recommended. It is generally
accepted that the minimum sample size to ensure appropriate use of MLE is 100...While
there is no correct sample size, recommendations are for a size ranging from 100 to 200.
...A sample size should also be large enough compared with the number of estimated
parameters but with an absolute minimum of 50. A minimum recommended level is five
observations for each estimated parameter (p.637).
In this study, structural equation modeling is used for the structural model and not for the measurement model. That is, the purpose of this analysis is to develop other propositions related to the relationships between variables in the model and test the fit of the model (the structural model), and not to determine the fit of the indicators with the latent variable (the measurement model). This is established using the techniques of exploratory factor analysis and scale reliabilities. Therefore, the number of variables included in the structural equation modeling is 12. Enough responses were received both from the successors and the presidents to undertake this analysis. However, due to the small number of responses from the family members those data could not be analysed separately. As will be seen in the chapter 6, it became possible to combine the responses of family members with those of successors as no difference in perceptions of these two groups was detected.

4.2.3. Method of analysis. The analysis of data can be briefly described using seven steps: (1) Diagnostics, (2) Preliminary testing for biases in data using indicators, (3) Scale construction, (4) Testing for biases in the data using scales, (5) Testing of regression assumptions, (6) Multiple regression and path analysis, and (7) Structural equation modeling. The reason for undertaking each of these analyses, and the procedure followed is discussed below.

4.2.3a. Diagnostics. The first step undertaken in the analysis was the inspection of the data using frequencies, histograms, stemleaf plots, and boxplots. These analyses were undertaken to locate any errors in coding of data, or data entry, and to gain an overall
view of the data. At this stage the errors in data entry or coding were corrected. The negatively worded questions were recoded.

4.2.3b. Preliminary testing for biases in the data using indicators. The collected data was examined for different kinds of biases that may be present. Specifically, seven different kinds of potential biases were tested by using multivariate analysis of variance (MANOVA). These are:

(i) **Timing bias**: Firms that qualified for the study could either have completed transition of management control of their business in the last five years or were likely to do so in the next five years. The first cause for bias in the data that was examined was between those who had already completed this transition and those who were likely to complete this in the next five years.

(ii) **Response bias**: As described in an earlier section respondents were contacted three times during the study with two mailings and a faxed reminder. Responses were received after different contact times. Moreover, no response was received from a number of firms. Tests of non-response were conducted using Armstrong and Overton's (1977) contention that late respondents are more likely to be similar to non-respondents. Data received were categorized into three batches based on the timing when they were received and tests were conducted to examine differences in responses among questionnaires received at different times.

(iii) **Respondent bias**: As mentioned earlier, data were collected from three different family members - outgoing presidents, successors, and other family members active in the business. The responses of these three categories of respondents were
examined to determine if there was any significant difference in the perceptions of these different family members.

(iv) **Bias due to different size of the business:** Respondents were asked to indicate the gross revenue of their business in 1995. Four ranges of sizes of business were reported\(^{13}\). Data were examined for biases based on different sizes of the respondents' businesses.

(v) **Bias due to the gender of the out-going president and the successor:** As the literature suggests that working relationships between members of the same gender may be different from that between members of different genders (e.g., Dumas, 1989), data was examined for biases in succession between different genders of successors and out-going presidents. Specifically, data were examined for difference in responses if there was transition between members of the same gender i.e., male-male or female-female transition, or between family members of different genders i.e., male-female or female-male transition.

(vi) **Bias due to the generation of family represented by the out-going president and the successor:** Respondents were asked to indicate the family generation that the out-going president and successor represented. Data were examined for any biases in responses due to transitions among members of varied generations, for example, from the first to second generation or among members of later generations.

(vii) **Bias due to the ethnic background of the respondent's family:** The last type of bias examined was the ethnic background of the respondent’s family.

\(^{13}\) (i) \(<\$1,000,000\); (ii) \(\$1,000,000\) to \(\$4,999,999\); (iii) \(\$5,000,000\) to \(\$9,999,999\); (iv) \(>\$10,000,000\).
Multivariate analysis of variance (MANOVA) tests were used to test for these biases. This technique is useful for assessing the relationship between two or more dependent variables and a classificatory variable. In this context, the indicators act as dependent variables and the classificatory variable would be the timing (two classes of past or present), or response bias (three batches), or respondents (three classes - president, successor, or family member), etc. Results of this analysis (table 6.2) indicated a significant bias in responses only on one of the seven dimensions examined. This dimension was the respondent bias. That is, the perceptions of the presidents were found to be significantly different from those of successors and other family members. A re-examination of biases along this dimension was undertaken after scale construction.

4.2.3c. Scale construction. As discussed earlier, the indicators used for each variable ranged from two (for 'propensity of successor to take over') to fifteen (for 'succession planning'). Scale reliability is undertaken to determine the internal consistency between items constituting the scale and also the stability of these items in different measurement situations. The reliability helps to decide whether to include all the indicators used to measure a variable into the construct. One of the most commonly used reliability coefficients is Cronbach’s Alpha. This is based on the ‘internal consistency’ of a test. That is, it is based on the average correlation of items within a test if the items are standardized to a standard deviation of one. One limitation of using alpha is that it does not consider some sources of measurement error. However, alpha is a lower bound for reliability of multi-item scales, and is never found to be higher than other measures of reliability
(Carmines & Zeller, 1979). The next question is, what is a satisfactory level of reliability? According to Carmines & Zeller (1979):

Unfortunately, it is difficult to specify a single level that should apply in all situations. As a general rule, we believe that reliabilities should not be below 0.80 for widely used scales. At that level, correlations are attenuated very little by random measurement error. At the same time, it is often too costly in terms of time and money to try to obtain a higher reliability coefficient. But the most important thing to remember is to report the reliability of the scale and how it was calculated. Then other researchers can determine for themselves whether it is adequate for any particular purpose (p.51).

Following this advise, the reliabilities are reported for each scale used in the study. SPSS provides the alpha values for each scale, as well as the overall alpha value if the item were deleted. Normally, items that substantially improve the overall alpha reliability if they are excluded, should be deleted. However, such decisions must be theoretically justifiable.

Another analysis that can prove useful in making decisions related to the number of indicators to be retained is the exploratory factor analysis, is discussed next.

Factor analysis is a general description for a number of specific computational techniques. The underlying objective of these techniques is to identify a relatively small number of factors that represent relationships among sets of interrelated variables, that is, to discover coherent subsets of variables that belong together and are relatively independent of other subsets of variables. Variables that are correlated with one another but largely independent of other subsets of variables are combined to form factors. However, the criteria for combining variables is ultimately theoretical justification (Tabachnik & Fidell, 1989).

Factor analysis begins by constructing a new set of variables based on the relationships in the correlation matrix. While this can be done in a number of ways, the
most frequently used approach is the principal components analysis (Emory & Cooper, 1991). With this method, a set of variables is transformed into a new set of variables or factors that are not correlated with each other. These factors account for the variance in the data as a whole. Each principal component (or factor) explains more variance than would the loadings obtained from other extraction methods (e.g., principal axis factoring).

In this study both methods of extraction, principal components as well as principal axis factoring were used. However, not much difference was found in the indicators that loaded together as factors using these two methods of extraction.

The results of factor extraction are rotated to improve the interpretability of the solution. The aim of rotation is to achieve a simple structure; that is, each indicator should have a nonzero loading on one (or a few) factor. The two main types of rotation techniques used are orthogonal (i.e., varimax and quartimax) and oblique. In orthogonal rotation techniques the factors are uncorrelated and this provides for ease of understanding and interpretations. Oblique rotation, on the other hand, assumes that factors are correlated which is more likely the case in social science research. This method is more conceptually sound, although orthogonal method is mathematically more elegant (Nunnally, 1978). However, it has been stated that:

If identification of the basic structuring of variables into theoretically meaningful subdimensions is the primary concern.....almost any readily method of rotation will do the job. Even the issue of whether factors are correlated or not may not make much difference in the exploratory stage of analysis. It even can be argued that employing a method of orthogonal rotation may be preferred over oblique rotation, if for no other reason than that the former is much simpler to understand and interpret (Kim & Mueller, 1978: 50).

Based on the above suggestions, this study used principal components analysis with orthogonal rotation for exploratory factor analysis.
The last question to be addressed with regards to the factor analysis is, what should be the factor-loading cut off point? Once again there is no hard and fast rule for the cut-off criteria. In general, a correlation of less than 0.70 between an item and a factor is generally considered to have a high measurement error (Nunnally, 1978). However, in the ultimate analysis, theoretical justification drives the decision related to whether the indicators should be regarded as forming a single factor or not, and loadings as low as 0.30 may be considered acceptable. Any loadings lower than 0.30 explains less than nine percent of the variance in a factor and are generally not considered acceptable (Nunnally, 1978).

A decision about which indicators would be used for each of the scales was made based on the Cronbach alpha values and the results of factor analysis. Scales were formed using unit weights for all indicators chosen for each construct.

4.2.3d. Testing for biases in the data using scales. As discussed earlier, the preliminary examination of data for biases (using indicators) revealed a difference in the responses of different family members. In order to make a decision whether the responses of the three categories of family members could be combined for further analysis, a re-examination of the differences in their responses was undertaken using Multivariate Analysis of Variance on the constructed scales. The results of this analysis (discussed in Chapter 6 - Table 6.15) confirmed that the responses of presidents were significantly different from those of successors and other family members. However, no significant difference was found in the responses of these latter two categories of respondents. Based on this finding, a decision was made to combine the responses of successors and other
family members into one group, and keep the presidents’ responses as a separate group. Thus, for further analysis data were divided into two groups, the first being the responses of presidents, and the second being the responses of successors and other family members.

4.2.3e. Testing of regression assumptions. The four regression assumptions for which testing was undertaken are linearity, normality, homoscedasticity, and collinearity between independent variables. The assumption of linearity is that there is a straight line relationship between two variables. This is a fundamental assumption of multiple regression as regression parameters are based on the general linear model. Nonlinearity can be diagnosed from residual plots or from scatter plots of the dependent variable and independent variables for each regression model.

Multivariate normality is the assumption that each variable and all linear combinations of the variables are normally distributed. When the assumption is met, the residuals of analysis are also normally distributed. An examination of the histograms of the standardized residuals of the dependent variables over values of independent variables indicates normality of distribution for the dependent variables.

The assumption of homoscedasticity is that the variability in scores for one variable is roughly the same at all values of the other variable. Homoscedasticity is evaluated by an examination of the scatter plots for standardised residuals over values of the dependent variables. A visible fan shape with an increasing or decreasing trend of values indicates a violation of this assumption.

Multi-collinearity is found among variables when a particular independent variable has a high correlation with other variables. This correlation causes the least-squares
regression coefficients to be unstable. Although multi-collinearity has rarely been found to be a serious problem for individual level cross-sectional data, it can be tested by calculation of variance inflation factors (Fox, 1991). These variance inflation factors (VIFs) are computed as the square roots of the inverse of the tolerances. A VIF greater than two can slightly affect the computation of the regression parameters. The VIFs were computed for each set of independent variables in the regression models.

Once it was determined that the regression assumptions had been met, it was expected that the estimates of multiple regression would be the best linear unbiased estimators.

4.2.3f. Multiple regression. This study includes three types of variables: the dependent variable (satisfaction with the succession process), mediating variables (mutual acceptance of individual roles, agreement to continue the business, propensity of successor to take over the leadership of the business, propensity of incumbent to step aside, and succession planning), and antecedent variables (perceived family harmony, payoffs from business to family members, career interests, incumbent's interests outside the business, trust in successor's capabilities and intentions, and presence of an active advisory board).

While the antecedent variables are exogenous and no attempt will be made to explain the variability of these variables or their relationship with each other, both the dependent and mediating variables are endogenous and their variation will be explained by either exogenous or other endogenous variables. According to a rule of thumb for multiple regression a regression model is run for each of the endogenous variable that has one or
more arrows coming into it. According to this rule the six regression models required for the testing of this model are:

(1) Satisfaction with the succession process (SwSP) regressed on all mediating variables (i.e., the five determinants: Acceptance of individual roles—AIR, Agreement to continue the business—ACB, Propensity of successor to take over—PSTO, Propensity of incumbent to retire—PPR, and Succession planning—SP).

(2) Mutual acceptance on individual roles (AIR) regressed on perceived family harmony (PFH),

(3) Agreement to continue the business (ACB) regressed on perceived family harmony (PFH) and payoffs from business to family members (PFB),

(4) Propensity of successor to take over (PSTO) regressed on mutual acceptance of individual roles (AIR), career interests (CI), and payoffs from business to family members (PFB),

(5) Propensity of an incumbent to retire (PPR) regressed on incumbent's interests outside the business (IOB), trust in successor's capabilities and intentions (TSAI),

(6) Succession planning (SP) regressed on propensity of incumbent to step aside (PPR), mutual acceptance of individual roles (AIR), and presence of an active advisory board (AAB).

In addition to these six models, one additional regression model was run to test the direct effect of the antecedent variables on the dependent variable. This regression is discussed below:
(7) Satisfaction with the succession process (SwSP) was regressed on all seven antecedent variables. This was done to estimate the direct effects of the antecedent variables on the satisfaction with the succession process. The indirect effects of the antecedent variables on the dependent variable were calculated using the technique of path analysis. An evaluation of the proposed model is indicated if the direct effects of antecedent variables on the dependent variable are significantly lower than the indirect effects of these variables (Pedhazur, 1982).

Specifically the regression equations that will be used are:

(1) SwSP = a₁ + b₈₁ AIR + b₉₁ ACB + b₁₀₋₁ PSTO + b₁₂₋₁ PPR + b₁₃₋₁ SP + e₁

(2) AIR = a₈ + b₉₂ PFH + e₈

(3) ACB = a₉ + b₉₂ PFH + b₉₃ PFB + e₉

(4) PSTO = a₁₀ + b₁₀₋₃ PFB + b₁₀₋₄ CI + b₁₀₋₈ AIR + e₁₀

(5) PPR = a₁₁ + b₁₁₋₅ TSAI + b₁₁₋₆ IOB + e₁₁

(6) SP = a₁₂ + b₁₂₋₉ ACB + b₁₂₋₁₁ PPR + b₁₂₋₇ AAB + e₁₂

(7) SwSP = a₁ + b₂₁ PFH + b₃₁ PFB + b₄₁ CI + b₅₁ TSAI + b₆₁ IOB + b₇₁ AAB + e₁

where

a₁ to 1₂ - the intercepts
e₁ to 1₂ - error terms
b's - parameter estimates

AAB - Presence of active board of directors
ACB - Agreement to continue the business
AIR - Mutual acceptance on individual roles
CI - Career interests
IOB - Interests of incumbent outside the business
PFB - Payoffs from business
PFH - Perceived family harmony
PPR - Propensity of incumbent-president to step aside
PSTO - Propensity of successor to take over
SP - Succession planning
SwSP - Satisfaction with the succession process
TSAI - Trust in successors' abilities and intentions
**Model testing.** Two methods are used for testing the overall fit of the model.

(i) **Chi-squared test** The model used in this study is an overidentified model; that is, it consists of more equations than are necessary for the purpose of parameter estimation. In other words, it is hypothesized that some of the variables have no direct effect on some endogenous variables, although they may have indirect effects. These restrictions regarding the causality of the model are referred to as overidentifying restrictions (Pedhazur, 1982). For example, while it is hypothesized that ‘perceived family harmony’ has a direct effect on ‘mutual acceptance of individual roles’ and ‘agreement to continue the business’, no direct effects of this variable are hypothesized for the dependent variable, ‘satisfaction with the succession process’, or for the other endogenous variables of ‘propensity of successor to take over’, ‘propensity of incumbent to step aside’, and ‘succession planning’. In this case, there are four overidentifying restrictions. Pedhazur (1982) has suggested that an overidentified model can be tested for significance, using a chi-squared test with degrees of freedom equal to the number of overidentifying restrictions. The null hypothesis of this test is that all the overidentifying restrictions have path coefficients equal to zero. Failure to reject the null can be interpreted as the model fitting the data (Pedhazur, 1982).

The measure of goodness of fit, $Q$, can be tested for significance using the following formula (Pedhazur, 1982: 619),

$$ W = -(N-d) \log_e Q $$

where,

$N = \text{sample size}$;
\[
\begin{align*}
\text{d} &= \text{number of over-identifying restrictions, that is, the number of path coefficients} \\
&\quad \text{hypothesized to be equal to zero;} \\
\log_e &= \text{natural logarithm; and} \\
Q &= \frac{(1 - R_m^2)}{(1 - M)} \\
\end{align*}
\]

\[R_m^2\] is the generalized R\(^2\) for the just-identified model or a fully recursive model and \(M\) is the generalized R\(^2\) for an over-identified model. \(R_m^2\) and \(M\) are calculated as follows:

\[
\begin{align*}
R_m^2 &= 1 - (1 - R_1^2)(1 - R_2^2)\ldots(1 - R_p^2) & \text{for just identified model} \\
M &= 1 - (1 - R_1^2)(1 - R_2^2)\ldots(1 - R_p^2) & \text{for over-identified model.}
\end{align*}
\]

\(W\) has an approximate \(X^2\) distribution, with \(df = d\) (i.e., the number of overidentifying restrictions). It has been suggested that as \(X^2\) is influenced by sample size, attention should be paid to \(Q\) which is not a function of the sample size. \(Q\) varies from 0 to 1. The closer \(Q\) is to one, the better the fit of the model. Although, the \(R^2\) of the just identified model will always be greater than that of the over identified model because of a higher number of variables included, a slight difference indicates a good fit of the model. Rejection of the null hypothesis indicates that the model does not fit the data. The major limitation of this test is that it is sensitive to the sample size. Pedhazur (1982) has stated that for sufficiently large samples, the null hypothesis may be rejected even when the model fits the data. Or, a small sample size may result in failure to reject the null hypothesis even when the fit of the model to the data is poor. Therefore, while this test is conducted to estimate the fit of the model, additional model testing was undertaken using Bayesian information criteria which takes the sample size into account.

(ii) **Bayesian Model Selection technique** is used to compare the likelihood of two models. Two models compared in this research are: (1) the model with the mediating
variables as influencers of the satisfaction with the succession process, and (2) the model with only the antecedent variables directly influencing the satisfaction with succession process. The basic question addressed by this technique is that given the observed data, which of the two models is more likely to be true? The BIC (Bayesian Information Criteria) statistic for multiple regression and path analysis is calculated for each model using the following formula:

\[
\text{BIC} = n \log(1-R^2) + p_k \log n.
\]

where,
\[
\begin{align*}
\text{BIC} & = \text{Bayesian information criteria} \\
n & = \text{sample size} \\
R^2 & = \text{Co-efficient of multiple determination} \\
p_k & = \text{associated degrees of freedom i.e., the number of independent variables}
\end{align*}
\]

When comparing two models using BIC, the model with the largest negative BIC is the more likely model. In the context of this research, the proposed model would be supported if a larger negative BIC is found for the first model (using mediating variables only), than for the second (model with antecedent variables as direct influencers of the main dependent variable).

Three advantages of using this technique over other model testing techniques are:

(1) the number of cases used in the calculation of \( R^2 \) is included in the calculation of BIC statistics. This allows for a comparison of data sets with unequal number of cases; (2) the calculation of BIC also includes the degrees of freedom thereby favoring parsimonious models. As \( R^2 \) increase with an increase in the number of variables, the inclusion of degrees of freedom allows testing models that provide greater parsimony, and (3) Adrian Raftery (1995) has provided tables that indicate the strength of the evidence suggested by
the difference in the BIC values\textsuperscript{14}. These tables allow for testing of the strength of the likelihood of one model over another. Because of these advantages this model testing approach is used in this research.

4.2.3g. \textit{Structural equation modeling}. Structural equation modeling (SEM) is an extension of various multivariate techniques especially multiple regression and factor analysis. While multiple regression can examine one relationship at a time between the dependent variables and a set of independent variables, SEM with its usage of multiple likelihood estimation allows for a simultaneous examination of various relationships within variables. It is particularly useful when one dependent variable becomes an independent variable in subsequent dependence relationships. A second advantage of this technique, relevant to this study, is the ability of standard software packages (e.g., EQS, which was used in this study) to provide estimates of other parameters not specified in the model. The LM or Lagrange Multiplier test (in the EQS software) is designed to evaluate the statistical necessity of freeing one or more restrictions placed in the model. The \textit{W}test or the Wald test, on the other hand, is designed to determine whether some of the parameters estimated in the model could be set to zero without any significant loss in model fit. In this study, the purpose of SEM is to point out directions for future investigation with regard to other relationships between variables in the model. Therefore, while it is recognized that the full capability of this technique would be realized by estimating both the measurement (i.e., confirmatory factor analysis that specifies the

<table>
<thead>
<tr>
<th>BIC difference</th>
<th>Bayes factor</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>1-3</td>
<td>Weak</td>
</tr>
<tr>
<td>2-6</td>
<td>3-20</td>
<td>Positive</td>
</tr>
<tr>
<td>6-10</td>
<td>0-150</td>
<td>Strong</td>
</tr>
<tr>
<td>&gt;10</td>
<td>&gt;150</td>
<td>Very strong</td>
</tr>
</tbody>
</table>

\textsuperscript{14} Raftery (1995: 139)
indicators for each construct) as well as structural model (i.e., the dependence relationships linking model constructs), a decision was made to use the constructs formed based on exploratory factor analysis and use SEM for the structural model alone. This decision was made for the following reasons: (1) As the number of indicators used in the study is large (about 75), the number of cases for which data were available would not be enough for carrying out such an analysis. (2) The main aim of undertaking this analysis was to point out propositions that may be studied in future research. This could be achieved by undertaking an analysis of the structural part of the model.

The first step in the testing of the model using structural equation modeling involved testing the model developed in Chapter 3, for both data sets. Byrne (1994) has stated that the 'focal point in analyzing structural equation models is the extent to which the hypothesized model "fits". or, in other words, adequately describes the sample data' (p.53). The overall fit of the model is assessed using chi-square statistics. The null model is one of complete independence of all variables in the model; that is, all correlations among variables are zero. The EQS software reports the chi-square of the null or independent model as well as the chi-square of the hypothesized model. For a good fitting model the chi-square for the hypothesized model should be substantially lower than that of the null model. Besides the values of the two chi-squares for the null and hypothesized models, EQS provides a number of fit indices, to compare the null and the hypothesized models. Byrne (1994) suggests that the Comparative Fit Index (CFI) should be the index of choice, as it takes into account the sample size. Values of CFI range from 0.00 to 1.00. It has been suggested that a value of 0.90 indicates an acceptable fit of the model to the
data (Bentler, 1992; Byrne, 1994). If the model is not found to adequately describe the data, then the next step is to detect the sources of misfit in the model. As indicated above, the two tests of Lagrange multiplier test (LM test) and Wald test (Wtest) were used to detect the need to free some of the fixed paths in the model or to fix some of the paths left free in the model. Based on the results of these two tests, some parameters that had been fixed in the model being tested in this research were freed, and the model was reanalyzed.

This approach led to two structural equation models for each data set: first, the model developed in this study, and second a modified model after freeing some of the parameters suggested by the LM test. A comparison of the overall fit of the two models was made using the Bayesian Information Criteria (BIC) suggested by Raftery (1995). As described earlier, the basic question addressed by this technique is that given the observed data, which of the two models is more likely to be true? The BIC (Bayesian Information Criteria) statistic for structural equation models is calculated using the following formula:

\[ \text{BIC} = L^2 - (df) \log n \]

where,
BIC = Bayesian information criteria
\( L^2 \) = Chi-square value for the hypothesized model
df = degrees of freedom associated with the model
n = sample size

As explained earlier, using BIC the model with larger negative BIC is the more likely model.
4.3. Conclusion

An attempt has been made in this chapter to lay out the design and methodology used in this study and to provide the rationale behind the statistical testing undertaken. It was described that a two stage approach was used for testing of the model developed in the last chapter. A qualitative approach using four case studies helped to determine the initial validity of the model in order to justify further investigation. The details of the method of selection of cases, data collection (in-depth interviews), and analysis (content analysis and non-parametric tests) for this stage of the research work were discussed. A quantitative approach using a large scale survey was used in the second stage. The entire population of the Canadian Association of Family Enterprises was studied. A set of three questionnaires was developed and sent to the president, successor, and another family member actively involved in each of the 604 CAFE member firms. Respondents were contacted three times in an attempt to improve the response rate of the study. A reasonable response rate of 34.77% was achieved. The techniques of MANOVA, factor analysis, multiple regression, path analysis, and structural equation modeling were used for analyzing the collected data. The results of the two stages of analysis are presented in the following two chapters. While the results of the analysis based on case studies is presented in the next chapter, those based on the statistical analyses of the large sample study are presented in chapter 6.
CHAPTER 5

RESULTS OF PRELIMINARY TESTING OF THE MODEL BASED ON CASE STUDIES

In order to determine the initial validity of the theoretical model developed in Chapter 3, it was subjected to a preliminary testing based on four case studies conducted by the Family Enterprise Research group at the University of Calgary. This chapter starts with a brief description of each of the four cases (section 5.1). In the second section (5.2) the 16 hypotheses developed in Chapter 3 are revisited and the data related to each of these are presented. The overall validity of the model is assessed by conducting a chi-square test of significance. The results of this test are discussed in section 5.3. The key points discussed in the chapter are summarized in the concluding section (5.4).

5.1. Brief description of the four cases studied

Eight in-depth interviews were conducted with different family members in four family firms. Based on the focus groups conducted (explained in section 4.1.1) it was known that the principles of the four chosen firms had experienced different levels of satisfaction with the succession process. Two cases represented fairly smooth and unproblematic succession processes; a third represented a problematic transition with a number of different family members involved, high role ambiguity, and no clear succession planning. The fourth case study can be classified as ranging mid-way in terms of the quality of the succession process experienced. An attempt was made to get perspectives of family members in different positions in these firms. Interviews were conducted with a second generation successor, a third generation successor, a son-in-law successor (second
generation), a male and female potential successor of the second generation, none of whom took over the reigns of the business but played a significant part in choosing the successor, and outgoing family members (a male and a female) of the first generation. The gender of interviewed family members, the generation of family they represented, and the type of succession experienced by the firm are summarized in Table 4.1 for each of the four cases. Some details of each of these cases are provided below the table.

Table 5.1. Gender, generation, and type of succession experienced by family members in the four cases studied

<table>
<thead>
<tr>
<th>CASE 1</th>
<th>GENERATION 1</th>
<th>GENERATION 2</th>
<th>GENERATION 3</th>
<th>TYPE OF SUCCESSION EXPERIENCED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Male</td>
<td></td>
<td>Unproblematic</td>
</tr>
<tr>
<td>CASE 2</td>
<td>Male</td>
<td>Male (son-in-law)</td>
<td></td>
<td>Problematic</td>
</tr>
<tr>
<td>CASE 3</td>
<td>Female</td>
<td>Male</td>
<td></td>
<td>Mid-range</td>
</tr>
<tr>
<td>CASE 4</td>
<td>Male</td>
<td>Male</td>
<td></td>
<td>Unproblematic</td>
</tr>
</tbody>
</table>

Case 1. A smooth succession process—"Just flowed in". In the first case the succession was from second generation to third, and the successor described it as having "just flowed in". The successor worked in the family business for 15 years before taking over the business, just as his father (the second generation family member) had done before taking over. The successor has three other siblings, a brother and two sisters, all of whom were involved in careers outside the family business and never showed any interest in joining the family firm. Both the out-going and the succeeding family members were interviewed. In general, this firm was characterized with a high acceptance among family members regarding their individual roles in the business, a high commitment to continue the business, a high propensity of the successor to take over, and the incumbent to retire, and there was a well thought out succession plan.
Case 2. A problematic transition—"succession not handled with professionalism at all". The second case represented a family business started by a father who was "just looking for something to coast into retirement", but the business got big and attracted five siblings, and some of their in-laws into it. Although the nature of the business (with independent retail store operations) allowed for many family members to "get their own little space", and the father wanted to retire, there was no succession plan in place. One of the interviewees commented that the succession process was not handled with professionalism at all. Two of the potential successors (a male and a female family member) were interviewed. Neither eventually took over the leadership of the business but both played a role in choosing the successor. Since many of the siblings were running independent operations they could envision themselves in a leadership role of the company. Eventually the succession took place with one of the brothers assuming the leadership role with the consent of other family members, and another separating his link with the company. Briefly, this family firm is characterized by an incumbent willing to retire, a number of potential successors eager to take over, a lack of mutual acceptance of individual roles in the business, and virtually no succession planning.

Case 3. A mid-range succession process—the involvement of a son-in-law. The third business was started by a mother who had three daughters. At first the father and the daughters were not involved in the business but as it grew larger the father, two of the daughters and a son-in-law joined in. While the founding couple invited one of their daughters and her husband to take over the business they found it very difficult to let go. The interviewees were the son-in-law and the mother. Most of the succession planning
was done by the successors (daughter and son-in-law) but they did not have the power to implement their plans, resulting in a somewhat problematic succession process. Although there was a strong commitment of family members to retain the business, and a high propensity of the successors to take over, this case demonstrates the difficulties in a succession process when founders find it difficult to let go. Eventually the successor (son-in-law) presented the founders with an option in which he and his wife would buy out the business from the rest of the family. The problems of capital gains that this option would cause forced the founders to pass the control to the successors.

Case 4. A smooth succession with members of both generations still actively involved in the business. This was another case of a smooth succession. Although the control of the business had largely been passed on to the next generation family member, the first generation family member was also actively involved in the business. Both these members were interviewed. This family firm was characterized by a high commitment of the family to continue the business, an agreement on the part of the family members regarding their relative roles in the business (the successor had five other siblings—four sisters and a brother, all of whom were involved in activities outside the context of the family firm), and a good succession plan.

5.2. Level of support for each hypothesis

Each case study was evaluated according to whether it supported or contradicted the hypotheses developed. The degree of support for each hypothesis from each case was classified into four different categories—strong support for the hypothesis (SS), weak or indirect support (WS), strong evidence that the hypothesis was not supported (S-NS), and
weak evidence that the hypothesis was not supported (W-NS). The support was labeled as strong (SS) or strong non-support (S-NS) if direct evidence was found either in favor of or against the hypothesis. On the other hand, if the evidence found was based on themes, hunches, or interpretations from data, the support was labeled as weak support or weak no-support (based on the direction in which the data pointed). Each of the hypotheses is presented below followed by the comments that support or refute it, and the degree of support received. Table 5.2 provides an overview of the degree of support for each hypothesis.

**Hypothesis 1:** There is a positive relationship between the level of mutual acceptance amongst family members regarding their individual roles in the business and the satisfaction experienced by the primary stakeholders with the succession process in family firms.

This hypothesis received a strong support in all four case studies. This support is indicated in some of the comments made by the respondents. The first comment is made by a member of the outgoing generation who has two sons and two daughters, and the business went through an unproblematic succession. Talking about the interests of other siblings in the business the former CEO says,

“That (as to who will take over the business) never got to be an area of a problem. They (one son and two daughters, not involved in business) all had different areas of interest. All of them worked here in summers but their interests were other than what we were involved in....There was not a problem as to which of the children would come in or wouldn't come in or if more than one came in, who would take over”.

A similar clarity of roles in relation to the business was reported in the second case with an unproblematic succession. In another case where the succession was problematic,
little agreement was observed in terms of the relative ownership and managerial roles of siblings in the business. One of the siblings comments on her father's suggestion that one of her brothers be given 51% of shares of the business as well as the leadership role. She says,

"And he (father) wanted us just to give it (51% shares and leadership role) to him (the brother). So we're saying why should we give it to you? Number 1 we don't trust you... especially since he's married with two kids, he's going to be looking after his immediate family, not necessarily his siblings".

The family members were found to value clearly defined roles and responsibilities in the context of the business. A number of comments made during the interviews stress the importance of separation of boundaries. For example,

"I spent the first few months redefining what everybody did there so we didn't start stepping on toes... because if I'm going to work with my wife and my sister-in-law, one thing I don't want to do is not knowing what we all are doing. So we did job descriptions".

In this firm the succeeding generation made an effort to define the roles clearly but the founding generation found it difficult to accept a lesser role in the business. The succession experienced by this firm was of a mid-range quality, thereby supporting the hypothesized relationship.

Hypotheses 1a: There is a positive relationship between perceived family harmony and the extent of mutual acceptance amongst family members regarding their role in business.

Perceived family harmony was defined as the degree of respect, trust, and understanding among family members. Strong support was found for this hypothesis in all
four cases. The following comments made regarding the major criteria that determine the
success of the succession process, are indicative of the general sentiment in this regard.

"I think respect has to come first. You can have all the skills but if you don't have the
respect of all the family members, then it's not going to happen (referring to the event of
succession)...In order to take on the leadership role you have to have at least the respect
of the majority of others (italics added)".

"I think trust has a lot to do with it, if you trust a person, you will be willing to accept him
(as a new leader)".

**Hypothesis 2: There is a positive relationship between the level of agreement
among family members to continue the business, and the satisfaction
experienced by the primary stakeholders with the succession process in family
firms.**

Strong support for this hypothesis was found in the two cases with unproblematic
succession. A strong commitment to business continuity was brought out by the following
comments made by two interviewees in these two family firms:

"The control of the business has stayed in the family and I think it's a natural thing to like
to see that it does".

"If we do our job right, we'll continue to be a big player in that regard and hopefully there
is something there that creates a situation where there is a succession issue, hopefully a
positive succession issue, in 15 to 20 years".

In the other two cases where a mid-range and problematic succession was
experienced, an agreement to continue the business could be detected among family
members. As this agreement did not lead to an unproblematic succession, and no direct
statements related to this were made during the interviews, the support for this hypothesis
was labeled as weak no-support for these two cases.
Hypothesis 2a: There is a positive relationship between the possibility of high payoffs from the business, and the level of agreement among family members to continue the business.

The possibility of high payoffs from the business can motivate family members to cooperate with each other and be committed to the continuation of the business. Strong support was found for this hypothesis in two cases (first and third) in which the agreement among family members to continue the business co-existed with the potential of positive payoffs from the business. One comment that demonstrates support for this hypothesis was made by a respondent who took over his in-laws’ business. Commenting on what prompted him and his wife to join the business he stated:

"At this point we really didn't know what her (wife's) involvement was from shareholders standpoint. And what we found out was she was heavily involved to the point where it dwarfed what we were doing personally and all of a sudden it changed our perspective...it sort of changed our outlook on it" (referring to the family business).

In the second case also strong support was found for the hypothesis. However, this case differed a little from the other two as the agreement for continuity in this case was not based on the potential future benefits of the business but on a desire to avoid payment of capital gains taxes—an immediate financial concern. The successor stated that,

"They (founders) don't want capital gains problems. If there is one thing they hate worse than some of the things in transition, it's paying taxes. I mean that's driving the whole thing...so working it out was the right scenario".

A weak non-support was found in the fourth case. This is indicated by the following comment made by a successor on what prompted his decision to leave his previous profession (accounting) and to join the family business. In this case the business
was continued because he joined the business. His father indicated that he would continue the business only if the son joined. While this indicates an acceptance of roles in the business, the reason for the son’s joining was not the high payoffs from the business but a desire to support his father and an opportunity to be independent. Some related comments are:

“My father was getting on in age and I guess he just felt that if didn’t have me in there he would just unload the whole thing. Why go through it all if there was no interest within your own family to see things through?”.

"You can make a pretty good living in the accounting business. I could have then, so I don't think I really needed the (family business) to provide a reasonable living...I sort of thought I'd have more independence...it was certainly an opportunity to be more independent".

**Hypothesis 2b: There is a positive relationship between the level of perceived family harmony and the agreement among family members to continue the business.**

Weak support was found in all four cases for this hypothesis. As mentioned earlier the support was labeled as weak support or weak non-support (based on the direction in which the data pointed), when the evidence found was based on themes, hunches, or interpretations from data, and no statement was found that directly related to the hypothesis. For this hypothesis there were indications of support in all of the cases but no statements could be found that directly related to this hypothesis. Therefore, the support was labeled as weak. An example of indirect statements in support of this hypothesis came from a successor in a firm that experienced an unproblematic succession. Two statements
(one of which was presented earlier) that indicate the founder’s willingness to continue the business (if the son joined him) and the extent of harmony between them are:

“My father was getting on in age and I guess he just felt that if didn’t have me in there he would just unload the whole thing. Why go through it all if there was no interest within your own family to see things through”.

“There have been times when we (founder and successor) have left here with fairly unpleasant thoughts about each other. You can sort of think about it and laugh about it because we do love each other, it’s obvious. I mean he’s my dad, and I’m his son; no matter what happens that’s the way we’ll always be”.

**Hypothesis 3: There is a positive relationship between the propensity of a successor to take over the leadership of a business, and the satisfaction experienced by the primary stakeholders with the succession process in family firms.**

Propensity of the successor to take over refers to the inclination of the successor to join the business with an intention to take over its leadership role. Strong support for this hypothesis was indicated in the first case that experienced a smooth succession. A comment made by the out-going family member about why the successor joined the business is indicative of this support,

"I think when he came in here he came in with the thought that he would eventually be taking over. I don’t see why the hell he would come in here if he wasn’t going to be taking over”.

In the second case, a no-support was recorded for this hypothesis. While this case experienced a problematic succession, there was a family member who was clearly willing to take over the business. However, there was no agreement among family members on his taking over the leadership role of the firm. In this case there was a high propensity of a
successor to take over the business but the satisfaction with the succession process experienced was low.

In the third case a weak lack of support was found for this hypothesis. This case indicated a high propensity of the successors (a daughter and son-in-law) to take over, but the quality of succession was mid-range. In this case the propensity of incumbents to step aside was quite low. The following comment demonstrates the high propensity of successors to take over the business:

"They (the incumbents) are saying do you really want to do this. I said well, you don't change your career, jump in here, buy a house - you don't do these things if you don't want to do it".

In the last case, weak support was recorded for this hypothesis as there were no direct comments found that related to this hypothesis but general interpretations could be made that supported the hypothesis. The firm experienced an unproblematic succession with a high level of satisfaction of stakeholders with the succession process and the successor had a high propensity to take over the business. The following two comments made by him indirectly indicate his propensity to take over the business.

"I graduated from University of...with a commerce degree in 1977 and I feel that I am one of the luckiest guys to come out of the university because I have not been slotted into a specific segment of a business to do a specific job. We have an item we manufacture from scratch, we warehouse, we wholesale it, we retail it. I get to see the business from every angle and I'm involved in it from every angle. It's kind of neat to be able to do that".

"I'm the guy who runs the show...It has been indicated to me that I will have control of the company in the event that something happens" (to the founder).

This hypothesis received either a strong or weak support in the two cases with an unproblematic succession. However, no support or a weak no-support was found in the
other two cases with a problematic and a mid-range succession. While there was a high propensity of successor/s to take over the business in all four cases, in cases with no support of this hypothesis there was either no acceptance of individual roles among family members, or a low propensity of incumbents to step down. This may suggest that the satisfaction of primary stakeholders with the succession process may be more heavily influenced by the extent of acceptance of individual roles among family members and the propensity of an incumbent to step aside, than due to the propensity of a successor to take over the business. However, because of the limited sample size, no firm conclusions can be made regarding the relative importance of the determinants influencing the stakeholders satisfaction with the succession process.

*Hypothesis 3a: There is a positive relationship between the possibility of high payoffs from the business, and the propensity of the successor to take over the business.*

Strong support was found in two cases. It was the high payoffs from the business that attracted the successors towards it. This is indicated by the following comment made by one successor on why he and his wife decided to join his in-laws business.

"At this point we really didn't know what her (wife's) involvement was from shareholders standpoint. And what we found out was she was heavily involved to the point where it dwarfed what we were doing personally and all of a sudden it changed our perspective...it sort of changed our outlook on it (on the family business)...that is when we decided we cannot pass this up".

Weak non-support was found in the other two cases as the successors decision to join the business and take over its leadership was not prompted by the payoffs from the business but by desire to be more independent in one case, and to support the founder in
another. However, as there are no statements that directly state these desires to be the primary reasons for their propensity to take over the business, the support was labeled as weak no-support.

*Hypothesis 3b: There is a positive relationship between the degree of mutual acceptance amongst family members regarding their individual roles in the context of business, and the propensity of the successor to take over the business.*

Both cases with an unproblematic succession provided strong support for this hypothesis. Weak support was found in the third case in which a mid-range succession was experienced. However, no-support was found in the fourth case that experienced a problematic succession.

As mentioned earlier, the propensity of successors to take over the business was found to be high in all four cases. In the two cases with an unproblematic succession, this propensity was matched by a high acceptance among family members regarding their individual roles in the business. Although the successors in both these firms had other siblings, these siblings were not interested in a career in the family business. The following comments made by family members in these two firms indicate this. The first comment was made by the out-going family member regarding the interests of his other children.

"Well, he (the successor who had a high propensity to work in the business) had a brother and two sisters...they all had different areas of interests. All of them worked in the business...but their interests were other than what we were involved in".

The successor commented,

"My sister spent a year in the business, but it wasn’t for her. My other sister is a personnel person at ____, and very successful at doing that...there was never any direct interest that
I knew on her part about being in the family. I have a brother, a younger brother, who is basically the brains in the family...he works in Chicago.

In the other case the successor commented on the interests of other family members in the business,

"I have four sisters and they're off all raising families. The husbands have gone out and brought home the bacon and they have cooked it and been very happy doing it...I think my brother had a bit of a problem with it (with the interviewee's working in the business) at the beginning but I think when he came in here (worked in the firm for some time when he was laid off from his job) and he saw how the thing was run and how we do business. I think it was an eye-opener for him...he saw his future as being in the oil patch".

In the case with a mid-range succession, weak support was found for this hypothesis. Although the successors (a daughter and her husband) were willing to take over the business, the founders (mother and father of the daughter) seemed unclear about their extent of acceptance regarding their role and that of the successors in the business. They invited the successors to “come down and start building teams and teamwork approach”, giving the successors a feeling that a mandate for changing the management style in the firm was given to them. However, when this was put into practice the founders found the new style and the roles created for family members difficult to accept. The son-in-law successor stated that they “had philosophy bangs right off the bat”.

In the last case with a problematic succession, although there was a successor willing to take over the leadership role of the business, this was not acceptable to other family members active in the business. A comment made by a younger brother who wanted to take over the leadership role as well a major portion (51%) of the ownership of the business is indicative of this disagreement. He said:
"I was willing to give him (older brother) the leadership role but not the percentage"...but my sister just said outright—"forget it, you are out of here buddy!".

Therefore, this case does not support hypothesis 3b.

**Hypothesis 3c:** There is a positive relationship between the likelihood that the career interests of the successor will be satisfied in the context of the family business, and his/her propensity to take over the leadership of the business.

This hypothesis suggests that if the designated successor's career interests are not met by the opportunities available in the family firm, his propensity to take over will be reduced. Strong support was found for this hypothesis in two of the four cases, while weak support was recorded for the other two cases. A comment that is indicative of a support for this argument was made by one of the respondents whose wife joined the family business and they (the couple) eventually took it over,

"When we came back from Europe one of the first things that happens is my wife wants to go to work for ____ (the family business). She had a good background in it and she feels comfortable in that environment".

Another interviewee who found his career interests satisfiable in the context of the business commented that,

"Although I operated as though that (not joining the business) was an option, I felt that the option of coming in here had been communicated to me by my father, in my own opinion, since I was four years old...I just think the opportunity to be in business for myself was something that the CA profession didn't offer me".

There were no direct comments in the other two cases to suggest a strong link of the career interests of the successors in the business. In one of these cases, the successor joined the family firm after having worked for four years with a large corporation. He said
that he felt that he got to see the business from every angle and that was "kind of neat". He considered himself one of the "luckiest guys to come out of the university". In the second case, the business was started by the founder to "coast into retirement". Although there is no indication of his asking any of his children to join him in the business, six of them got actively involved in the business. This suggests that there may be opportunities in the business that satisfied their career interests. As there was a high propensity of the successor to take over the business in both these cases, but the extent of alignment of the career interests of the successors with the opportunities in the business is based on themes and hunches, weak support for this hypothesis was recorded in these two cases.

**Hypothesis 4: There is a positive relationship between the propensity of an incumbent to step aside from the leadership of a business and the satisfaction experienced by the primary stakeholders with the succession process in family firms.**

The inclination of the incumbent to retire has been suggested to be one of the most important factors in determining the quality of the succession process. Moreover, the incumbent is likely to find this to be difficult. In most cases, the business remains such an integral part of the life of the family member who is in charge, that it becomes difficult for him or her to visualize a life outside the business. Strong support for this hypothesis was found in two cases. In the first the incumbent was willing to retire and 'take it easy', and the succession process was unproblematic. A comment made by the outgoing family member is indicative of his desire to let go:

"I think that I had it in my mind that I wanted to be prepared to take things easier".
In another case of strong support for the hypothesis, the succession was problematic and one of the incumbents (dad) found it difficult to let go. Their reluctance to retire is described by the following comment,

"Mom (the founder) has been good about that, she wants out and she can understand that. We (successors) finally had a little bit of a breakdown with (dad) in the sense that he finally came out (communicated) after a year and said he doesn't want to leave".

The successor further comments,

"The phrase I (successor) picked on the way is that you can't calculate how your founders can accept the time. They need the time to grieve and I understand that. I think that it's tough" (italics added).

Interestingly, a strong non-support was found for this hypothesis in the other two cases. The first of these cases had experienced an unproblematic succession but the incumbent was not willing to retire. Although he had passed the control of most day to day operations to his son, he was actively involved in the business and there was no indication of his retirement. The son stated,

"My father is a very hands on individual...I pretty much handle everything...he (father) is robust, he's in better shape than I am...he's very proactive. any hint of retirement just isn't there....for him to retire is almost impossible because this is something he enjoys doing".

Although both the incumbent and the successor were actively involved in the business, there was a high degree of trust between the two and they had worked out their schedules in a way that each of them took vacation at different times of the year leaving the other in charge of the business. This gave them both some time alone in the business and that seemed to work well for this firm.
In the second case in which this hypothesis did not receive any support the succession was problematic. While the incumbent was willing to retire, and a successor willing to take over, the succession was problematic because of the lack of succession planning. A second generation family member who did not take over the leadership role in the business, but was one of the family members who was involved in choosing the successor said,

"Dad is telling us on one hand that he doesn't want to be in it forever, he wants to bow out gracefully and he would like us to run it. He has never ever given us any training or any kind of insight, like anything we knew was through osmosis....he hasn't handled succession with professionalism at all....there is no succession plan".

This last case suggests that succession planning may be a more important determinant than both the propensity of the successor to take over or of the incumbent president to step aside. However, because of the limited sample size a conclusive statement cannot be made in this regard.

_Hypothesis 4a: There is a positive relationship between the degree of trust that the president has in the capabilities and intentions of a successor, and his/her propensity to retire._

Strong support was received for this hypothesis in three of the four cases, while no support was found in the fourth case. A number of comments made during the interviews supported this argument. For example,

"I (the retired president) think the biggest problem that I might have had, and it wasn't really a problem, but the thing I was worried about was what would happen if he (the chosen successor) or one of them (next generation members) wanted to come in, and they didn't have either the aptitude or an ability for it. I felt that I should try and determine that before decisions were made. Fortunately, I thought he (chosen successor) did have (both the intention and the ability), and I think I was right".
"My dad has really been backing out a lot over the last year. I think after he saw that we could function without him on a daily basis, then a monthly basis, I think now it's been a year that he doesn't attend family council meetings".

In a third case, although the founders had invited the successors to take over the business, they found it very difficult to let go. The following comment made the by the successor regarding the final decision made by founders to let go indicates the necessity of trust the founders must have in the abilities of successors and supports this hypothesis.

"Maybe they (founding couple) just feel comfortable after two years that we've (the successors) got the management ability to run the company and make it a success in the long term...that's the key (to their letting go)".

In the last case, the founder invited the successor (who was working in a large corporation) to join him in the business, and demonstrated a great deal of trust in his son. However, he did not show any inclination to retire. Two comments made by the successor are indicative of this situation:

"he's very proactive...any hint of retirement just isn’t there”.

“There are some aspects of it (the business) that I got more involved in because ....he (founder) knew I was thinking in the best interest of the company, so he let me run with it”.

As the trust in the successor’s intentions is not matched by the incumbent’s propensity to retire, a strong no-support for the hypothesis was recorded in this case.

Hypothesis 4b: There is a positive relationship between the interests of a president outside the business, and his/her propensity to retire.
Strong support was found for this argument in all four cases. Comments made in the two cases where a high propensity of the president to retire was paralleled by his/her other interests are indicative of the support for this hypothesis. These are:

"I think that I had it in my mind that I wanted to be prepared to take things easier...I think he (successor) was ready and he felt he was ready. I was ready" (comment made by an incumbent).

"He's 70 now, and he likes to travel a little bit, and he likes to dabble in the computer at the warehouse, but he doesn't want to be in control".

In another case the founders (couple) had no specific retirement plans or interests outside the business, and had difficulty 'letting go', thereby lending support to this hypothesis. The son-in-law successor commented:

"Your mom and dad (founders) worked like workaholics...they're saying they are not going to do it...what are they going to do? We asked them what they were going to do? They said they were going to travel, and I said well that's good for six months, what are you going to do? They never answered".

_Hypothesis 5: There is a positive relationship between the degree of succession planning, and the satisfaction experienced by the primary stakeholders with the succession process in family firms._

In all four cases strong support was found for this hypothesis. The succession was well planned out in two cases of unproblematic succession, in the case with mid-range satisfaction the planning was carried out mostly by the successors, and in the case with a problematic succession there were no succession plans at all. A number of interviewees indicated the difficulty of engaging in such planning. The importance and difficulties
involved in succession planning were suggested in some of the comments made in the course of interviews. For example,

"The real nuts and bolts issue of passing of control, is a difficult issue for anybody...even if you have the confidence in the person you're passing it off to".

"It's a difficult issue to talk about because typically you're talking about the demise of the founder, if you will. So, it's not an easy subject to get into tooth and nail".

"Some of the things that happened were that we set up a time guideline on how the transition was going to progress. We set up the steps, we all have notes of how it's going to go".

"Dad is telling us on one hand that he doesn't want to be in it forever, he wants to bow out gracefully and he would like us to run it. He has never ever given us any training or any kind of insight, like anything we knew was through osmosis....he hasn't handled succession with professionalism at all...there is no succession plan".

**Hypothesis 5a: There is a positive relationship between the propensity of an incumbent to retire and the degree of succession planning undertaken.**

Related to this hypothesis the data provide an interesting mix of support. In two of the cases the hypothesis was strongly refuted. In the first case there was a well thought out succession plan, although the incumbent had no propensity to retire. In the second case although there was a propensity of the incumbent to retire, he did not lay out any succession plan. The third case, however, demonstrated strong support for this hypothesis as the incumbent wished to retire and had also well planned the succession process. Weak support was found in the last case in which the founders (couple) showed mixed emotions when it came to retirement; at times they communicated their desire to retire, while at other times they did not want to let go. Even in terms of succession plans they relayed confused signals. While they invited their daughter and son-in-law to take over the
business, they kept delaying the actual date of handing control over to them. On the whole, mixed support was found for this hypothesis.

*Hypothesis 5b: There is a positive relationship between the presence of an active advisory body and the degree of succession planning undertaken.*

Strong support was found for all four cases. In the two cases with unproblematic succession family members were found to use their accountants, lawyers, and other family members for advice on succession. Two related comments are,

"The upfront work on how transition was going to take place, took a fair amount of work, as far as accountants and lawyers were concerned".

"I know my father had some help from our lawyer, who is actually a semi-distant member of the family, in terms of whether or not to dish off control. That helped him...it was not technical sort of advice but a personal sort that said 'look it's time'.

On the other hand, there was no advisory body in the other two cases that experienced a problematic and mid-range succession, thus providing support for the hypothesis.

*Hypothesis 5c. There is a positive relationship between the agreement among family members to continue the business and the degree of succession planning undertaken.*

Strong support was found for this hypothesis in both cases with unproblematic succession experiences. A strong commitment to continue the business was found to co-exist with a well thought out succession plan in both these cases. However, in the other two cases weak non-support was found for this hypothesis. While there was a
commitment among family members to continue the business there was no succession planning in place in either of these cases.

For an overview, the degree of support for each hypothesis in each case is presented in Table 5.2:
### TABLE 5.2: PRELIMINARY TESTING OF THE HYPOTHESES DEVELOPED

<table>
<thead>
<tr>
<th>Case Number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of interviewees</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Overall quality of succession process and satisfaction with process (SwSP)</td>
<td>Unproblematic</td>
<td>Problematic</td>
<td>Mid-range</td>
<td>Unproblematic</td>
</tr>
<tr>
<td>H1. Mutual acceptance of individual roles (AIR) - SwSP</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H1a. Family harmony (PFH) - AIR</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H2. Agreement to continue the business (ACB) - SwSP</td>
<td>SS</td>
<td>W-NS</td>
<td>W-NS</td>
<td>SS</td>
</tr>
<tr>
<td>H2a. Payoffs from business (PFB) - ACB</td>
<td>W-NS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H2b. PFH - ACB</td>
<td>WS</td>
<td>WS</td>
<td>WS</td>
<td>WS</td>
</tr>
<tr>
<td>H3. Propensity of successor to takeover (PSTO) - SwSP</td>
<td>SS</td>
<td>S-NS</td>
<td>W-NS</td>
<td>WS</td>
</tr>
<tr>
<td>H3a. PFB - PSTO</td>
<td>W-NS</td>
<td>SS</td>
<td>SS</td>
<td>W-NS</td>
</tr>
<tr>
<td>H3b. AIR - PSTO</td>
<td>SS</td>
<td>S-NS</td>
<td>WS</td>
<td>SS</td>
</tr>
<tr>
<td>H3c. Career interests (CI) - PSTO</td>
<td>SS</td>
<td>WS</td>
<td>SS</td>
<td>WS</td>
</tr>
<tr>
<td>H4. Propensity of incumbent to retire (PPR) - SwSP</td>
<td>SS</td>
<td>S-NS</td>
<td>SS</td>
<td>S-NS</td>
</tr>
<tr>
<td>H4a. Trust in successor's abilities and intentions (TSAI) - PPR</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>S-NS</td>
</tr>
<tr>
<td>H4b. Incumbent's interests outside business (IOB) - PPR</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H5. Succession planning (SP) - SwSP</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H5a. PPR - SP</td>
<td>SS</td>
<td>S-NS</td>
<td>WS</td>
<td>S-NS</td>
</tr>
<tr>
<td>H5b. Presence of active advisory board (AB) - SP</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
<td>SS</td>
</tr>
<tr>
<td>H5c. ACB - SP</td>
<td>SS</td>
<td>W-NS</td>
<td>W-NS</td>
<td>SS</td>
</tr>
</tbody>
</table>

Key:
- SS - Case provides strong support for the hypothesis.
- WS - Case provides weak or indirect support for the hypothesis.
- S-NS - Case provides strong evidence that the hypothesis is not supported.
- W-NS - Case provides weak evidence that the hypothesis is not supported.
5.3. Overall results of the preliminary analysis

Although the sample size is insufficient to make strong statements about the statistical validity of individual hypothesis, it was observed that in most cases the evidence available did support the hypotheses developed. Taken as a group, the data available provide strong support for the overall conceptual model, i.e., approximately 76% of the observations provided either a strong direct or a weak indirect support for the hypotheses developed (Table 5.3). This preliminary analysis provides a rough test of the statistical validity of the conceptual scheme as a gestalt, even though the sample size for each individual proposition precludes making any final judgments about the statistical validity of individual hypotheses.

**TABLE 5.3: OVERALL RESULTS OF THE PRELIMINARY ANALYSIS - PERCENTAGES**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of observations</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Direct Support (SS)</td>
<td>40</td>
<td>62.50 %</td>
</tr>
<tr>
<td>Weak Indirect Support (WS)</td>
<td>9</td>
<td>14.06 %</td>
</tr>
<tr>
<td>Strong No-Support</td>
<td>7</td>
<td>10.94 %</td>
</tr>
<tr>
<td>Weak No-Support</td>
<td>8</td>
<td>12.50 %</td>
</tr>
<tr>
<td>TOTAL OBSERVATIONS</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

A chi-square test of significance was conducted to calculate the overall fit of the model against the null hypothesis of randomness in the distribution of supporting and non-supporting data pertaining to the hypotheses. The overall analysis for the model using a chi-square test is presented in Table 5.4. The most stringent chi-square test was conducted. All the other three categories of support (i.e., weak support, weak non-
support and strong non-support) were counted as one category and only strong support for the hypothesis was treated as the second category (although this is a highly unlikely situation). Even in this case, it was found that the chi-square was significant (at 0.05 level) and the validity of the model was supported.

**TABLE 5.4: OVERALL RESULTS OF PRELIMINARY ANALYSIS - CHI-SQUARE TEST**

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>STRONG SUPPORT</th>
<th>WEAK SUPPORT</th>
<th>STRONG NO-SUPPORT</th>
<th>WEAK NO-SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2.</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2a.</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>H2b.</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>H3a.</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>H3b.</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>H3c.</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4.</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>H4a.</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>H4b.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5a.</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>H5b.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5c.</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>9</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

CHI-SQUARE VALUE - 9.00 (significant at 0.05 level)

**Calculation of chi-square:** The null hypothesis to be tested in this case is that the respondents are giving equal preference for each category of support. This null hypothesis can be tested using chi-square test which is calculated using the following formulae:

\[
X^2 = \frac{\sum (Fo - Fe)^2}{Fe}
\]

where \(X^2\) = chi-square value

\(\sum\) = sum of this ratio for all categories

\(Fo\) = the observed number in a given category

\(Fe\) = the expected number in a given category
In this case the two categories tested are (1) Strong support for the hypothesis, and (2) All other categories: includes strong non-support, weak non-support, and weak support cases. The calculations involved are shown in the following table (5.5).

**TABLE 5.5. CALCULATIONS FOR CHI-SQUARE TEST**

<table>
<thead>
<tr>
<th>Category</th>
<th>Fo</th>
<th>Fe</th>
<th>Fo-Fe</th>
<th>(Fo-Fe)^2</th>
<th>(Fo-Fe)^2/Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Support</td>
<td>40</td>
<td>32</td>
<td>8</td>
<td>64</td>
<td>2.0</td>
</tr>
<tr>
<td>All other (9+7+8)</td>
<td>24</td>
<td>32</td>
<td>-8</td>
<td>64</td>
<td>2.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>64</td>
<td>64</td>
<td></td>
<td></td>
<td>X^2=4.0</td>
</tr>
</tbody>
</table>

X^2 critical values at one degree of freedom at 0.05 level of significance is 3.841. As the obtained value (4.00) is greater than the chi-square value (3.841), it can be concluded that even by using the most stringent of tests, the data fail to support the null hypothesis and there is a significant difference in the responses of the participants in favor of the support for the model.

**5.4. Conclusion**

The model developed in Chapter 3 was subjected to a preliminary testing to determine its validity. This methodology of pretesting the propositions developed has also been adopted by some well established researchers such as Hofer and Charan (1984). The data for the preliminary testing came from four case studies conducted by the Family Enterprise Research group at the University of Calgary. Each of the four cases represented different types of succession experiences. Specifically, eight in-depth interviews were conducted, with different family members in four family firms. This chapter started with a description of each of the four cases. This was followed with an examination of the level of support for each hypothesis from the data. An overall test of the model was done using
percentages and chi-square tests. Strong support for the validity of the model was found. As preliminary testing indicated that the conceptual model developed has sufficient validity to warrant a more complete testing program, the next step in the research was to conduct a large scale study using a mailed questionnaire. While the details of the methodology used and the development of the questionnaire for this part of the study were presented in chapter 4, the results of the analyses undertaken are presented in the next chapter.
CHAPTER 6

FINAL TESTING OF THE MODEL - THE STATISTICAL ANALYSES

As mentioned Chapter 4 which covers research design, the analysis of data collected through the mailed questionnaires is described in seven steps: (1) Diagnostics, (2) Preliminary testing for biases in data using indicators, (3) Scale construction, (4) Testing for biases in the data using scales, (5) Testing of regression assumptions, (6) Multiple regression and path analysis, and (7) Structural equation modeling. While the rationale behind each of these analyses was explained in that chapter, the results obtained are presented in the following sections. The last section summarizes the discussion in this chapter.

6.1. Data diagnostics

The first step in data analysis was subjecting of complete data set to diagnostics. Specifically, the frequencies, histograms, stemleaf plots, and boxplots for each variable were examined. Some errors in data entry and coding of data were located and corrections made. The negatively worded questions were recoded.

In order to prepare for the preliminary testing for biases in the data using Multiple Analysis of Variances (MANOVAS) some additional variables were computed. Specifically, seven new variables (presented below) were computed as the data was examined for potential biases along seven dimensions.

(i) Timing of succession: A new categorical variable (TIMING) was computed with values 0 if the succession had taken place in the last five years, or 1 if it was likely to take
place in the next five years. The frequencies and percentages for the different categories in this variable are:

**Table 6.1a. Frequencies and valid percentages for the variable - TIMING**

<table>
<thead>
<tr>
<th>Timing of succession</th>
<th>Frequencies</th>
<th>Valid Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past succession</td>
<td>131</td>
<td>46.0%</td>
</tr>
<tr>
<td>Future succession</td>
<td>154</td>
<td>54.0%</td>
</tr>
<tr>
<td>Information missing</td>
<td>25</td>
<td>-</td>
</tr>
</tbody>
</table>

*(ii) Response bias:* The responses were classified into three batch numbers according to the time when the information was received (RESPONSE). Batch 1 referred to the responses received to the first mailing, batch 2 to responses received after the fax reminder, and batch 3 for responses to the second mailing. The frequencies and valid percentages for this variable are:

**Table 6.1b. Frequencies and percentages for the variable - RESPONSE**

<table>
<thead>
<tr>
<th>Batch number</th>
<th>Frequencies</th>
<th>Valid Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>118</td>
<td>38.1%</td>
</tr>
<tr>
<td>2</td>
<td>130</td>
<td>41.9%</td>
</tr>
<tr>
<td>3</td>
<td>62</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

*(iii) Respondent:* A new variable—RESPONDENTS was formed to identify the position of the respondent i.e., president, successor, or family member. The frequencies for this variable are:

**Table 6.1c. Frequencies and percentages for the variable - RESPONDENTS**

<table>
<thead>
<tr>
<th>Respondent category</th>
<th>Frequencies</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presidents</td>
<td>118</td>
<td>38.06 %</td>
</tr>
<tr>
<td>Successors</td>
<td>142</td>
<td>45.81 %</td>
</tr>
<tr>
<td>Other family members</td>
<td>50</td>
<td>16.13 %</td>
</tr>
<tr>
<td>TOTAL</td>
<td>310</td>
<td>100.00 %</td>
</tr>
</tbody>
</table>
(iv) **Size of the business**: Based on the gross revenue for 1995, firms in the sample were divided into four categories for this variable, REVENUES. The range of revenue, number of firms, and valid percentages in each category are listed in table below:

<table>
<thead>
<tr>
<th>Approx. Gross Revenues in 1995</th>
<th>Frequencies</th>
<th>Valid Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $1,000,000</td>
<td>34</td>
<td>11.3%</td>
</tr>
<tr>
<td>$1,000,000 to $4,999,999</td>
<td>96</td>
<td>31.9%</td>
</tr>
<tr>
<td>$5,000,000 to $9,999,999</td>
<td>49</td>
<td>16.3%</td>
</tr>
<tr>
<td>&gt; $10,000,000</td>
<td>122</td>
<td>40.5%</td>
</tr>
<tr>
<td>Information missing</td>
<td>9</td>
<td>-</td>
</tr>
</tbody>
</table>

(v) **Gender of the out-going president and the successor**: Respondents were asked to indicate the gender of the outgoing president and that of the successor. The interest in this variable was not the gender of the outgoing president or that of successor per se but their relative genders, that is, whether the transition was among members of one gender or among members of different genders. The responses therefore had to be recoded to form a new variable GENDER that was given a value 0 if the transition was between members of the same gender and 1 if it was among family members of different genders. The decision to use these two categories was made due to the virtually null set categories of Female to Female transitions, and Female to Male transitions. The values and frequencies of this variable are listed in table 6.1e. below:

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Value given</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same gender transitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male - Male</td>
<td>0</td>
<td>208</td>
<td>79.3%</td>
</tr>
<tr>
<td>Female - Female</td>
<td></td>
<td>204</td>
<td>78.8%</td>
</tr>
<tr>
<td>Female - Male</td>
<td></td>
<td>4</td>
<td>1.5%</td>
</tr>
<tr>
<td>Different gender transitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male - Female</td>
<td>1</td>
<td>51</td>
<td>19.7%</td>
</tr>
<tr>
<td>Female - Male</td>
<td></td>
<td>44</td>
<td>17.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>2.7%</td>
</tr>
<tr>
<td>Information missing</td>
<td></td>
<td>51</td>
<td>-</td>
</tr>
</tbody>
</table>
(vi) Generation of family represented by the out-going president and the successor:
Respondents were asked to indicate the generation of the outgoing president and the successor. What was of interest in this research was whether the transition was from members of the first generation or among members of later generations. Accordingly, the new variable GENERATION had two categories—the first with a value of 0 was for transitions from the members of the first generation, i.e., the founders, and the second category with value 1 was for transitions among later generations. The frequencies and percentages for this variable are presented in the table 6.1f.

**Table 6.1f. Frequencies and percentages for the variable - GENERATION**

<table>
<thead>
<tr>
<th>GENERATION</th>
<th>Value given</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition from first generation</td>
<td>0</td>
<td>205</td>
<td>69.0 %</td>
</tr>
<tr>
<td>Transition among later generations</td>
<td>1</td>
<td>92</td>
<td>31.0 %</td>
</tr>
<tr>
<td>Information missing</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

(vii) Ethnic background of the owners of the firm: Respondents were asked to indicate their ethnic background. The responses received were categorized into two categories of a new variable ETHNIC—the frequencies and percentages of which are presented in table 6.1g.

**Table 6.1g. Frequencies and percentages for the variable - ETHNIC**

<table>
<thead>
<tr>
<th>ETHNIC</th>
<th>Value given</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo-Saxons</td>
<td>0</td>
<td>161</td>
<td>57.9 %</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>117</td>
<td>42.1 %</td>
</tr>
<tr>
<td>Information missing</td>
<td></td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>
6.2. Biases in the data.

The technique of Multivariate Analysis of Variance (MANOVA) was used to determine the number of significantly different responses in terms of the seven dimensions (variables) discussed above. The total number of indicators in the data were 72. The number of indicators on which statistically significant differences were observed on the different categories of the seven dimensions tested for are listed in Table 6.2.

Table 6.2. Results of the preliminary testing of biases in data using MANOVA

<table>
<thead>
<tr>
<th>Dimension or Variable name</th>
<th>Number of categories</th>
<th>Number of statistically different indicators (Total indicators -72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIMING</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>RESPONSE</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>RESPONDENT</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>REVENUES</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>GENDER</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>GENERATION</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>ETHNIC</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level, based on Pillai’s Trace Test.

The above table indicates that there is only one variable—RESPONDENTS in which a significant difference in perceptions of the three categories was found in more than 50% of the indicators. This suggests that because of a strong difference in perceptions it may not be possible to combine the data collected from the three different categories of respondents (i.e., presidents, successors, and other family members). No strong justification for splitting the data based on any other variable is indicated by this analysis. As it is not the indicators themselves but the constructed scales that will be used for further analysis, it was decided to re-examine the data for biases along this dimension after scale construction which is discussed in the following section.
6.3. Scale construction

The model tested in this study is formed of thirteen constructs. The number of indicators for each construct varied from 2 to 15. A combination of factor analysis (principal components and orthogonal rotation) and scale reliability tests (cronbach's alpha) was used to determine the indicators that would be used for the construction of scales for each of these variables. Unit weighting was used to construct the scales i.e., the scores for all selected indicators were added to form the scale for each variable. The results of these analyses are presented in the two sub-sections below: (6.3.1) the antecedent and mediating variables, and (6.3.2) the dependent variable.

6.3.1. The antecedent and mediating variables. Scale construction for each of the six antecedent and five mediating variables is discussed in this section.

6.3.1a. Perceived Family Harmony. Respondents were asked the extent of accuracy of five indicators, i.e., whether family members emotionally bonded with each other, trusted each other, respected each other, maintained harmonious relations with each other, and communicated openly with each other. The results of reliability tests and factor analysis are presented in tables 6.3a. and 6.3b.

Table 6.3a. Perceived family harmony: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH'S ALPHA</th>
<th>0.9198</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>Alpha if item deleted</td>
</tr>
<tr>
<td>Family members:</td>
<td></td>
</tr>
<tr>
<td>1. Emotionally bonded with each other</td>
<td>0.9257</td>
</tr>
<tr>
<td>2. Trusted each other</td>
<td>0.8958</td>
</tr>
<tr>
<td>3. Respected each other</td>
<td>0.8922</td>
</tr>
<tr>
<td>4. Maintained harmonious relations with each other</td>
<td>0.8922</td>
</tr>
<tr>
<td>5. Communicated openly with each other.</td>
<td>0.9024</td>
</tr>
</tbody>
</table>
Table 6.3b. Perceived family harmony: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>76.4%</td>
</tr>
<tr>
<td>Items</td>
<td>Factor Loadings</td>
</tr>
<tr>
<td>Family members:</td>
<td></td>
</tr>
<tr>
<td>1. Emotionally bonded with each other</td>
<td>0.7857</td>
</tr>
<tr>
<td>2. Trusted each other</td>
<td>0.8972</td>
</tr>
<tr>
<td>3. Respected each other</td>
<td>0.9101</td>
</tr>
<tr>
<td>4. Maintained harmonious relations with each other</td>
<td>0.9047</td>
</tr>
<tr>
<td>5. Communicated openly with each other</td>
<td>0.8666</td>
</tr>
</tbody>
</table>

The results of both factor analysis and reliability test indicate that all five items are internally consistent and stable indicators of perceived family harmony. Although a slight increase in alpha is indicated by dropping of one of the indicators (emotional bonding), there is no theoretical justification for dropping out this item. Therefore, all five items were included for this scale. The scores for each of these indicators were added to form the scale for ‘perceived family harmony’.

6.3.1b. Mutual acceptance of individual roles. Eight indicators were used for this variable. While seven of these were positively coded, there was one negatively coded. This negatively coded indicator was recoded before undertaking these analyses. Each of these indicators and the results of reliability tests and factor analysis are presented in tables 6.4a. and 6.4b.
Table 6.4a. Mutual acceptance of individual roles: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH'S ALPHA</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td></td>
</tr>
<tr>
<td>Family members:</td>
<td></td>
</tr>
<tr>
<td>1. Accepted their roles or positions in the business</td>
<td>0.8731</td>
</tr>
<tr>
<td>2. Accepted their relative ownership stakes</td>
<td>0.8801</td>
</tr>
<tr>
<td>3. Understood their specific roles and responsibilities</td>
<td>0.8682</td>
</tr>
<tr>
<td>4. Acknowledged each other’s achievements in the context of the business</td>
<td>0.8630</td>
</tr>
<tr>
<td>5. Encouraged each other to give his/her best efforts</td>
<td>0.8701</td>
</tr>
<tr>
<td>6. Co-operated and worked as a team with other family members involved in the business</td>
<td>0.8677</td>
</tr>
<tr>
<td>7. Freely expressed their opinions about day to day decisions in the business</td>
<td>0.9015</td>
</tr>
<tr>
<td>*8. Found it easier to discuss problems related to business with people outside the family than with each other</td>
<td>0.9055</td>
</tr>
</tbody>
</table>

*negatively coded indicator

Table 6.4b. Mutual acceptance of individual roles: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>59.4 %</td>
</tr>
<tr>
<td>Items</td>
<td>Factor Loadings</td>
</tr>
<tr>
<td>Family members:</td>
<td></td>
</tr>
<tr>
<td>1. Accepted their roles or positions in the business</td>
<td>0.8269</td>
</tr>
<tr>
<td>2. Accepted their relative ownership stakes</td>
<td>0.7613</td>
</tr>
<tr>
<td>3. Understood their specific roles and responsibilities</td>
<td>0.8553</td>
</tr>
<tr>
<td>4. Acknowledged each other’s achievements in the context of the business</td>
<td>0.8945</td>
</tr>
<tr>
<td>5. Encouraged each other to give his/her best efforts</td>
<td>0.8421</td>
</tr>
<tr>
<td>6. Co-operated and worked as a team with other family members involved in the business</td>
<td>0.8572</td>
</tr>
<tr>
<td>7. Freely expressed their opinions about day to day decisions in the business</td>
<td>0.5131</td>
</tr>
<tr>
<td>*8. Found it easier to discuss problems related to business with people outside the family than with each other</td>
<td>0.4973</td>
</tr>
</tbody>
</table>

*negatively coded indicator
These results indicate that while the overall scale reliability is high, it could be further improved by dropping two indicators (7 and 8). This finding was confirmed from the results of factor analysis. Although all indicators loaded to one factor, six loaded heavily while the other two were comparatively weak loadings. However, theoretically there seems to be no justification for dropping these indicators. Thus, all items were included in the scale for mutual acceptance of individual roles.

6.3.1c. Payoffs from business. Four indicators related to this variable were used in the questionnaire. Two of these were related to the long term financial and non-financial gains for family members from continuation of the business as compared to its sale, a third asked for a comparison of the level of the firm’s profitability with the industry average, and a fourth was related to the potential for future expansion. The results of scale reliability tests and factor analysis are presented in tables 6.5a and 6.5b.

Table 6.5a. Payoffs from business: Results of scale reliability tests

<table>
<thead>
<tr>
<th>Items</th>
<th>CRONBACH’S ALPHA</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The long term financial gains available to family members from the continuation of our company as a family business were much higher than those from its sale.</td>
<td>0.3682</td>
<td>0.1905</td>
</tr>
<tr>
<td>2. The long term non-financial gains available to family members from the continuation of our company as a family business were much higher than those from its sale.</td>
<td></td>
<td>0.2081</td>
</tr>
<tr>
<td>3. The level of profitability achieved by our firm was about the highest possible in this industry.</td>
<td></td>
<td>0.4630</td>
</tr>
<tr>
<td>4. Our business had great potential for future expansion.</td>
<td></td>
<td>0.3082</td>
</tr>
</tbody>
</table>
Table 6.3b. Payoffs from business: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>62.0 %</td>
</tr>
<tr>
<td>Items</td>
<td>FACTOR LOADINGS</td>
</tr>
<tr>
<td>1. The long term financial gains available to family members from the continuation of our company as a family business were much higher than those from its sale.</td>
<td>Factor 1</td>
</tr>
<tr>
<td></td>
<td>0.8179</td>
</tr>
<tr>
<td>2. The long term non-financial gains available to family members from the continuation of our company as a family business were much higher than those from its sale.</td>
<td>0.7411</td>
</tr>
<tr>
<td>3. The level of profitability achieved by our firm was about the highest possible in this industry.</td>
<td>-0.0664</td>
</tr>
<tr>
<td>4. Our business had great potential for future expansion.</td>
<td>0.4662</td>
</tr>
</tbody>
</table>

The results of both the scale reliability test and factor analysis point towards this being a weak scale. Specifically, it is found that the third indicator is not strongly correlated with the other three. The scale reliability is substantially increased by dropping this indicator. Moreover, this is the only indicator that loads heavily on the second factor. A reexamination of this indicator points towards certain conceptual problems. For example, if a firm had the highest possible profitability in a low profit industry or an industry in decline, the payoffs for family members may be low. Because of the complexity of situations that may be involved in the diverse group of this sample, a decision was made to drop this indicator during scale construction. Therefore, the scale for payoffs from business consisted of three indicators (1, 2, and 4). As with all other constructs the responses for each of these indicators were added to form this scale.
6.3.1d. Agreement to continue the business. This refers to the agreement among family members with regard to the perpetuation of business and their willingness to work together to ensure its future. Five items were included in the questionnaire with an intent to measure the extent of such agreement among family members. The results of scale reliability test and factor analysis for this construct are presented in tables 6.6a. and 6.6b.

Table 6.6a. Agreement to continue the business: Results of scale reliability tests

<table>
<thead>
<tr>
<th>Items</th>
<th>CRONBACH’S ALPHA</th>
<th>0.7373</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All family members actively involved in the business were committed to the company continuing as a family business.</td>
<td></td>
<td></td>
<td>0.6833</td>
</tr>
<tr>
<td>2. All family members not actively involved in the business were committed to the company continuing as a family business.</td>
<td></td>
<td></td>
<td>0.7271</td>
</tr>
<tr>
<td>3. If none of the younger family members had joined the business family members of the preceding generation would have been very disappointed.</td>
<td></td>
<td></td>
<td>0.7163</td>
</tr>
<tr>
<td>4. The outgoing president of our firm was deeply committed to continuing the business as a family business.</td>
<td></td>
<td></td>
<td>0.6695</td>
</tr>
<tr>
<td>5. The outgoing president of our business wanted his/her children to enter the business.</td>
<td></td>
<td></td>
<td>0.6655</td>
</tr>
</tbody>
</table>

Table 6.6b. Agreement to continue the business: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>71.3 %</td>
</tr>
<tr>
<td>Items</td>
<td>FACTOR LOADINGS</td>
</tr>
<tr>
<td>1. All family members actively involved in the business were committed to the company continuing as a family business.</td>
<td>Factor 1</td>
</tr>
<tr>
<td>2. All family members not actively involved in the business were committed to the company continuing as a family business.</td>
<td>0.2462</td>
</tr>
<tr>
<td>3. If none of the younger family members had joined the business family members of the preceding generation would have been very disappointed.</td>
<td>0.0998</td>
</tr>
<tr>
<td>4. The outgoing president of our firm was deeply committed to continuing the business as a family business.</td>
<td>0.8009</td>
</tr>
<tr>
<td>5. The outgoing president of our business wanted his/her children to enter the business.</td>
<td>0.7424</td>
</tr>
</tbody>
</table>

| Items                                                                 | Factor 1 | Factor 2 |
| 1. All family members actively involved in the business were committed to the company continuing as a family business. | 0.8382 | 0.1801 |
The results in these tables indicate that although these items have high scale reliability which is not increased by dropping any of the five indicators, there are two distinct factors present. On closer observation, it is found that the three items closely related to the commitment of the president towards continuation of the business form the first factor, while the two items related to the commitment of active and non-active family members formed the second factor. Although the hypothesized relationship in this study was between the agreement of all family members to continue the business, the results of factor analysis suggest that the perception of presidents regarding the continuation of the business may not be similar to that of other family members. As more insights could be gained by separating the extent of presidents' commitment to continue the business from that of other family members, a decision was made to split this construct into two scales. The first scale would be formed of indicators 3, 4, & 5 and would measure the extent of presidents' commitment to continue the business. The second construct, on the other hand, would be formed of indicators 1 & 2 and would measure the extent of agreement of other family members to continue the business. Separate scale reliability analysis were conducted on these two sub-scales (tables 6.6c and 6.6d) and alpha values were found to be higher than those found earlier in table 6.6a. when all items were retained in one scale.
Table 6.6c. Extent of President’s commitment to continue the business: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.7929</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
<td></td>
</tr>
<tr>
<td>1. If none of the younger family members had joined the business, family members of the preceding generation would have been very disappointed.</td>
<td>0.7894</td>
</tr>
<tr>
<td>2. The outgoing president of our firm was deeply committed to continuing the business as a family business.</td>
<td>0.7030</td>
</tr>
<tr>
<td>3. The outgoing president of our business wanted his/her children to enter the business.</td>
<td>0.6439</td>
</tr>
</tbody>
</table>

Table 6.6d. Agreement of other family members to continue the business: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.7914</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
<td></td>
</tr>
<tr>
<td>1. All family members actively involved in the business were committed to the company continuing as a family business.</td>
<td>-</td>
</tr>
<tr>
<td>2. All family members not actively involved in the business were committed to the company continuing as a family business.</td>
<td>-</td>
</tr>
</tbody>
</table>

6.3.1e Career interests of successors. This variable focuses on the career needs of the successor and the extent to which these needs could be met in the context of the family business. In an attempt to measure this construct, respondents were asked to indicate the extent of accuracy of three items: (1) successor’s career needs and interests were closely aligned with opportunities in business; (2) personal growth was one of the major reasons for successors joining the firm, and (3) opportunities available to him/her from working in family firm were much higher than those available from adopting other careers. The results of scale reliability tests and factor analysis for these indicators are presented in the following tables:
Table 6.7a. Career interests of successors: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.4844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha if item deleted</td>
<td>0.3392</td>
</tr>
<tr>
<td>0.3835</td>
<td>0.4333</td>
</tr>
</tbody>
</table>

| Items | 1. Successor’s careers needs and interests were closely aligned with opportunities in the business. | 2. One of the major reasons that the successor joined the business was the opportunity for personal growth available in the business. | 3. The opportunities available to the successor from working in our family firm were much higher than those available from other careers. | 0.7363 | 0.7071 | 0.6633 |

The above analyses indicate a high degree of internal consistency between the three indicators. Although the alpha for the scale is considerably lower than other developed scales in this study, it does not increase with the deletion of any item. Moreover, all indicators load on one factor. Thus, the scores for the three indicators were added to provide a scale for the variable ‘career interests’.

6.3.1f. Propensity of successor to take over. Respondents were asked the extent of accuracy of two statements: (1) successor had a strong desire to take over the business,
and (2) successor had a great deal of confidence in his/her ability to run the business. The results of scale reliability tests and factor analysis are presented in Tables 6.8a and 6.8b.

**Table 6.8a. Propensity of successor to take over: Results of scale reliability tests**

<table>
<thead>
<tr>
<th>CRONBACH'S ALPHA</th>
<th>0.6835</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
<td></td>
</tr>
<tr>
<td>1. The successor had a strong desire to take over the business.</td>
<td></td>
</tr>
<tr>
<td>2. The successor had a great deal of confidence in his/her ability to run the business.</td>
<td></td>
</tr>
<tr>
<td>Alpha if item deleted</td>
<td>-</td>
</tr>
</tbody>
</table>

**Table 6.8b. Propensity of successor to take over: Results of factor analysis**

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>76.0 %</td>
</tr>
<tr>
<td><strong>Items</strong></td>
<td>Factor loadings</td>
</tr>
<tr>
<td>1. The successor had a strong desire to take over the business.</td>
<td>0.8719</td>
</tr>
<tr>
<td>2. The successor had a great deal of confidence in his/her ability to run the business.</td>
<td>0.8719</td>
</tr>
</tbody>
</table>

The fairly high alpha values and the high percent of variance explained indicates that the two items are reliable and internally consistent. The scores of these two items were added to provide a scale for 'propensity of successor to take over'.

6.3.1g. *Incumbent's interests outside the business.* Two positively coded items (1 and 2) and one negatively coded item (3) were used to measure this construct. The negatively coded item was recoded before estimating the scale reliability and conducting factor analysis. The results of these analyses are presented in tables 6.9a. and 6.9b.
Table 6.9a. Incumbent’s interests outside the business: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.5690</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td></td>
</tr>
<tr>
<td>1. The outgoing president of our business was looking forward to the pursuit of activities outside the business.</td>
<td>Alpha if item deleted</td>
</tr>
<tr>
<td>2. The outgoing president of our business was heavily involved in activities outside the business.</td>
<td>0.4841</td>
</tr>
<tr>
<td>3. Most of the time of our outgoing president was spent in work related to the business.</td>
<td>0.2748</td>
</tr>
<tr>
<td></td>
<td>0.5931</td>
</tr>
</tbody>
</table>

Table 6.9b. Incumbent’s interests outside the business: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>53.9 %</td>
</tr>
<tr>
<td>Items</td>
<td></td>
</tr>
<tr>
<td>1. The outgoing president of our business was looking forward to the pursuit of activities outside the business.</td>
<td>Factor loadings</td>
</tr>
<tr>
<td>2. The outgoing president of our business was heavily involved in activities outside the business.</td>
<td>0.7318</td>
</tr>
<tr>
<td>3. Most of the time of our outgoing president was spent in work related to the business.</td>
<td>0.8294</td>
</tr>
<tr>
<td></td>
<td>0.6263</td>
</tr>
</tbody>
</table>

Overall, the three indicators seem to form a reliable and internally consistent scale. Although the scale reliability tests indicate a slight increase in alpha value if the third item was deleted, the factor analysis results suggest the presence of only one factor. As deletion of item 3 leads to only a small increase in alpha and there is no theoretical justification for deleting this item, all three items were retained for constructing this scale.

6.3.1h. Trust in successors’ abilities and intentions. This variable refers to the trust that the outgoing president has in the capabilities and intentions of the successor. Four items were used to measure this construct. While two of these items aimed at understanding the perceptions of the outgoing president regarding the ability and intentions of the successor
(items 3 & 4), the other two items asked for the relevance of successors’ experience and education. The negatively coded item related to the education of the successor was recoded before the analysis related to scale construction was undertaken. The results of scale reliability tests and factor analysis are presented in tables 6.10a and 6.10b.

Table 6.10a. Trust in successors’ abilities and intentions: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td></td>
</tr>
<tr>
<td>1. The successor’s prior work experience was relevant to the business.</td>
<td>0.6177</td>
</tr>
<tr>
<td>2. The educational background of the successor was not appropriate for our business.</td>
<td>0.6654</td>
</tr>
<tr>
<td>3. The outgoing president of our business had a great deal of trust in the ability of the successor to run the business.</td>
<td>0.4091</td>
</tr>
<tr>
<td>4. The outgoing president of our business had a great deal of confidence in the integrity of the successor.</td>
<td>0.7641</td>
</tr>
</tbody>
</table>

Table 6.10b. Trust in successors’ abilities and intentions: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>57.4 %</td>
</tr>
<tr>
<td>Items</td>
<td>Factor loadings</td>
</tr>
<tr>
<td>1. The successor’s prior work experience was relevant to the business.</td>
<td>0.7787</td>
</tr>
<tr>
<td>2. The educational background of the successor was not appropriate for our business.</td>
<td>0.7123</td>
</tr>
<tr>
<td>3. The outgoing president of our business had a great deal of trust in the ability of the successor to run the business.</td>
<td>0.9769</td>
</tr>
<tr>
<td>4. The outgoing president of our business had a great deal of confidence in the integrity of the successor.</td>
<td>0.4792</td>
</tr>
</tbody>
</table>

The results of the above analyses indicate the presence of a single factor, although the scale reliability can be increased by dropping the last indicator. As the increase in alpha value...
that dropping the last indicator would cause is only marginal, a decision was made to retain all four indicators for this scale\textsuperscript{15}.

6.3.11. Propensity of an incumbent to step aside. Five items, two of which (3 & 4) were negatively coded were used to measure the propensity of an incumbent to step aside from the leadership of a business. These items along with the results of scale reliability tests and factor analysis are presented in tables 6.11a and 6.11b.

Table 6.11a. Propensity of incumbent to step aside: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.4969 (0.7009*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items:</td>
<td></td>
</tr>
<tr>
<td>1. The outgoing president of our business was getting tired of the business.</td>
<td>Alpha if item deleted</td>
</tr>
<tr>
<td>2. There was nothing else that the outgoing president of our business wanted to accomplish with respect to the business.</td>
<td>0.4746</td>
</tr>
<tr>
<td>3. The outgoing president of our business did not want to let go of the leadership of the business.</td>
<td>0.3761</td>
</tr>
<tr>
<td>4. The outgoing president of our business felt that his/her presence in the business was necessary to keep it running.</td>
<td>0.4300</td>
</tr>
<tr>
<td>5. The outgoing president of our business felt that other family members should take over its leadership for the good of the business.</td>
<td>0.4302</td>
</tr>
</tbody>
</table>

* - alpha values using only two items - 3 & 4.

Table 6.11b. Propensity of incumbent to step aside: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTION</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>63.1 %</td>
</tr>
<tr>
<td>Items</td>
<td>Factor loadings</td>
</tr>
<tr>
<td>1. The outgoing president of our business was getting tired of the business.</td>
<td>-0.1764 0.8563</td>
</tr>
<tr>
<td>2. There was nothing else that the outgoing president of our business wanted to accomplish with respect to the business.</td>
<td>0.1044 0.8234</td>
</tr>
<tr>
<td>3. The outgoing president of our business did not want to let go of the leadership of the business.</td>
<td>0.8561 0.0673</td>
</tr>
<tr>
<td>4. The outgoing president of our business felt that his/her presence in the business was necessary to keep it running.</td>
<td>0.8747 0.0504</td>
</tr>
<tr>
<td>5. The outgoing president of our business felt that other family members should take over its leadership for the good of the business.</td>
<td>0.1938 0.3966</td>
</tr>
</tbody>
</table>

\textsuperscript{15} As one could theoretically argue in favor of the presence of two distinct dimensions in this scale, one related to successor abilities (indicators 1.2.3) and a second related to integrity (indicator 4), another set of regression analyses were run after splitting this scale into these two dimensions. The results of this analysis are presented in Appendix E (Section 4).
While scale reliability tests indicate that deletion of any of these items would not cause much difference in terms of the alpha values, the results of factor analysis suggest that there are clearly two dimensions in this scale. While items 1 and 2 load heavily on the second factor, items 3 and 4 load heavily on the first. Item 5 loads heavier on the second factor than on the first although this loading is not as heavy as for the other indicators. Moreover, the difference in the loading of this item on the two factors is not as much as in the case of the other 4 indicators. A re-examination of the questions in light of these results and keeping in mind that this variable is aimed to measure the desire of an incumbent to step aside from the leadership of the business, it was felt that items 3 and 4 were more direct measures for an incumbent’s desire to let go. The other items were related more to the reasons for this desire than the desire itself. Based on this reasoning a decision was made to include only items 3 and 4 for constructing the scale for this variable. It is found that the usage of these two items led to only a significant increase in the alpha levels (marked with asterisk in table 6.11a).

6.3.1j. Presence of an active advisory board. This refers to the presence of a formal or an informal advisory board that meets at regular intervals. Six indicators, three (i.e., 3,5,6) of which were negatively coded, were included in the questionnaire in an attempt to measure this variable. The results of scale reliability tests and factor analysis, which were conducted after recoding of the negative questions are presented in tables 6.12a and 6.12b.
Table 6.12a. Presence of an active advisory board: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH'S ALPHA</th>
<th>0.4604</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items:</strong></td>
<td></td>
</tr>
<tr>
<td>1. We had a formal board of directors.</td>
<td></td>
</tr>
<tr>
<td>2. We had an informal board of directors.</td>
<td></td>
</tr>
<tr>
<td>*3. Our board did not play an active role in determining the strategic direction of our business.</td>
<td>0.5066</td>
</tr>
<tr>
<td>4. Our board met several times a year.</td>
<td>0.2685</td>
</tr>
<tr>
<td>*5. Family members made major business decisions.</td>
<td>0.5642</td>
</tr>
<tr>
<td>*6. We did not involve outsiders in most important strategic decisions of our business.</td>
<td>0.2814</td>
</tr>
</tbody>
</table>

* Negatively coded indicators

Table 6.12b. Presence of an active advisory board: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% of variance explained</strong></td>
<td>71.0 %</td>
</tr>
<tr>
<td><strong>Items</strong></td>
<td>Factor 1</td>
</tr>
<tr>
<td>1. We had a formal board of directors.</td>
<td>0.8476</td>
</tr>
<tr>
<td>2. We had an informal board of directors.</td>
<td>0.0030</td>
</tr>
<tr>
<td>*3. Our board did not play an active role in determining the strategic direction of our business.</td>
<td>0.5889</td>
</tr>
<tr>
<td>4. Our board met several times a year.</td>
<td>0.8177</td>
</tr>
<tr>
<td>*5. Family members made major business decisions.</td>
<td>0.2091</td>
</tr>
<tr>
<td>*6. We did not involve outsiders in most important strategic decisions of our business.</td>
<td>0.1522</td>
</tr>
</tbody>
</table>

An increase in alpha values is reported if items related to the presence of an informal board of directors and the decision making by family members are deleted. Results of factor
analysis indicate the presence of three dimensions among these indicators. First, dimension is formed of items 1, 3, and 4, i.e., the presence of a formal advisory board, its role in determining the strategic direction of the business, and meeting several times a year. The presence of an informal board forms the second dimension. Items 5 and 6 related to the extent of outsider involvement in making of the major business related decisions, form the third dimension.

A re-examination of indicators suggests that indicators in the first factor measure the presence of a formal active advisory board, while the indicator in the second factor measures the presence of an informal board of advisors. The indicators in the third factor do not add any new information that has not been collected by indicators in the first factor. Thus, a decision was made to drop indicators 5 and 6, and retain the first two factors as two distinct scales, first measuring the presence of a formal active advisory board (items 1, 3, & 4), and second measuring the presence of an informal board (item 2). Scale reliability tests (Table 6.12c) conducted on the three items that formed the first dimension indicate a considerable increase in alpha value than was found when all six indicators were used.

Table 6.12c. Presence of a FORMAL active advisory board: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH'S ALPHA</th>
<th>0.6838</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items:</strong></td>
<td></td>
</tr>
<tr>
<td>1. We had a formal board of directors.</td>
<td>Alpha if item deleted</td>
</tr>
<tr>
<td>2. Our board did not play an active role in determining the strategic direction of our business.</td>
<td>0.6183</td>
</tr>
<tr>
<td>3. Our board met several times a year.</td>
<td>0.6821</td>
</tr>
<tr>
<td></td>
<td>0.4566</td>
</tr>
</tbody>
</table>

6.3.1k. Succession planning. As mentioned in the discussion of operationalization of this variable in chapter 4, succession planning is considered to be a multi-dimensional
construct in this study. The respondents were asked to indicate the accuracy of statements related to fifteen items related to the four dimensions of: (1) process used to select and train the successor (items 1-5), (2) communication of the decision as to who the successor would be (items 6,7), (3) the role of the outgoing president after the transfer of leadership (items 8-10), and (4) strategic plan for the business after transfer of leadership (items 11-13). Besides these indicators for each dimension, two items (negatively coded item 14, & item 15) were used to gauge the overall degree of succession planning. Specific items used and the results of scale reliability tests and factor analysis are presented in the tables 6.13a and 6.13b.
### Table 6.13a. Succession planning: Results of scale reliability tests

<table>
<thead>
<tr>
<th>Items:</th>
<th>CRONBACH'S ALPHA</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A list of potential successors was developed.</td>
<td></td>
<td>0.8625</td>
</tr>
<tr>
<td>2. Explicit succession criteria were developed for identifying the best successor.</td>
<td></td>
<td>0.8535</td>
</tr>
<tr>
<td>3. Explicit efforts were made to train potential successors for their future role in the business.</td>
<td></td>
<td>0.8428</td>
</tr>
<tr>
<td>4. Explicit attention was given to familiarize the potential successors with the business prior to the succession.</td>
<td></td>
<td>0.8452</td>
</tr>
<tr>
<td>5. Explicit attention was given to familiarize the potential successors with the employees of the business prior to the succession.</td>
<td></td>
<td>0.8489</td>
</tr>
<tr>
<td>6. The decision of who the successor would be, was clearly communicated to family members active in the business.</td>
<td></td>
<td>0.8453</td>
</tr>
<tr>
<td>7. The decision of who the successor would be, was clearly communicated to key non-family managers.</td>
<td></td>
<td>0.8467</td>
</tr>
<tr>
<td>8. We had a formal plan regarding the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td></td>
<td>0.8470</td>
</tr>
<tr>
<td>9. We had an unwritten understanding of the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td></td>
<td>0.8555</td>
</tr>
<tr>
<td>10. A financial package was developed for the out-going president's retirement.</td>
<td></td>
<td>0.8523</td>
</tr>
<tr>
<td>11. Explicit decisions were made about how ownership of our business would be distributed after the successor takes over.</td>
<td></td>
<td>0.8484</td>
</tr>
<tr>
<td>12. We had an understanding of what the business strategy would be after leadership was transferred to the successor.</td>
<td></td>
<td>0.8450</td>
</tr>
<tr>
<td>13. We had an explicit plan for the business after the transfer of leadership to the successor.</td>
<td></td>
<td>0.8432</td>
</tr>
<tr>
<td>14. We did not have any written succession plan for transferring the management control of our business to the successor.</td>
<td></td>
<td>0.8565</td>
</tr>
<tr>
<td>15. We had an unwritten succession plan for transferring the management control of our business to the successor.</td>
<td></td>
<td>0.8673</td>
</tr>
</tbody>
</table>

* negatively coded indicator
Table 6.13b. Succession planning: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>% of variance explained</th>
<th>464.4 %</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 3</td>
</tr>
<tr>
<td>1. A list of potential successors was developed.</td>
<td>-0.0651</td>
<td>0.1387</td>
<td>0.0621</td>
</tr>
<tr>
<td>2. Explicit succession criteria were developed for identifying the best successor.</td>
<td>0.1833</td>
<td>0.1891</td>
<td>0.0737</td>
</tr>
<tr>
<td>3. Explicit efforts were made to train potential successors for their future role in the business.</td>
<td>0.2593</td>
<td>0.7210</td>
<td>0.2013</td>
</tr>
<tr>
<td>4. Explicit attention was given to familiarize the potential successors with the business prior to the succession.</td>
<td>0.1906</td>
<td>0.9054</td>
<td>0.1589</td>
</tr>
<tr>
<td>5. Explicit attention was given to familiarize the potential successors with the employees of the business prior to the succession.</td>
<td>0.1708</td>
<td>0.8911</td>
<td>0.1017</td>
</tr>
<tr>
<td>6. The decision of who the successor would be, was clearly communicated to family members active in the business.</td>
<td>0.2597</td>
<td>0.1968</td>
<td>0.6638</td>
</tr>
<tr>
<td>7. The decision of who the successor would be, was clearly communicated to key non-family managers.</td>
<td>0.3047</td>
<td>0.0626</td>
<td>0.7256</td>
</tr>
<tr>
<td>8. We had a formal plan regarding the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td>0.7142</td>
<td>0.0916</td>
<td>0.1131</td>
</tr>
<tr>
<td>9. We had an unwritten understanding of the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td>0.4152</td>
<td>0.0128</td>
<td>0.5436</td>
</tr>
<tr>
<td>10. A financial package was developed for the out-going president's retirement.</td>
<td>0.7349</td>
<td>0.1020</td>
<td>0.0187</td>
</tr>
<tr>
<td>11. Explicit decisions were made about how ownership of our business would be distributed after the successor takes over.</td>
<td>0.7196</td>
<td>0.2007</td>
<td>0.0897</td>
</tr>
<tr>
<td>12. We had an understanding of what the business strategy would be after leadership was transferred to the successor.</td>
<td>0.6368</td>
<td>0.2405</td>
<td>0.3722</td>
</tr>
<tr>
<td>13. We had an explicit plan for the business after the transfer of leadership to the successor.</td>
<td>0.7257</td>
<td>0.2130</td>
<td>0.2791</td>
</tr>
<tr>
<td>14. We did not have any written succession plan for transferring the management control of our business to the successor.</td>
<td>0.5203</td>
<td>-0.0180</td>
<td>0.0904</td>
</tr>
<tr>
<td>15. We had an unwritten succession plan for transferring the management control of our business to the successor.</td>
<td>-0.6767</td>
<td>0.2452</td>
<td>0.2697</td>
</tr>
</tbody>
</table>

* negatively coded indicator
The scale reliability tests indicate that there is a high consistency and reliability among the items for this scale. Although dropping of two items would lead to an increase in the alpha values, the increase would be only marginal. Moreover, there did not seem to be any theoretical justification to delete these items. Factor analysis results indicate the presence of four sub-dimensions: (1) plans for the future of the business and role of past president (items 8-15\footnote{Although item 9 loads heaviest on the third factor, its loading on the first is fairly heavy too. As it seems to related closer to the first factor than the third conceptually, a decision was made to include this in the first factor.}), (2) criteria for successor selection (items 1&2), (3) successor training (items 3,4,&5), and (4) communication of successor appointment (items 6&7). A closer examination of the results of factor analysis suggests that although a majority of the indicators used load heavily on the first factor, the dimension revealed by this factor remains unclear. As the results of scale reliability indicate a high internal consistency among all the indicators, and the results of factor analysis fail to bring out the dimensions very clearly, it was decided to include all these items for formation of the scale for succession planning.

However, out of curiosity and in an attempt to attain some more insights related to the hypothesized relationships using different sub-dimensions of this variable, separate scale reliability tests and regression analyses were conducted on the four dimensions suggested by factor analysis. These results are presented in Appendix F (Section 5).

\textbf{6.3.2. Operationalization of the dependent variable.} The dependent variable in this study is the satisfaction of the primary stakeholders (i.e., presidents, successors, and other family members actively involved in the business) with the succession process. While one question (item1) asked the respondents to indicate their extent of satisfaction
with the succession process in general, eleven other items were included in the questionnaire to measure satisfaction with regard to the three possible dimensions of succession process. These dimensions are: (1) process used to select and train a successor (items 2-7), (2) role of outgoing president (items 8-9), and (3) manner in which the decision regarding the chosen successor was communicated (items 10-12). Respondents were asked to indicate their extent of satisfaction with regard to each of these items. The results of scale reliability tests and factor analysis for this variable are presented in tables 6.14a and 6.14b.

Table 6.14a. Satisfaction with the succession process: Results of scale reliability tests

<table>
<thead>
<tr>
<th>Items</th>
<th>CRONBACH'S ALPHA</th>
<th>0.9312</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate the extent of satisfaction with the following:</td>
<td>Alpha if item deleted</td>
<td></td>
</tr>
<tr>
<td>1. The manner in which the succession process was managed.</td>
<td>0.9230</td>
<td></td>
</tr>
<tr>
<td>2. The process used to determine the potential candidates for</td>
<td>0.9228</td>
<td></td>
</tr>
<tr>
<td>succession.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The criteria used to select the successor.</td>
<td>0.9194</td>
<td></td>
</tr>
<tr>
<td>4. The process used to train the successor.</td>
<td>0.9224</td>
<td></td>
</tr>
<tr>
<td>5. The process used to familiarize the successor with the business.</td>
<td>0.9252</td>
<td></td>
</tr>
<tr>
<td>6. The process used to familiarize the successor with the employees</td>
<td>0.9286</td>
<td></td>
</tr>
<tr>
<td>of the business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The suitability of the chosen successor.</td>
<td>0.9278</td>
<td></td>
</tr>
<tr>
<td>8. The financial arrangements for the outgoing president of your</td>
<td>0.9349</td>
<td></td>
</tr>
<tr>
<td>firm upon his/her retirement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The criteria used for determining the distribution of ownership</td>
<td>0.9316</td>
<td></td>
</tr>
<tr>
<td>after the transfer of leadership to the successor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The manner in which the choice of successor was communicated to</td>
<td>0.9222</td>
<td></td>
</tr>
<tr>
<td>family members actively involved in the business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The manner in which the choice of successor was communicated to</td>
<td>0.9233</td>
<td></td>
</tr>
<tr>
<td>family members not actively involved in the business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The manner in which the choice of successor was communicated to</td>
<td>0.9220</td>
<td></td>
</tr>
<tr>
<td>key non-family managers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6.14b. Satisfaction with the succession process: Results of factor analysis

<table>
<thead>
<tr>
<th>FACTORS EXTRACTED</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>68.2 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings</th>
<th>Factor loadings</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate the extent of satisfaction with the following:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The manner in which the succession process was managed.</td>
<td>0.5275</td>
<td>0.6641</td>
<td></td>
</tr>
<tr>
<td>2. The process used to determine the potential candidates for succession.</td>
<td>0.7390</td>
<td>0.3623</td>
<td></td>
</tr>
<tr>
<td>3. The criteria used to select the successor.</td>
<td>0.8185</td>
<td>0.3621</td>
<td></td>
</tr>
<tr>
<td>4. The process used to train the successor.</td>
<td>0.8426</td>
<td>0.2162</td>
<td></td>
</tr>
<tr>
<td>5. The process used to familiarize the successor with the business.</td>
<td>0.8496</td>
<td>0.1010</td>
<td></td>
</tr>
<tr>
<td>6. The process used to familiarize the successor with the employees of the business.</td>
<td>0.7845</td>
<td>0.0304</td>
<td></td>
</tr>
<tr>
<td>7. The suitability of the chosen successor.</td>
<td>0.6297</td>
<td>0.3132</td>
<td></td>
</tr>
<tr>
<td>8. The financial arrangements for the outgoing president of your firm upon his/her retirement.</td>
<td>0.0788</td>
<td>0.8186</td>
<td></td>
</tr>
<tr>
<td>9. The criteria used for determining the distribution of ownership after the transfer of leadership to the successor.</td>
<td>0.2198</td>
<td>0.7953</td>
<td></td>
</tr>
<tr>
<td>10. The manner in which the choice of successor was communicated to family members actively involved in the business.</td>
<td>0.6679</td>
<td>0.4880</td>
<td></td>
</tr>
<tr>
<td>11. The manner in which the choice of successor was communicated to family members not actively involved in the business.</td>
<td>0.6737</td>
<td>0.4395</td>
<td></td>
</tr>
<tr>
<td>12. The manner in which the choice of successor was communicated to key non-family managers.</td>
<td>0.7194</td>
<td>0.4181</td>
<td></td>
</tr>
</tbody>
</table>

The results of scale reliability tests indicate a strong internal consistency among all these items. The factor analysis confirms the existence of multiple dimensions within this construct, although two dimensions are revealed instead of the three dimensions around which the indicators were designed during operationalization of this construct. While most of the indicators load heavily on the first factor, only three indicators loaded heavier on the second factor. The first of these indicators measured the overall extent of satisfaction with the succession process (item 1). While this indicator loaded heavier on the second factor,
its loading on the first factor was quite heavy too. Therefore, this item could easily be combined with the other items of factor 1. The other two items (8&9) that loaded heavily on the second factor are related to the extent of satisfaction of the respondent with the financial and ownership distribution after the transfer of leadership. These are also the two items that would lead to a slight increase in alpha values if dropped out. As this increase is not significant and the aim in this research is to understand the determinants of the overall satisfaction of respondents with the succession process, a decision was made to retain all 12 items for this construct. In order to gain additional insights, however, separate regression analyses for the two dimensions of the dependent variable (first with items 1-7, & 10-12; and second with items 8&9) regressed on the mediating variables were conducted to gain additional insights. These results are presented in Appendix F(Section 4).

6.4. Testing for biases in data using scales

As the results of MANOVAs conducted on indicators (section 6.2) suggested a possibility of biases in data due to the perceptions of the three categories of respondents (presidents--P, successors--S, and other family members--FM), a re-testing for these biases was undertaken using constructed scales. These results are presented in table 6.15. While the complete data set was used for the analyses presented below, similar results were found using data from firms from which multiple responses were received (Appendix F, Section 7).
Table 6.15: Results of testing for RESPONDENT bias in the constructed scales using MANOVAs

<table>
<thead>
<tr>
<th>Construct</th>
<th>P-S-FM</th>
<th>P-S</th>
<th>P-FM</th>
<th>S-FM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Sig F.</strong></td>
<td>0.007**</td>
<td>0.041*</td>
<td>0.001**</td>
<td>0.256</td>
</tr>
<tr>
<td>AAB-a</td>
<td>0.467</td>
<td>0.285</td>
<td>0.890</td>
<td>0.858</td>
</tr>
<tr>
<td>AAB-b</td>
<td>0.350</td>
<td>0.438</td>
<td>0.742</td>
<td>0.694</td>
</tr>
<tr>
<td>ACB-a</td>
<td>0.761</td>
<td>0.658</td>
<td>0.712</td>
<td>0.468</td>
</tr>
<tr>
<td>ACB-b</td>
<td>0.013*</td>
<td>0.003**</td>
<td>0.443</td>
<td>0.193</td>
</tr>
<tr>
<td>AIR</td>
<td>0.001**</td>
<td>0.001**</td>
<td>0.003**</td>
<td>0.607</td>
</tr>
<tr>
<td>CI</td>
<td>0.244</td>
<td>0.870</td>
<td>0.116</td>
<td>0.123</td>
</tr>
<tr>
<td>IOB</td>
<td>0.610</td>
<td>0.518</td>
<td>0.330</td>
<td>0.623</td>
</tr>
<tr>
<td>PFB</td>
<td>0.295</td>
<td>0.959</td>
<td>0.143</td>
<td>0.153</td>
</tr>
<tr>
<td>PFH</td>
<td>0.000***</td>
<td>0.000***</td>
<td>0.002**</td>
<td>0.649</td>
</tr>
<tr>
<td>PPR</td>
<td>0.004**</td>
<td>0.003**</td>
<td>0.005**</td>
<td>0.572</td>
</tr>
<tr>
<td>PSTO</td>
<td>0.246</td>
<td>0.211</td>
<td>0.130</td>
<td>0.519</td>
</tr>
<tr>
<td>SP</td>
<td>0.015*</td>
<td>0.006**</td>
<td>0.040*</td>
<td>0.737</td>
</tr>
<tr>
<td>SwSP</td>
<td>0.001**</td>
<td>0.001**</td>
<td>0.001**</td>
<td>0.354</td>
</tr>
<tr>
<td>TSAI</td>
<td>0.000***</td>
<td>0.015*</td>
<td>0.000***</td>
<td>0.000***</td>
</tr>
<tr>
<td><strong>Scales With SIG. DIFF.</strong></td>
<td>7/14</td>
<td>7/14</td>
<td>6/14</td>
<td>1/14</td>
</tr>
</tbody>
</table>

The overall Sig. F. values are based on Pillai’s trace test.
* significant at 0.05 level.  ** significant at 0.01 level.  *** significant at 0.001 level.

AABa  A formal active board of directors
AABb  An informal board of directors
ACBa  Extent of Presidents commitment to continue the business
ACBb  Agreement of family members to continue business
AIR   Mutual acceptance on individual roles
CI    Career interests
IOB   Interests of incumbent outside the business
PFB   Payoffs from business
PFH   Perceived family harmony
PPR   Propensity of incumbent-president to step aside
PSTO  Propensity of successor to take over
SP    Succession planning
SwSP  Satisfaction with the succession process
TSAI  Trust in successors’ abilities and intentions

The results in the second column of the above table indicate a significant difference in the perceptions of the three categories of respondents. This suggests that the responses of the three respondent groups cannot be combined into one data set. Further
analysis was conducted to determine if the responses of any two groups of respondents could be combined. This analysis presented in columns 3-5 of Table 6.15 suggest that although the perceptions of presidents were significantly different from those of successors and other family members, there was no significant difference in the responses of these latter two categories of respondents. Only in the case of one variable (Trust in successor abilities and intentions) was a significant difference detected amongst the responses of these two respondent groups. However, as no overall difference was detected, a decision was made to combine the responses of these two groups of respondents and ignore the suggested difference in one variable. Thus, for further analysis data was divided into two groups: (1) presidents, and (2) successors and other family members.

6.5. Testing for regression assumptions

The four regression assumptions for which testing was undertaken are linearity, normality, homoscedasticity, and collinearity between independent variables. The assumptions of linearity, normality, and homoscedasticity were tested by visually scanning histograms and scatterplots which are attached as Appendices H to J. Appendix H contains the scatter diagrams of the dependent variables upon the independent variables for each of the regression models. These scatter diagrams with a trend line fitted to indicate an approximate linear relationship (and a clear lack of curvilinear relationship) indicate no violation of the assumption of linearity.

The histograms of the standardized residuals of the dependent variables over values of independent variables indicate normality of distribution for the dependent variables. These histograms are presented in Appendix I. Although perfect normality is not
observed in case of any of the variables and this cannot be expected, a marked skewness would require some transformation of the data. However, in case of this sample no serious skewness was found.

The assumption of homoscedasticity was evaluated by an examination of the scatter plots for standardised residuals over values of the dependent variables (Appendix J). As no visible fan shape was observed in any of the scatter plots no violation of this assumption was indicated.

To test for any violation in the assumption related to multi-collinearity among variables, Variance Inflation Factors (VIF) were computed for each of the regression models run. These values are presented alongside the regression parameters in Tables 6.18 to 6.23. A VIF greater than two can slightly effect the computation of the regression parameters. The VIFs ranged from 1.000 to 1.817. Therefore, no substantial multi-collinearity among variables was detected. As the initial screening of the residual scatter plots, normal plots, and histograms did not reveal any violation of regression assumptions, further screening of variables was considered unnecessary.

6.6. Testing of hypotheses - results of multiple regression

Before presentation of the results of multiple regression models, the means and standard deviations for the variables in the model are presented in table 6.16.
Table 6.16: Means and standard deviations for variables in the model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Presidents responses</th>
<th>Successors (S) and other family members (FM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>Std. dev.</td>
</tr>
<tr>
<td>AAB-a</td>
<td>8.00</td>
<td>3.89</td>
</tr>
<tr>
<td>AAB-b</td>
<td>2.30</td>
<td>1.54</td>
</tr>
<tr>
<td>ACB-a *</td>
<td>10.77</td>
<td>3.43</td>
</tr>
<tr>
<td>ACB-b</td>
<td>7.70</td>
<td>2.34</td>
</tr>
<tr>
<td>AIR *</td>
<td>31.84</td>
<td>6.30</td>
</tr>
<tr>
<td>CI</td>
<td>11.96</td>
<td>1.98</td>
</tr>
<tr>
<td>IOB</td>
<td>7.08</td>
<td>2.81</td>
</tr>
<tr>
<td>PFB</td>
<td>11.57</td>
<td>2.40</td>
</tr>
<tr>
<td>PPR **</td>
<td>20.54</td>
<td>4.32</td>
</tr>
<tr>
<td>PPR **</td>
<td>7.23</td>
<td>1.94</td>
</tr>
<tr>
<td>PSTO</td>
<td>8.55</td>
<td>1.78</td>
</tr>
<tr>
<td>SP *</td>
<td>47.75</td>
<td>12.45</td>
</tr>
<tr>
<td>SwSP *</td>
<td>49.59</td>
<td>8.54</td>
</tr>
<tr>
<td>TSAI **</td>
<td>16.67</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level.  ** significant at 0.01 level

AABa  A formal active board of directors
AABb  An informal board of directors
ACBa  Extent of Presidents commitment to continue the business
ACBb  Agreement of family members to continue business
AIR   Mutual acceptance on individual roles
CI    Career interests
IOB   Interests of incumbent outside the business
PFB   Payoffs from business
PFH   Perceived family harmony
PPR   Propensity of incumbent-president to step aside
PSTO  Propensity of successor to take over
SP    Succession planning
SwSP  Satisfaction with the succession process
TSAI  Trust in successors' abilities and intentions

A comparison of the absolute values of means and standard deviations for the two data sets combined with results of MANOVAS presented in the previous table, reveal
some interesting differences in the two data sets. As was mentioned earlier, significant
differences in means between two data sets (1) presidents and (2) successors and other
family members were observed in 7 out of the 14 variables under study. A brief discussion
about each of these variables follows.

*Extent of President's commitment to continue the business.* Three indicators were used to
measure this scale. As there were five response choices for each indicator, this scale
ranged from 5 to 15. The successors and family members perceived a higher level of
commitment of the incumbent president to continue the business, than the presidents
themselves. This suggests that while the presidents may be willing to discontinue the
business other family members do not recognize this.

*Acceptance of individual roles.* The presidents perceived a higher level of acceptance of
individual roles among family members working in the business (mean 31.84 on a scale of
ranging from 7 - 35 with 7 indicators and response choices varying from 1-5) than did the
successors and other family members (mean 27.87). Although the standard deviation was
higher for the successors and other family members (S.D. of 7.87 as compared to 6.30 for
presidents) indicating a higher variation in perception among this group of respondents,
the difference in variation was not large.

*Perceived family harmony.* For this variable too, the presidents perceived the presence of
higher degree of family harmony than did the family members themselves. On a scale from
5 to 25 (with five indicators and five response choices (1-5) for each indicator) the mean
for presidents’ responses was 20.54 as compared to 17.91 for successors. Once again
there was a slightly higher variation in terms of the responses of the successors and other
family members (S.D. 5.67 as compared to 4.32 for presidents) but the difference was not substantial.

Propensity of president to step aside. The presidents rated their propensity to step aside as higher than that rated by other family members (mean 7.23 as compared to 5.99 by other family members—scale ranges from 5-10 with 2 indicators, each with five response choices: 1-5). The variance in responses of presidents (SD 1.94) was lower than the variance for other family members (2.53).

Succession planning. With regard to succession planning, the presidents rated the degree of succession planning undertaken as higher than did other family members involved in the business. On a scale ranging from 15 to 75 (15 indicators each with five response choices: 1-5), the mean for presidents was 47.75 while that for successors and other family members was 40.98. The variation among presidents (SD 12.45) was virtually identical to that of successors and other family members (SD 12.24). This suggests that the succession plan of the president is not clearly recognized by other family members.

Trust in successors' abilities and intentions. It was interesting to find that there was a significant difference in the perceptions of all three categories of respondents with regard to this variable. This was the only variable in which the responses of successors and other family members varied significantly. The presidents themselves reported a higher trust in the abilities and intentions of successors (mean 16.67 on a scale ranging from 5 - 20), than was perceived by either the successors (mean 15.64) or other family members (mean 12.92). Moreover, the variation in presidents' responses were the least among the three groups of respondents (SD 2.82—presidents, 2.99—successors, 3.28—other family
memh). As mentioned in the previous section, as this was the only variable along which a difference was observed in the responses of successors and family members, the two data sets were combined. The mean for the combined responses of successors and family members for this variable was 15.61 and standard deviation was 3.16.

Satisfaction with the succession process. This was the main dependent variable in the model. Twelve indicators were used to form the scale for this variable. As each indicator had five response choices (1-5) the scale values could range from 15 - 75. The presidents reported a higher degree of satisfaction with the succession process with lower variation (mean 49.59, SD 8.54) than did the successors and other family members (mean 43.33, SD 11.28).

Overall, the presidents perceived a higher level of family harmony, acceptance of individual roles among family members working in the business, trust in successor abilities and intentions, presence of succession planning, their own propensity to retire, and were more satisfied with the succession process than were the successors and other family members. However, it was the successors and other family members who perceived a higher level of commitment of presidents to continue the business, than the presidents themselves.

The regression models. As described in Chapter 4, seven regressions were run to test the model presented in Chapter 3. The results of each of these regressions for the two data sets: (1) presidents, and (2) successors and other family members\(^\text{17}\) are presented in this section.

\(^{17}\) Although previous analysis suggested that there is no significant difference in the perceptions of successors and other family members, separate regressions were run using only the data from successors, to detect any differences in the regression results. These results are presented in Appendix F (section 2).
**Model 1: Satisfaction with the succession process regressed on the five mediating variables.** This model predicts that higher levels of: (1) acceptance of individual roles among family members (AIR), (2a) commitment of presidents to continue the business (ACB-a), (2b) agreement of other family members to continue the business (ACB-b), (3) propensity of successor to take over the leadership of the business (PSTO), (4) propensity of incumbent-president to step aside (PPR), and (5) the degree of succession planning undertaken (SP), will lead to higher levels of satisfaction with the succession process (SwSP - dependent variable in this model). The equation for this model reads as:

\[ SwSP = a_1 + b_{91} \text{AIR} + b_{921} \text{ACB-a} + b_{921} \text{ACB-b} + b_{13} \text{PSTO} + b_{11} \text{PPR} + b_{12} \text{SP} + e_1 \]

The results of multiple regression for the two data sets: (1) presidents and (2) successors and other family members, are presented in tables 6.17 below.

**Table 6.17. Regression results of the mediating variables on the satisfaction with the succession process (SwSP - dependent variable)**

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta B</td>
</tr>
<tr>
<td>AIR (H1)</td>
<td>0.2943 (.1251)</td>
<td>0.2064</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>0.4093 (.3405)</td>
<td>0.1081</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>0.3894 (.1216)</td>
<td>0.1457</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>2.0088 (.4766)</td>
<td>0.3755</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.3781 (.3815)</td>
<td>0.0807</td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.2088 (.0677)</td>
<td>0.2666</td>
</tr>
<tr>
<td>CONS.</td>
<td>2.3739 (4.829)</td>
<td>0.492</td>
</tr>
</tbody>
</table>

Other statistics:
- R²: 0.6063
- Adj. R²: 0.5726
- F.stat.: 17.9698
- Prob. F: 0.0000***
- N: 77

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level
This model predicts and explains 57% of the variance in the satisfaction with the succession process for the president's data set, and 66% of the variance in satisfaction of the successors and other family members with the succession process. Thus, the fit of the model is very good for both data sets. While the statistical significance of both acceptance of individual roles (H1) and succession planning (H5) is indicated by both data sets, the other four variables are not statistically significant for both data sets. Interestingly, while the propensity of successors to take over (H3) is reported to have a statistically significant effect (0.001 level) on the president's satisfaction with the succession process, it does not have any significant influence on the satisfaction with the succession process as perceived by successors and other family members. This findings becomes even more interesting in the light that there was no significant difference in the means of this variable for the two data sets. A reversal of this finding is reported for the propensity of presidents to step aside (H4). While this variable does not have a significant influence for the first data set, it is highly significant in determining the satisfaction of the successors and other family members with the succession process.

In comparing the beta estimates, it is seen that the variables of propensity of successor to take over, succession planning, and acceptance of individual roles have the highest comparative effects on satisfaction of presidents with the succession process. However, for the successors and other family members, the variables that have the highest
comparative effect on the dependent variable are: succession planning, acceptance of individual roles, and propensity of an incumbent-president to step aside.

On the whole, this model has proved to be statistically significant and explains a high degree of variance in the dependent variable for both data sets.

Model 2: Mutual acceptance of individual roles regressed on perceived family harmony. This model predicts that there is a positive relationship between perceived family harmony and the mutual acceptance of individual roles among family members in the business (H1a). The equation that describes this model is:

$$AIR = a_0 + b_{28} PFH + e_9$$

The results of multiple regression for the two data sets (1) presidents and (2) successors and other family members, are presented in tables 6.18. below.

Table 6.18. Regression results of the perceived family harmony (PFH) on mutual acceptance of individual roles (AIR - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. beta (SE)</td>
<td>Beta B</td>
</tr>
<tr>
<td>PFH (H1a)</td>
<td>1.1383 (.0874)</td>
<td>0.7888</td>
</tr>
<tr>
<td></td>
<td>t value</td>
<td>13.027</td>
</tr>
<tr>
<td></td>
<td>p one tailed</td>
<td>0.0000 ***</td>
</tr>
<tr>
<td></td>
<td>VIFs</td>
<td>1.000</td>
</tr>
<tr>
<td>CONS.</td>
<td>8.4143 (1.834)</td>
<td>4.5879</td>
</tr>
<tr>
<td></td>
<td>t value</td>
<td>0.0000 ***</td>
</tr>
<tr>
<td></td>
<td>p one tailed</td>
<td>7.4983</td>
</tr>
<tr>
<td></td>
<td>VIFs</td>
<td>(1.080)</td>
</tr>
<tr>
<td>R²</td>
<td>0.6223</td>
<td>0.7009</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.6186</td>
<td>0.6991</td>
</tr>
<tr>
<td>F.stat.</td>
<td>169.6901</td>
<td>391.3488</td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0000***</td>
<td>0.0000***</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>169</td>
</tr>
</tbody>
</table>

* significant at 0.05 level. ** significant at 0.01 level. ***significant at 0.001 level

AIR Mutual acceptance on individual roles
PFH Perceived family harmony

This model suggests that around 62% and 70% of the variance in acceptance of individual roles among family members is explained by perceived family harmony, for the two data
sets and that the beta is also statistically significant for both data sets. This provides strong support for hypothesis H1a.

**Model 3. Agreement to continue the business (ACBa and ACBb) regressed on perceived family harmony (PFH) and payoffs from business to family members (PFB).**

This model predicts that there is a positive relationship between the agreement to continue the business and perceived family harmony and the payoffs from the business. As the results of scale construction had indicated the presence of two distinct dimensions in this variable, two separate scales were formed: (1) the extent of commitment of presidents to continue the business, and (2) the agreement of family members to continue the business. Thus, separate regressions were conducted for each of these two dimensions. The following equations represent the relationship tested. The results of the multiple regression are presented in table 6.19a and 6.19b.

\[
ACBa = a_{9a} + b_{29a} \text{PFH} + b_{39a} \text{PFB} + e_{9a}
\]

\[
ACBb = a_{9b} + b_{29b} \text{PFH} + b_{39b} \text{PFB} + e_{9b}
\]

**Table 6.19a. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on extent of commitment of presidents to continue the business (ACBa - dependent variable)**

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th></th>
<th>Successors and other family members</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB (H2a)</td>
<td>Unstd. b (SE)</td>
<td>Beta B</td>
<td>t value</td>
<td>p one tailed</td>
</tr>
<tr>
<td>0.3739 (.0889)</td>
<td>0.3892</td>
<td>4.204</td>
<td>0.0001 ***</td>
<td>1.029</td>
</tr>
<tr>
<td>PFH (H2b)</td>
<td>0.0683 (.0516)</td>
<td>0.1228</td>
<td>1.325</td>
<td>0.1882</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.0129 (1.363)</td>
<td>1.477</td>
<td>0.1429</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.1828</td>
<td></td>
<td></td>
<td>0.1812</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.1661</td>
<td></td>
<td></td>
<td>0.1710</td>
</tr>
<tr>
<td>F.stat.</td>
<td>10.9600</td>
<td></td>
<td></td>
<td>17.7037</td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0001 ***</td>
<td></td>
<td></td>
<td>0.0000 ***</td>
</tr>
<tr>
<td>N</td>
<td>101</td>
<td></td>
<td></td>
<td>163</td>
</tr>
</tbody>
</table>
Table 6.19b. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on agreement of family members to continue the business (ACBb—dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta B</td>
</tr>
<tr>
<td>PFB (H2a)</td>
<td>0.4063 (.1377)</td>
<td>0.2851</td>
</tr>
<tr>
<td>PFH (H2b)</td>
<td>0.0323 (.0799)</td>
<td>0.0391</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>5.4876 (2.140)</td>
<td>2.564</td>
</tr>
<tr>
<td>R²</td>
<td>0.0861</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.0678</td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td>4.7109</td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0111 *</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level.  ** significant at 0.01 level  *** significant at 0.001 level

ACBa Extent of President’s commitment to continue the business
ACBb Agreement of family members to continue business
PFB Payoffs from business
PFH Perceived family harmony

Although the above results indicate statistically significant results for these models, the percentage of variance explained is only around 16% for the first variable (presidents commitment to continue the business), and around 6% for the second variable (i.e., agreement of other family members to continue the business). At an individual variable level these results suggest a significant positive relationship between the payoffs from the business and the agreement of family members to continue the business, as well as the commitment of presidents to continue the business. However, perceived family harmony was not found to influence the agreement among family members or commitment of presidents for the continuation of the business. Therefore, hypothesis 2b is not supported for both groups of respondents. This indicates that the decision of family firms to continue
their business is largely based on the payoffs from that business and is not influenced by the harmony that may exist in the family. However, these results need to be interpreted with caution as the scale used for the variable ‘payoffs from business’ was not found to have a high degree of internal consistency (alpha value 0.4630).

**Model 4: Propensity of successor to take over (PSTO) regressed on mutual acceptance of individual roles (AIR), career interests (CI), and payoffs from business to family members (PFB).** The relationship predicted by this model is indicated as:

\[ \text{PSTO} = a + b_1 \text{PFB} + b_2 \text{CI} + b_3 \text{AIR} + \epsilon \]

This model predicts that the propensity of a successor to take over the business is positively influenced by the payoffs from the business, the alignment of successor’s career interests with the family business, and the extent of acceptance of individual roles among family members. The results obtained from this regression analysis are presented in table 6.20.

**Table 6.20. Regression results of the payoffs from business (PFB), career interests of successors (CI), and acceptance on individual roles (AIR) on the propensity of successor to take over (PSTO—dependent variable)**

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents response Mean (SE)</th>
<th>Successors and other family members Mean (SE)</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
<th>t value</th>
<th>p one tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB (H3a)</td>
<td>0.1029 (.0633)</td>
<td>0.0421 (.0518)</td>
<td>1.625</td>
<td>0.1073</td>
<td>1.108</td>
<td>0.0603</td>
<td>0.812</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIR (H3b)</td>
<td>0.0619 (.026)</td>
<td>0.1114 (.0169)</td>
<td>2.384</td>
<td>0.0190</td>
<td>1.141</td>
<td>-0.0508</td>
<td>-0.671</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI (H3c)</td>
<td>0.3347 (0.082)</td>
<td>0.3432 (.0547)</td>
<td>4.097</td>
<td>0.0001</td>
<td>1.228</td>
<td>0.4804</td>
<td>6.280</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONS.</td>
<td>1.4633 (1.110)</td>
<td>4.0026 (.7526)</td>
<td>1.318</td>
<td>0.1905</td>
<td>1.4367</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.3130</td>
<td>0.2352</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.2918</td>
<td>0.2203</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td>14.7337</td>
<td>15.7831</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td><strong>0.0000</strong>*</td>
<td><strong>0.0000</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>101</td>
<td>158</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level.  ** significant at 0.01 level  *** significant at 0.001 level
This model is found statistically significant for both data sets and explains approximately 29% and 22% of variance in successors' propensity to take over the business for presidents and other family members including the successors themselves. Out of the three determinants hypothesized to positively influence the propensity of a successor to take over the business, the alignment of successors' career interests with the family business is found to have the maximum influence in both data sets, thereby lending strong support to hypothesis 3c. While the presidents perceive that acceptance of individual roles among family members has a positive influence on the successor's propensity to take over the business, the successors themselves or other family members do not perceive this. Therefore, hypothesis 3b is supported for the president's data set but not for the successors and other family members. Interestingly, payoffs from business does not have any influence on the propensity of successors to take over the business. This surprising result is found in both data sets. But once again, because of the low reliability of the scale used for 'payoffs from business', these results have to be interpreted with caution.

The following equation represents this model:

\[ PPR = a_{11} + b_{5-11} \text{IOB} + b_{6-11} \text{TSAI} + e_{11} \]

This model predicts that the propensity of the incumbent president to step aside from the leadership of a business is positively influenced by the level of trust he/she has in the
intentions and capabilities of the successor (hypothesis 4a), and the interests an incumbent has outside the context of the business (hypothesis 4b). The results of multiple regression for this model are presented in table 6.21.

Table 6.21. Regression results of the trust in successor capabilities and intentions (TSAI), and incumbent’s interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR—dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSAI (H4a)</td>
<td>Unstd. b (SE) Beta B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.1519 (.0626) 0.2284</td>
<td>2.429 0.0168*</td>
</tr>
<tr>
<td>IOB (H4b)</td>
<td>Unstd. b (SE) Beta B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0437 (.0614) 0.0670</td>
<td>0.712 0.4781</td>
</tr>
<tr>
<td>CONS.</td>
<td>Unstd. b (SE) Beta B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4612 (1.162) 3.837</td>
<td>0.0002***</td>
</tr>
<tr>
<td>R²</td>
<td>0.0553</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.0376</td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td>3.1311</td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0477*</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level.  ** significant at 0.01 level.  ***significant at 0.0001 level

IOB  Interests of incumbent outside the business
PPR  Propensity of incumbent president to step aside
TSAI Trust in successors’ abilities and intentions

While this model is statistically significant overall for both data sets, it is found that ‘trust in successor’s abilities and intentions’ and ‘incumbents’ interests outside the business’ explain only about 4% and 12% of the variance in ‘propensity of an incumbent to step aside’ in the two data sets, respectively. Both data sets provide strong support for a positive relationship between the presence of trust in a successors’ capabilities and

---

18 Results of regression runs on the two possible dimensions of this variable: trust in successors’ abilities and trust in successors’ intentions are presented in Appendix F (Section 4).
intentions held by the incumbent president and his/her propensity to step aside (hypothesis 4a).

It is only the second data set that supports the positive relationship between an incumbent’s interests outside the business and his/her propensity to step aside. The data from presidents themselves does not provide any support for this relationship. This is an interesting finding especially since there is no difference in the means for the ‘interest outside business’ for the two data sets. That is, while there is an agreement on the level of interest an incumbent president has outside the context of the business, this does not translate into an agreement on the influence this interest has on the propensity of president to step aside.

**Model 6: Succession planning (SP) regressed on propensity of an incumbent to step aside (PPR), presence of an active advisory board (AAB), and the agreement of family members to continue the business (ACB).** This model predicts that the level of succession planning\(^{19}\) in a family firm is positively influenced by the propensity of an incumbent president to step aside (hypothesis 5a), the presence of an active advisory board (hypothesis 5b), and the agreement among family members to continue the business (hypothesis 5c). The results of scale construction had suggested the presence of two distinct dimensions for two of the three independent variables of this model, and a decision was made to undertake regression analysis using the sub-dimensions in both these variables. The first variable with two dimensions is ‘Agreement of family members to

\(^{19}\) The results of factor analysis on the indicators used for succession planning had indicated the presence of four sub-dimensions (scale reliability tests for these dimensions are presented in Appendix F. Section 1). Although a decision was made not to split this variable into these four dimensions, regression analysis were conducted on each of these dimensions for additional insights. These results are presented in Appendix F. Section 5).
continue the business'. The two dimensions are (1) Extent of commitment of presidents to continue the business (ACBa), and (2) Agreement of other family members to continue the business (ACBb). The second variable with two dimensions is ‘Presence of an active advisory board’ and the two dimensions are: (1) Presence of a formal active advisory board (AAB-a), and (2) Presence of an informal advisory board (AAB-b). Thus, the model tested in this regression run is represented by the following equation:

\[ SP = a_{12} + b_{11.12} \text{PPR} + b_{7a.12} \text{AABa} + b_{7b.12} \text{AABb} + b_{bm.12} \text{ACBa} + b_{mb.12} \text{ACBb} + e_{12} \]

The multiple regression results related to this model are presented in table 6.22.

**Table 6.22. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on ‘succession planning’ (SP—dependent variable)**

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta B</td>
</tr>
<tr>
<td>PPR (H5a)</td>
<td>2.0971 (.7090)</td>
<td>0.3200</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.3976 (.3331)</td>
<td>0.1225</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.7185 (.6905)</td>
<td>0.1109</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>1.0589 (.6156)</td>
<td>0.2016</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.2449 (.4289)</td>
<td>0.0653</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>14.633 (8.359)</td>
<td>1.750</td>
</tr>
</tbody>
</table>

| R²        | 0.2083               | 0.1790 |
| Adj. R²   | 0.1568               | 0.1491 |
| F.stat.   | 4.0509               | 5.9187 |
| Prob. F   | 0.0026**             | 0.0001*** |
| N         | 83                   | 143    |

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

AABa  A formal active board of directors
AABb  An informal board of directors
ACBa  Extent of President’s commitment to continue the business
ACBb  Agreement of family members to continue business
PPR   Propensity of incumbent president to step aside
SP    Succession planning
Approximately 15% of the variance in succession planning is explained by the three independent variables included in this model for both data sets. At an individual variable level, both data sets indicate a significant positive relationship between succession planning and the propensity of an incumbent to step aside, thereby lending support to hypothesis 5a. It was surprising to find no support for a positive relationship between succession planning and the presence of advisory boards, either formal and informal. Partial support was found for hypothesis 5c. While the successors and other family members perceived a positive relationship between the extent of succession planning undertaken and the commitment of an outgoing president to continue the business, they did not report any positive relationship between the commitment of other family members to continue the business and the extent of succession planning undertaken. No support for either of these relationships was found in the president’s data set. The beta values obtained suggest that two variables that have the most influence on succession planning in both data sets are: propensity of president to step aside, and president’s commitment to continue the business.

**Model 7: Satisfaction with the succession process regressed on the six antecedent variables.** This last model was tested to estimate the direct effects of antecedent variables on the main dependent variable—Satisfaction with the succession process (SwSP). The following equation represents the tested model.

\[
SwSP = a_1 + b_{21} \text{PFH} + b_{31} \text{PFB} + b_{41} \text{CI} + b_{51} \text{TSAI} + b_{61} \text{IOB} + b_{7a-1} \text{AABa} + \\
\quad b_{7b-1} \text{AABb} + e_I
\]
The two dimensions (formal and informal) for the variable ‘active advisory board’ are treated as distinct. The results of this regression run are provided in Table 6.23. To gain additional insights into the data, additional regressions were run using the two dimensions of the variable ‘trust in successors’ abilities and intentions’. These results are presented in Appendix F (Table 4b).

Table 6.23. Regression results of the seven antecedent variables on satisfaction with succession process (SwSP - dependent variable)

<table>
<thead>
<tr>
<th>IVs (Antecedents)</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta</td>
</tr>
<tr>
<td>PFH</td>
<td>0.2722 (.2196)</td>
<td>0.1305</td>
</tr>
<tr>
<td>PFB</td>
<td>0.6670 (.3655)</td>
<td>0.1801</td>
</tr>
<tr>
<td>CI</td>
<td>0.9111 (.4644)</td>
<td>0.2079</td>
</tr>
<tr>
<td>TSAI</td>
<td>1.1290 (.3480)</td>
<td>0.3394</td>
</tr>
<tr>
<td>IOB</td>
<td>0.0934 (.3017)</td>
<td>0.0300</td>
</tr>
<tr>
<td>AAB-a</td>
<td>0.3672 (.2316)</td>
<td>0.1500</td>
</tr>
<tr>
<td>AAB-b</td>
<td>-0.0188 (.5597)</td>
<td>-.0032</td>
</tr>
<tr>
<td>CONS</td>
<td>2.7589 (7.560)</td>
<td>0.365</td>
</tr>
</tbody>
</table>

R² | 0.3734 | 0.5013
Adj. R² | 0.3116 | 0.4701
F.stat. | 6.0434 | 16.0809
Prob. F | 0.0000*** | 0.0000***
N | 79 | 120

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
SwSP Satisfaction with the succession process
TSAI Trust in successors’ abilities and intentions
This model is also significant for both data sets. It explains about 31% and 47% of the variance in the satisfaction with the succession process for the two data sets. Although this is a high percentage of variance explained for both data sets, it should be kept in mind that the mediating variables explained 57% and 66% of the variance in satisfaction with succession process for the two data sets. The analysis of individual level variables indicates that only one variable, ‘trust in successors’ abilities and intentions’ had a highly significant influence on the satisfaction with the succession process for both data sets. The other important variable for successors and other family members is the ‘perceived family harmony’.

In order to detect whether the influence of these antecedent variables was indeed mediated by the mediating variables, the direct and indirect effects of these variables were calculated using the technique of path analysis. The details of the calculation of indirect effects are presented in Table 6.24 (for presidents) and 6.24a (for successors and other family members). Tables 6.25 and 6.25a present a comparison of the direct and indirect effects of each of the independent and antecedent variables on the SwSP, the main dependent variable, for the two data sets respectively.
Table 6.24. Calculations for the indirect effects of the antecedent variables on SwSP - the main dependent variables (for PRESIDENTS)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Paths</th>
<th>Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>PFH-AIR-SwSP</td>
<td>(0.7888)(0.2064) = 0.1628</td>
</tr>
<tr>
<td></td>
<td>PFH-AIR-PSTO-SwSP</td>
<td>(0.7888)(0.2143)(0.3755) = 0.0635</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBa-SwSP</td>
<td>(0.1228)(0.1081) = 0.0133</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBa-SP-SwSP</td>
<td>(0.1228)(0.2061)(0.2667) = 0.0066</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBb-SwSP</td>
<td>(0.0391)(0.1457) = 0.0057</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBb-SP-SwSP</td>
<td>(0.0391)(0.0653)(0.2667) = 0.0007</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.1628</td>
</tr>
<tr>
<td>PFB</td>
<td>PFB-ACBa-SwSP</td>
<td>(0.3892)(0.1081) = 0.0421</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBa-SP-SwSP</td>
<td>(0.3892)(0.2016)(0.2667) = 0.0209</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBb-SwSP</td>
<td>(0.2891)(0.1457) = 0.0451</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBb-SP-SwSP</td>
<td>(0.2851)(0.0653)(0.2667) = 0.0050</td>
</tr>
<tr>
<td></td>
<td>PFB-PSTO-SwSP</td>
<td>(0.1440)(0.3755) = 0.0541</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.1636</td>
</tr>
<tr>
<td>CI</td>
<td>CI-PSTO-SwSP</td>
<td>(0.3821)(0.3755) = 0.1435</td>
</tr>
<tr>
<td>TSAI</td>
<td>TSAI-PPR-SwSP</td>
<td>(0.2284)(0.0807) = 0.0184</td>
</tr>
<tr>
<td></td>
<td>TSAI-PPR-SP-SwSP</td>
<td>(0.2284)(0.3200)(0.2667) = 0.0195</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.0379</td>
</tr>
<tr>
<td>IOB</td>
<td>IOB-PPR-SwSP</td>
<td>(0.0670)(0.0807) = 0.0054</td>
</tr>
<tr>
<td></td>
<td>IOB-PPR-SP-SwSP</td>
<td>(0.0670)(0.3200)(0.2667) = 0.0057</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.0111</td>
</tr>
<tr>
<td>AABa</td>
<td>AABa-SP-SwSP</td>
<td>(0.1225)(0.2667) = 0.0326</td>
</tr>
<tr>
<td>AABb</td>
<td>AABa-SP-SwSP</td>
<td>(0.1109)(0.2667) = 0.0296</td>
</tr>
</tbody>
</table>

AABa  Presence of formal active board of directors  
AABb  Presence of an informal board  
ACBa  Extent of Presidents commitment to continue the business  
ACBb  Agreement of family members to continue business  
AIR  Mutual acceptance on individual roles  
CI  Career interests  
IOB  Interests of incumbent outside the business  
PFB  Payoffs from business  
PFH  Perceived family harmony  
PPR  Propensity of incumbent president to step aside  
PSTO  Propensity of successor to take over  
SP  Succession planning  
SwSP  Satisfaction with the succession process  
TSAI  Trust in successors’ abilities and intentions
Table 6.24a. Calculations for the indirect effects of the antecedent variables on SwSP - the main dependent variables (for SUCCESSORS & OTHER FAMILY MEMBERS)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Paths</th>
<th>Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>PFH-AIR-SwSP</td>
<td>(0.8372)(0.4238) = 0.3548</td>
</tr>
<tr>
<td></td>
<td>PFH-AIR-PSTO-SwSP</td>
<td>(0.8372)(-0.0508)(0.0400) = -0.0017</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBa-SwSP</td>
<td>(0.0529)(-0.1176) = -0.0062</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBa-SP-SwSP</td>
<td>(0.0529)(0.2097)(0.4383) = 0.0049</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBb-SwSP</td>
<td>(-0.0707)(0.0126) = -0.0009</td>
</tr>
<tr>
<td></td>
<td>PFH-ACBb-SP-SwSP</td>
<td>(-0.0707)(0.0959)(0.4383) = -0.0030</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.3479</td>
</tr>
<tr>
<td>PFB</td>
<td>PFB-ACBa-SwSP</td>
<td>(0.4115)(-0.1176) = -0.0484</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBa-SP-SwSP</td>
<td>(0.4115)(0.2097)(0.4383) = 0.0378</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBb-SwSP</td>
<td>(0.2840)(0.0126) = 0.0036</td>
</tr>
<tr>
<td></td>
<td>PFB-ACBb-SP-SwSP</td>
<td>(0.2840)(0.0959)(0.4383) = 0.0119</td>
</tr>
<tr>
<td></td>
<td>PFB-PSTO-SwSP</td>
<td>(0.0603)(0.0400) = 0.0024</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.0073</td>
</tr>
<tr>
<td>CI</td>
<td>CI-PSTO-SwSP</td>
<td>(0.4804)(0.0400) = 0.0192</td>
</tr>
<tr>
<td>TSAI</td>
<td>TSAI-PPR-SwSP</td>
<td>(0.2684)(0.1821) = 0.0489</td>
</tr>
<tr>
<td></td>
<td>TSAI-PPR-SP-SwSP</td>
<td>(0.2684)(0.2681)(0.4383) = 0.0315</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.0804</td>
</tr>
<tr>
<td>IOB</td>
<td>IOB-PPR-SwSP</td>
<td>(0.2386)(0.1821) = 0.0434</td>
</tr>
<tr>
<td></td>
<td>IOB-PPR-SP-SwSP</td>
<td>(0.2386)(0.2681)(0.4383) = 0.0280</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>= 0.0714</td>
</tr>
<tr>
<td>AABa</td>
<td>AABa-SP-SwSP</td>
<td>(0.1256)(0.4383) = 0.0550</td>
</tr>
<tr>
<td>AABb</td>
<td>AABa-SP-SwSP</td>
<td>(-0.0316)(0.4383) = -0.0138</td>
</tr>
</tbody>
</table>

AABa  Presence of formal active board of directors
AABb  Presence of an informal board
ACBa  Extent of Presidents commitment to continue the business
ACBb  Agreement of family members to continue business
AIR   Mutual acceptance on individual roles
CI    Career interests
IOB   Interests of incumbent outside the business
PFB   Payoffs from business
PFH   Perceived family harmony
PPR   Propensity of incumbent president to step aside
PSTO  Propensity of successor to take over
SP    Succession planning
SwSP  Satisfaction with the succession process
TSAI  Trust in successors’ abilities and intentions
Table 6.25. Direct and Indirect effects of the antecedent variables on Satisfaction with succession process (SwSP) for PRESIDENTs data set

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct effects</th>
<th>Indirect effects</th>
<th>Total effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>0.1305</td>
<td>0.1628</td>
<td>0.2933</td>
</tr>
<tr>
<td>PFB</td>
<td>0.1801</td>
<td>0.1636</td>
<td>0.3437</td>
</tr>
<tr>
<td>CI</td>
<td>0.2079</td>
<td>0.1435</td>
<td>0.3514</td>
</tr>
<tr>
<td>TSAI</td>
<td>0.3394**</td>
<td>0.0379</td>
<td>0.3773</td>
</tr>
<tr>
<td>IOB</td>
<td>0.0300</td>
<td>0.0111</td>
<td>0.0411</td>
</tr>
<tr>
<td>AABa</td>
<td>0.1500</td>
<td>0.0326</td>
<td>0.1826</td>
</tr>
<tr>
<td>AABb</td>
<td>-0.0032</td>
<td>0.0296</td>
<td>0.0264</td>
</tr>
</tbody>
</table>

AABa  Presence of formal active board of directors
AABb  Presence of an informal board
CI    Career interests
IOB   Interests of incumbent outside the business
PFB   Payoffs from business
PFH   Perceived family harmony
SwSP  Satisfaction with the succession process
TSAI  Trust in successors’ abilities and intentions

Table 6.25a. Direct and Indirect effects of the antecedent variables on Satisfaction with succession process (SwSP) for SUCCESSORs AND OTHER FAMILY MEMBERS data set

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct effects</th>
<th>Indirect effects</th>
<th>Total effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>0.5553***</td>
<td>0.3479</td>
<td>0.9032</td>
</tr>
<tr>
<td>PFB</td>
<td>0.0584</td>
<td>0.0073</td>
<td>0.0657</td>
</tr>
<tr>
<td>CI</td>
<td>0.0984</td>
<td>0.0192</td>
<td>0.1176</td>
</tr>
<tr>
<td>TSAI</td>
<td>0.2213**</td>
<td>0.0804</td>
<td>0.3017</td>
</tr>
<tr>
<td>IOB</td>
<td>-0.1102</td>
<td>0.0714</td>
<td>-0.0388</td>
</tr>
<tr>
<td>AABa</td>
<td>-0.0354</td>
<td>0.0550</td>
<td>0.0904</td>
</tr>
<tr>
<td>AABb</td>
<td>0.0817</td>
<td>-0.0138</td>
<td>0.0679</td>
</tr>
</tbody>
</table>

Results presented in tables 6.25 and 6.25a indicate that the direct effects of some variables are significantly higher than their indirect effects. Specifically, the variable ‘trust in successor abilities and intentions’ has a significantly high direct effect on the satisfaction with the succession process for both data sets. This result suggests a new proposition: the trust that the outgoing president has in successors’ abilities and intentions has a significant
influence towards the satisfaction of both the outgoing presidents and successors with the succession process. The second antecedent variable that has a significant direct influence on the satisfaction with succession process for the successors and other family members is 'perceived family harmony'.

These new relationships among the antecedent variables and the main dependent variable, suggested by the results of path analysis, will be further explored in the Structural Equation Modeling. However, before presenting the results of structural equation modeling, the results of the two approaches to overall model testing are presented.

(1) Chi-squared test. The model used in this study is an overidentified model, with seven endogenous variables. There are 60 over-identifying restrictions, i.e., paths that are hypothesized not to have any direct effect in the model. As explained in Chapter 4, the overall fit of a path model can be estimated using the W statistic, which follows a chi-squared distribution, with degrees of freedom equal to the number of over-identifying restrictions. W is calculated as:

\[ W = - (N-d) \log Q \]

where,
N = sample size;
d = number of over-identifying restrictions, that is, the number of path coefficients hypothesized to be equal to zero;
\( \log_e \) = natural logarithm; and
Q = \( (1 - R_m^2) / (1 - M) \)

\( R_m^2 = 1 - (1 - R_{11}^2)(1 - R_{22})... \)
\( R_p^2 = 1 - (1 - R_{1p}^2)(1 - R_{2p})... \)

- generalized \( R^2 \) for just identified model,
\( M = 1 - (1 - R_{11}^2)(1 - R_{22})... \)
\( \ldots (1 - R_{pp}^2) \) - generalized \( R^2 \) for over-identified model.

The \( R^2 \) values for the just identified models are presented in table 6.26. Table 6.26a lists the \( R^2 \) values for the over-identified models presented earlier in Tables 6.18 to 6.23. Table 6.28 presents the calculations for Q and W for the overall testing of the model.
Table 6.26. R² values for the just identified models

<table>
<thead>
<tr>
<th>DVs</th>
<th>Regression equations for just-identified models</th>
<th>R² values for Presidents n=118</th>
<th>R² values for Successors n=192</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+ACBa+ACBb+PSTO+PPR+SP</td>
<td>0.6538</td>
<td>0.7687</td>
</tr>
<tr>
<td>ACBa</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBb+PSTO+PPR+SP</td>
<td>0.3010</td>
<td>0.2774</td>
</tr>
<tr>
<td>ACBb</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBa+PSTO+PPR+SP</td>
<td>0.1673</td>
<td>0.2433</td>
</tr>
<tr>
<td>PSTO</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBa+ACBb+PPR+SP</td>
<td>0.3815</td>
<td>0.2544</td>
</tr>
<tr>
<td>PPR</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBb+PSTO+PPR+SP</td>
<td>0.0661</td>
<td>0.1658</td>
</tr>
<tr>
<td>SP</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBa+ACBb+PSTO+PPR+SP</td>
<td>0.2448</td>
<td>0.4454</td>
</tr>
<tr>
<td>SwSP</td>
<td>PFH+PFB+CI+TSAI+IOB+AABa+AABb+AIR+ACBa+ACBb+PSTO+PPR+SP</td>
<td>0.5677</td>
<td>0.6804</td>
</tr>
</tbody>
</table>

\[ R_m^2 = 1 - (1 - R_1^2)(1 - R_2^2)....(1 - R_p^2) \]

AABa Presence of formal active board of directors
AABb Presence of an informal board
ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP Satisfaction with the succession process
TSAI Trust in successors’ abilities and intentions
Table 6.27. $R^2$ values for the over-identified models used in this research

<table>
<thead>
<tr>
<th>DVs</th>
<th>Regression equations for the over-identified models</th>
<th>Number of overidentifying restrictions</th>
<th>$R^2$ values for Presidents $n=118$</th>
<th>$R^2$ values for Successors $n=192$</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR</td>
<td>PFH</td>
<td>10</td>
<td>0.6186</td>
<td>0.6991</td>
</tr>
<tr>
<td>ACBa</td>
<td>PFH+PFB</td>
<td>9</td>
<td>0.1661</td>
<td>0.1710</td>
</tr>
<tr>
<td>ACBb</td>
<td>PFH+PFB</td>
<td>9</td>
<td>0.0678</td>
<td>0.0669</td>
</tr>
<tr>
<td>PSTO</td>
<td>PFH+CI+AIR</td>
<td>9</td>
<td>0.2918</td>
<td>0.2203</td>
</tr>
<tr>
<td>PPR</td>
<td>TSAI+IOB</td>
<td>9</td>
<td>0.0376</td>
<td>0.1196</td>
</tr>
<tr>
<td>SP</td>
<td>AABa+AABb+AIR+PPR</td>
<td>7</td>
<td>0.1568</td>
<td>0.1491</td>
</tr>
<tr>
<td>SwSP</td>
<td>AIR+ACBa+ACBb+PSTO+PPR+SP</td>
<td>7</td>
<td>0.5726</td>
<td>0.6580</td>
</tr>
</tbody>
</table>

\[ M = 1 - (1 - R_1^2)(1 - R_2^2)...(1 - R_p^2) \]
\[ df = 43 \]
\[ M=0.9272 \]
\[ M=0.94' \]

AABa  Presence of formal active board of directors  
AABb  Presence of an informal board  
ACBa  Extent of Presidents commitment to continue the business  
ACBb  Agreement of family members to continue business  
AIR  Mutual acceptance on individual roles  
CI  Career interests  
IOB  Interests of incumbent outside the business  
PFB  Payoffs from business  
PFH  Perceived family harmony  
PPR  Propensity of incumbent president to step aside  
PSTO  Propensity of successor to take over  
SP  Succession planning  
SwSP  Satisfaction with the succession process  
TS1AI  Trust in successors' abilities and intentions

Table 6.28. Overall testing of the path model for the two data sets

<table>
<thead>
<tr>
<th>For Presidents</th>
<th>For successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ Q = (1-R_m^2) / (1-M) ]</td>
<td>[ Q = (1-R_m^2) / (1-M) ]</td>
</tr>
<tr>
<td>[ Q= (1-0.9620) / (1- 0.9272) ]</td>
<td>[ Q= (1-0.9861) / (1- 0.9477) ]</td>
</tr>
<tr>
<td>[ Q = 0.5220 ]</td>
<td>[ Q = 0.2658 ]</td>
</tr>
<tr>
<td>[ W = - (N-d) \log_e Q ]</td>
<td>[ W = - (N-d) \log_e Q ]</td>
</tr>
<tr>
<td>[ W = - (118-60) \log_e 0.5220 ]</td>
<td>[ W = - (192-60) \log_e 0.2658 ]</td>
</tr>
<tr>
<td>[ W = 16.3751 ]</td>
<td>[ W = 75.9587 ]</td>
</tr>
<tr>
<td>[ X^2 \text{ at } 0.05 \text{ level} ]</td>
<td>[ X^2 \text{ at } 0.01 \text{ level} ]</td>
</tr>
<tr>
<td>[ df = 60, X^2 = 79.0819 ]</td>
<td>[ df = 60, X^2 = 88.3794 ]</td>
</tr>
</tbody>
</table>
Table 6.28 indicates that the values of $W$ in the case of both models are less than the $X^2$ values. Therefore, we cannot reject the null. This indicates that the model fits both data sets. It was explained earlier that the closer $Q$ is to one, the better the fit of the model to the data. Based on the values of $Q$, it can be interpreted that the model fits the first data set better than it does the second. As this test is dependent on the sample size, additional model testing was undertaken using Bayesian information criteria which take into account the sample size.

2. Model testing using Bayesian Information Criteria. In both data sets, the model using only the antecedent variables as direct influencers of the main dependent variable (SwSP) is found to be statistically significant. It was decided to compare the likelihood of two different models: (1) the model with the mediating variables influencing the satisfaction with succession process (table 6.17), and (2) the model with all the antecedent variables as directly influencing the satisfaction with the succession process (table 6.23), using the technique of Bayesian Model selection. The formula used to calculate the BIC (Bayesian Information Criteria) is:

$$BIC = n \log(1-R^2) + p_k \log n.$$ 

where,
- $BIC$ = Bayesian information criteria
- $n$ = sample size
- $R^2$ = Co-efficient of multiple determination
- $p_k$ = associated degrees of freedom i.e., the number of independent variables

The basic question addressed by this technique is that given the observed data, which of the two models is more likely to be true? In a comparison of two models by this method,
the model with a higher negative BIC is the more likely model. The calculation of BIC values for the two models in both data sets is presented below:

Table 6.29: Calculation of Bayesian Information Criteria for the two data sets, antecedent variables vs. mediating variables

<table>
<thead>
<tr>
<th></th>
<th>Presidents data set</th>
<th>Successors and other family members data set</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antecedent variables as direct influencers of SwSP</strong></td>
<td>n= 79</td>
<td>n= 120</td>
</tr>
<tr>
<td></td>
<td>R² = 0.3116</td>
<td>R² = 0.4701</td>
</tr>
<tr>
<td></td>
<td>p_k = 7</td>
<td>p_k = 7</td>
</tr>
<tr>
<td></td>
<td>BIC = -1.0887</td>
<td>BIC = - 42.6996</td>
</tr>
<tr>
<td><strong>Mediating variables as direct influencers of SwSP</strong></td>
<td>n= 77</td>
<td>n= 120</td>
</tr>
<tr>
<td></td>
<td>R² = 0.5726</td>
<td>R² = 0.6580</td>
</tr>
<tr>
<td></td>
<td>p_k = 6</td>
<td>p_k = 6</td>
</tr>
<tr>
<td></td>
<td>BIC = - 39.3872</td>
<td>BIC = - 100.0284</td>
</tr>
<tr>
<td><strong>BIC difference</strong></td>
<td><strong>38.2985</strong></td>
<td><strong>57.3288</strong></td>
</tr>
</tbody>
</table>

Raftery (1995: 139) has provided tables to determine the grade of evidence in favor of one model over another. According to him, the level of evidence for various values of BIC differences and Bayes factors (BIC values) are:

<table>
<thead>
<tr>
<th>BIC difference</th>
<th>Bayes factor</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>1-3</td>
<td>Weak</td>
</tr>
<tr>
<td>2-6</td>
<td>3-20</td>
<td>Positive</td>
</tr>
<tr>
<td>6-10</td>
<td>20-150</td>
<td>Strong</td>
</tr>
<tr>
<td>&gt;10</td>
<td>&gt;150</td>
<td>Very strong</td>
</tr>
</tbody>
</table>

In analyzing the obtained results using Raftery’s table there is a strong to very strong evidence in favor of a direct influence of the mediating variables on the satisfaction with succession process in comparison to a direct influence of the antecedent variables.

Results presented in Table 6.23 suggest that the antecedent variable, ‘trust in successors’ abilities and intentions’ has a significant positive influence on the main dependent variable (SwSP) for both data sets. Another antecedent variable, ‘perceived
family harmony' was found to be a significant direct influencer of the satisfaction with the succession process for the second data set (i.e., successors and other family members).

Another test using BIC statistics was conducted by adding these significant variables along with the mediating variables for the two data sets, in an attempt to reveal the strength of such a model. The relevant values and the calculation of BIC statistics are presented in Table 6.30. A comparison of models using the BIC values is provided in table 6.31.

Table 6.30: Calculation of Bayesian Information Criteria (BIC) for the two data sets - the mediating variables and TSAI for presidents data set, and the mediating variables, PFH, and TSAI for successors and other family members

<table>
<thead>
<tr>
<th>Variables included</th>
<th>Presidents data set</th>
<th>Successors data set</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBa</td>
<td>n= 76</td>
<td>n= 119</td>
</tr>
<tr>
<td>ACBb</td>
<td>R² = 0.5775</td>
<td>R² = 0.6955</td>
</tr>
<tr>
<td>AIR</td>
<td>px = 7</td>
<td>px = 8</td>
</tr>
<tr>
<td>PSTO</td>
<td>BIC = -36.0255</td>
<td>BIC = -103.2680</td>
</tr>
<tr>
<td>PPR</td>
<td>SP</td>
<td></td>
</tr>
<tr>
<td>TSAI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSTO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSAI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AABa Presence of formal active board of directors
AABb Presence of an informal board
ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
PPR Propensity of incumbent-president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP Satisfaction with the succession process
TSAI Trust in successors' abilities and intentions
Table 6.31: A comparison of models using Bayesian Information Criteria (BIC)

<table>
<thead>
<tr>
<th>Variables in the model</th>
<th>Presidents data set</th>
<th>Successors and other family members data set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediating variables directly influencing SwSP</td>
<td>-39.3872</td>
<td>-100.0284</td>
</tr>
<tr>
<td>Antecedent variables directly influencing SwSP</td>
<td>1.0887</td>
<td>-42.6996</td>
</tr>
<tr>
<td>Mediating variables + TSAI directly influencing SwSP</td>
<td>-36.0255</td>
<td></td>
</tr>
<tr>
<td>Mediating variables + TSAI + PFH directly influencing SwSP</td>
<td></td>
<td>-103.2680</td>
</tr>
<tr>
<td><strong>BIC difference</strong> (the difference between two higher negative BIC values)**</td>
<td>3.3617</td>
<td>3.2396</td>
</tr>
</tbody>
</table>

For the presidents data set, the above results provide positive evidence in favor of the model developed in this research, in which the mediating variables directly influence the satisfaction with the succession process as this model has the highest negative BIC value (-39.3872). It was surprising that this model was found even more likely than the model that included the variable (‘trust in successor abilities and intentions’) that was found to have a significant positive influence on the satisfaction with the succession process for this data set.

Different results were obtained for the successors and other family members. For this data set, the most likely model was the one in which the mediating variables and the two significant antecedent variables (TSAI and PFH) were considered to influence the satisfaction with the succession process.

The last of the statistical analyses undertaken was the structural equation modeling using EQS software. These results are presented next.
6.7. Structural equation modeling

The model developed in Chapter 3 (referred to as M1) was tested for both data sets using structural equation modeling. The results of this testing are presented in Tables 6.34 and 6.35. The programs used for this analysis are presented in Appendix G. The main aim of structural equation modeling is to estimate parameter values such that the model best fits the data. The fit of the model can be assessed by examining the value of the Comparative Fit Index (CFI). Byrne (1994) has suggested that a CFI value of greater than 0.90 is considered to be an acceptable fit of the model to the data. As seen in tables 6.34 and 6.35, the CFI value of the model developed in this study (M1) meets this criteria for the president's data set (0.907), but does not do so for the successors and other family members data set (0.867). Two tests in the EQS software that help to discover whether the specification of certain parameters as fixed (to zero) rather than free (hypothesized relationship that requires the parameter to be estimated) or vice versa would lead to a model that better represents the data, are the Wald test and Lagrange Multiplier test (LM). In an attempt to improve the fit of the model for this data (i.e., to improve the CFI values) and to discover other important underlying relationships between the variables, these two tests were conducted on the data. At this stage the research takes an exploratory turn and the additional relationships suggested by these tests need to be further explored in future research.

The Wald test (Wtest) was conducted to determine whether some freed parameters (i.e., hypothesized relationships) needed to fixed (to zero) to increase the overall fit of the model. In case of both data sets, the results of Wald test (Tables 6.32 and 6.32a) suggest
that fixing of any of the freed parameters (i.e., relationships hypothesized in the model) would not have any significant effect on the overall fit of the model. The highest decrease in chi-square value that may be achieved by fixing any of the freed parameters is 3.718 (Table 6.32a), which is not a significant change in chi-square value at 0.05 level (for 1 df significant value for chi-square is 3.84). Thus, it was decided not to fix (to zero) any of the freed parameters.

Table 6.32. Results of Wald’s test for the Presidents data set

<table>
<thead>
<tr>
<th>PARAMETER FIXED</th>
<th>CHI-SQUARE DECREASE</th>
<th>PROBABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP - AABb</td>
<td>0.048</td>
<td>0.827</td>
</tr>
<tr>
<td>SwSP - ACBb</td>
<td>0.075</td>
<td>0.785</td>
</tr>
<tr>
<td>ACBb - PFH</td>
<td>0.076</td>
<td>0.783</td>
</tr>
<tr>
<td>PPR - IOB</td>
<td>0.456</td>
<td>0.500</td>
</tr>
<tr>
<td>SP - ACBb</td>
<td>0.499</td>
<td>0.480</td>
</tr>
<tr>
<td>SP - AABAa</td>
<td>1.322</td>
<td>0.250</td>
</tr>
<tr>
<td>ACBa - PFH</td>
<td>2.486</td>
<td>0.115</td>
</tr>
<tr>
<td>SwSP - PPR</td>
<td>3.180</td>
<td>0.075</td>
</tr>
<tr>
<td>PSTO - PFB</td>
<td>3.533</td>
<td>0.060</td>
</tr>
</tbody>
</table>

Chi-square at 1 degrees of freedom: 3.8414 (0.05 level); 6.6349 (0.01 level)

Table 6.32a. Results of Wald’s test for the Successors and other family members data set

<table>
<thead>
<tr>
<th>PARAMETER FIXED</th>
<th>CHI-SQUARE DECREASE</th>
<th>PROBABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSTO - AIR</td>
<td>0.088</td>
<td>0.767</td>
</tr>
<tr>
<td>SwSP - ACBb</td>
<td>0.155</td>
<td>0.694</td>
</tr>
<tr>
<td>ACBa - PFH</td>
<td>0.314</td>
<td>0.575</td>
</tr>
<tr>
<td>PSTO - PFB</td>
<td>0.471</td>
<td>0.492</td>
</tr>
<tr>
<td>ACBb - PFH</td>
<td>0.832</td>
<td>0.362</td>
</tr>
<tr>
<td>SP - AABb</td>
<td>0.959</td>
<td>0.327</td>
</tr>
<tr>
<td>SwSP - ACBa</td>
<td>1.374</td>
<td>0.241</td>
</tr>
<tr>
<td>SP - AABAa</td>
<td>3.718</td>
<td>0.054</td>
</tr>
</tbody>
</table>

Chi-square at 1 degrees of freedom: 3.8414 (0.05 level); 6.6349 (0.01 level)

AABa Presence of formal active board of directors
ACBa Presidents commitment to continue the business
IOB Interests of incumbent outside the business
PPR Propensity of incumbent president to step aside
SP Succession planning
TSAI Trust in successors’ abilities and intentions

AABb Presence of an informal board
ACBb Agreement of family members to continue business
PFH Perceived family harmony
PSTO Propensity of successor to take over
SwSP Satisfaction with the succession process
The model used in this study (developed in Chapter 3) is an over-identified model as a number of paths between variables are fixed (to zero). The Lagrange Multiplier test (LM) was conducted to determine whether, in a subsequent EQS run, the specification of certain parameters as free rather than fixed would lead to a model that better represents the data (Byrne, 1994). In other words, this test suggests other significant relationships among the variables in the data that have not been hypothesized in the model being tested.

The results of LM test are presented in the following two tables.

**Table 6.33. Results of LM test - the paths that need to be freed to improve the model fit for the Presidents data set**

<table>
<thead>
<tr>
<th>Paths to be freed</th>
<th>Decrease in value of $X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP - TSAI</td>
<td>15.650</td>
</tr>
<tr>
<td>PSTO - TSAI</td>
<td>12.104</td>
</tr>
<tr>
<td>SP - CI</td>
<td>5.909</td>
</tr>
<tr>
<td>IOB - PFB</td>
<td>4.173</td>
</tr>
<tr>
<td>AIR - TSAI</td>
<td>3.923</td>
</tr>
</tbody>
</table>

Parameters freed in $M_2$ are in bold.

**Table 6.33a. Results of LM test - the paths that need to be freed to improve the model fit for the Successors and other family members data set**

<table>
<thead>
<tr>
<th>Paths to be freed</th>
<th>Decrease in value of $X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP - PFH</td>
<td>19.962</td>
</tr>
<tr>
<td>PSTO - TSAI</td>
<td>13.449</td>
</tr>
<tr>
<td>SwSP - TSAI</td>
<td>13.063</td>
</tr>
<tr>
<td>ACBb - TSAI</td>
<td>11.863</td>
</tr>
<tr>
<td>ACBb - AABa</td>
<td>11.138</td>
</tr>
<tr>
<td>AIR - CI</td>
<td>10.909</td>
</tr>
<tr>
<td>SP - TSAI</td>
<td>5.078</td>
</tr>
<tr>
<td>SwSP - AABb</td>
<td>4.791</td>
</tr>
<tr>
<td>ACBa - IOB</td>
<td>4.472</td>
</tr>
<tr>
<td>SwSP - IOB</td>
<td>4.227</td>
</tr>
</tbody>
</table>

Parameters freed in $M_2$ are in bold.

<table>
<thead>
<tr>
<th>AABa</th>
<th>Presence of formal active board of directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBa</td>
<td>Presidents commitment to continue the business</td>
</tr>
<tr>
<td>IOB</td>
<td>Interests of incumbent outside the business</td>
</tr>
<tr>
<td>PPR</td>
<td>Propensity of incumbent to step aside</td>
</tr>
<tr>
<td>SP</td>
<td>Succession planning</td>
</tr>
<tr>
<td>TSAI</td>
<td>Trust in successors' abilities and intentions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AABb</th>
<th>Presence of an informal board</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACBb</td>
<td>Agreement of family members to continue business</td>
</tr>
<tr>
<td>PFH</td>
<td>Perceived family harmony</td>
</tr>
<tr>
<td>PSTO</td>
<td>Propensity of successor to take over</td>
</tr>
<tr>
<td>SwSP</td>
<td>Satisfaction with succession process</td>
</tr>
</tbody>
</table>
The results of LM test (Tables 6.33 and 6.33a) suggest that freeing of some parameters (or paths) would result in a significant decrease in the chi-square values, thereby causing an increase in the fit of the model and the CFI values. As a number of relationships among variables are suggested to cause a significant decrease in the chi-square values, a decision needs to be made about how many and which parameters should be respecified (i.e., freed). It has been suggested that this decision of which or how many parameters to respecify should “always be based on a judicious combination of both the statistical information provided in the output and the researcher’s knowledge of his or her substantive area” (Byrne, 1994: p.63).

Statistically, all the relationships listed in the above two tables lead to a significant increase in the model fit. However, freeing of some paths causes a higher decrease in the chi-square values than freeing others. Thus, the decision to respecify the parameters was made using a combination of theoretical support and the extent of decrease in the chi-squared values. However, this decision remains quite judgemental and it may be possible to lend some arguments in favor of freeing some other parameters too. As the research takes an exploratory turn at this juncture, only some suggested relationships are tested here.

Two most important relationships suggested by the LM test in the presidents data set are a positive relationship between ‘trust in successor abilities and intentions’ and (1) the extent of ‘succession planning’ undertaken, and (2) the ‘propensity of successor to take over the business’. The importance of these two relationships is underscored in the second data set. Moreover, some (admittedly preliminary) theoretical explanations can be
suggested for both these relationships. For example, it has been suggested that succession planning is largely controlled by the incumbent president, although they find it difficult to initiate this planning because of its psychological deterrents (e.g., Christensen, 1953; Lansberg, 1988). If there is no successor available whose abilities and intentions are trusted by the incumbent president, the emotionally challenging process of succession planning may be postponed by these individuals. Some theoretical arguments can be suggested for freeing the second parameter too (i.e., positive relationship between the 'trust in successors' abilities and intentions' and 'propensity of successor to take over the business'). It has been suggested that next-generation family members greatly value the trust and respect of an incumbent president (e.g., Handler, 1989). The presence of such a trust could increase their propensity to take over the business. Thus, these two fixed parameters were freed for the second model (M2) for both data sets.

Besides the two relationships discussed above, two other important (i.e., leading to a high decrease in chi-square values) relationships suggested in the second data set are a positive influence of: (1) 'perceived family harmony' on 'succession planning', and (2) 'trust in successors abilities and intentions' on the 'satisfaction with the succession process'. It is interesting to find the presence of a positive relationship between 'perceived family harmony' and 'succession planning', as this finding has previously been reported by Malone (1989). In the model developed in this study, however, an indirect relationship (through 'agreement to continue the business') between family harmony and succession planning was hypothesized rather than a direct relationship, following the lead of Lansberg and Astrachan (1994). While this indirect relationship received partial support in this study
(Tables 6.34 and 6.35), this relationship suggested by the LM test provides confirmation for Malone’s (1989) finding. However, as this relationship is not found in both data sets, it needs to be further explored in future studies.

The LM test for the successors and family members data suggests that the extent of satisfaction that these family members experience with the succession process is positively associated with their perception of the trust that an incumbent-president has in the abilities and intentions of the successors. This relationship provides confirmation to suggestions for a similar relationship made by Handler (1989). In her research on the next-generation family members, she found that one of the most important influencers of the quality of succession experienced by the next generation family members is the extent of ‘mutual respect and understanding’ between these family members and the founders or owner-managers. Although, the term ‘mutual respect and understanding’ was broadly defined in her research as - “the degree to which the next generation family member and his predecessor have a good working relationship, which includes, trust, support, communication, feedback, and mutual learning” (Handler, 1989: p.48), the relationship suggested by the LM test provides support of a positive relationship between the satisfaction with the succession process with one of the elements (trust) in her definition. It is interesting to note, however, that the satisfaction of the presidents with the succession process is not positively related to the extent of trust they have in the abilities and intentions of the successor.

For the second model testing, two parameters were freed for the presidents data set (SP-TSAI, and PSTO-TSAI)\(^2\), and four for the successors and family members data set (PFH - Perceived family harmony, PSTO - Propensity of successor to take over, SP - Succession planning, SwSP - Satisfaction with the succession process, TSAI - Trust in successors’ abilities and intentions).
set (SP-TSAI, PSTO-TSAI, SP-PFH, and SwSP-TSAI). Although there are some other relationships among variables that are suggested by the LM test for both data sets, a decision was made to limit the respecification of the model to freeing the most important parameters, and reserving judgment concerning other parameters until the results from this respecified model were ascertained. The results of both model tests (i.e., M1 - the original model developed in this research, and M2- the model after freeing the above mentioned parameters) for each of the two data sets are presented in tables 6.34 and 6.35. As it was found that for both data sets the fit index (CFI) was greater than the cut-off point of 0.90 for a good fitting model, a decision was made not to free other suggested parameters. However, these relationships should be explored in future research.

As discussed in Chapter 4, Bayesian Information Statistics suggested by Raftery (1995) was used to compare the two models (M1 and M2) in order to determine which of these two models is the more likely model, given the data sets. The results of this analysis are presented in Tables 6.34a and 6.35a.
Table 6.34. Results of structural equation modeling (using EQS) for the Presidents data set

<table>
<thead>
<tr>
<th></th>
<th>AIR</th>
<th>ACBa</th>
<th>ACBb</th>
<th>PSTO</th>
<th>PPR</th>
<th>SP</th>
<th>SwSP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M2</td>
<td>M1</td>
<td>M2</td>
<td>M1</td>
<td>M2</td>
<td>M1</td>
</tr>
<tr>
<td>PFB</td>
<td>1.150* (.789)</td>
<td>.073 (.135)</td>
<td>.020 (.025)</td>
<td>.113 (.153)</td>
<td>.109 (.153)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>.347* (.356)</td>
<td>.347* (.356)</td>
<td>.403* (.285)</td>
<td>.403* (.285)</td>
<td>.329* (.368)</td>
<td>.276* (.308)</td>
<td></td>
</tr>
<tr>
<td>TSAI</td>
<td>.196* (.313)</td>
<td>.134* (.195)</td>
<td>.134* (.195)</td>
<td>1.498* (.346)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOB</td>
<td>.042 (.061)</td>
<td>.042 (.061)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AABa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.307 (.098)</td>
<td>.281* (.090)</td>
<td></td>
</tr>
<tr>
<td>AABb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.147 (-.019)</td>
<td>-.174 (-.022)</td>
<td></td>
</tr>
<tr>
<td>AIR</td>
<td>.062* (.221)</td>
<td>.31 (.111)</td>
<td></td>
<td></td>
<td>.313* (.253)</td>
<td>.313* (.253)</td>
<td></td>
</tr>
<tr>
<td>ACBa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.294* (.248)</td>
<td>.984* (.189)</td>
<td></td>
</tr>
<tr>
<td>ACBb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.214 (.060)</td>
<td>.283 (.080)</td>
<td></td>
</tr>
<tr>
<td>PSTO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.214 (.060)</td>
<td>.283 (.080)</td>
<td></td>
</tr>
<tr>
<td>PPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.588* (.361)</td>
<td>1.58* (.361)</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.818* (.289)</td>
<td>1.475* (.234)</td>
<td>.502 (.125)</td>
</tr>
</tbody>
</table>

**X²**

MODEL 1: 112.727 (49 df)
MODEL 2: 86.383 (47 df)

**CFI**

MODEL 1: 0.907
MODEL 2: 0.942

* *b*-values that are significant at 0.05 level
Beta values are placed in brackets
Table 6.34a: A comparison of the two models (M1 - developed in Chapter 3) and M2 (with 2 paths freed based on the results of LM test), using BIC statistics

<table>
<thead>
<tr>
<th></th>
<th>Model 1 - The model developed in Chapter 3</th>
<th>Model 2 - The model with modifications based on LM test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X^2$ or $L^2$</td>
<td>112.727</td>
<td>86.383</td>
</tr>
<tr>
<td>df</td>
<td>49</td>
<td>47</td>
</tr>
<tr>
<td>n</td>
<td>118</td>
<td>118</td>
</tr>
<tr>
<td>BIC</td>
<td>$L^2$ - $(df) \log n$</td>
<td>$L^2$ - $(df) \log n$</td>
</tr>
<tr>
<td></td>
<td>$112.727 - (49) \log 118$</td>
<td>$86.383 - (47) \log 118$</td>
</tr>
<tr>
<td></td>
<td>$112.727 - 233.763$</td>
<td>$86.383 - 224.222$</td>
</tr>
<tr>
<td></td>
<td>(-121.036)</td>
<td>(-137.839)</td>
</tr>
<tr>
<td>BIC difference</td>
<td>16.803</td>
<td></td>
</tr>
</tbody>
</table>

As the model with a higher negative BIC value is the more likely model, the above results provide a confirmation that Model 2 (in which two additional paths TSAI-SP, and TSAI-PSTO are freed) fits the data better than the original model developed in this study. It is interesting to note that the results of structural equation modeling (SEM) for the presidents data set do not concur with the findings from the path analysis in which a direct link between 'trust in successor abilities and intentions' (TSAI) and 'satisfaction with the succession process' (SwSP) was suggested. No such linkage in this data set is suggested by SEM. It must be remembered, however, that the results of Bayesian Information Statistics (BIC) analysis conducted to compare the different models suggested by multiple regression and path analysis did not lend support to the superiority of a model that included the antecedent variable TSAI as a direct influencer of the main dependent variable (SwSP).

Another difference related to the determinants of the main dependent variable (SwSP) was found between the results of multiple regression and structural equation modeling for the presidents data set. This was in terms of the relationship between SwSP
and the commitment of presidents to continue the business (ACBa). While this relationship was not supported by the multiple regression results, the SEM results provide support for this relationship. It is generally accepted that SEM is a more powerful technique than path analysis and multiple regression (e.g., Pedhazur, 1982). This is because among other things (like being based on less restrictive assumptions), SEM considers the relationships between all variables in a model (both dependent and independent) simultaneously rather than considering one dependent variable with one or more independents at a time. Thus, the results of SEM should be given greater weight than the results of path analysis.
Table 6.35. Results of structural equation modeling (using EQS) for the Successors and other family members data set

<table>
<thead>
<tr>
<th>AIR</th>
<th>ACBa</th>
<th>ACBb</th>
<th>PSTO</th>
<th>PPR</th>
<th>SP</th>
<th>SwSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>M2</td>
<td>M1</td>
<td>M2</td>
<td>M1</td>
<td>M2</td>
<td>M1</td>
</tr>
<tr>
<td>PFH</td>
<td>1.162* (.837)</td>
<td>.015 (.037)</td>
<td>-0.032 (.065)</td>
<td>-0.032 (.065)</td>
<td>.545* (.257)</td>
<td></td>
</tr>
<tr>
<td>PFH</td>
<td>.380* (.420)</td>
<td>.320* (.284)</td>
<td>.003 (.047)</td>
<td>.035 (.049)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>.362* (.496)</td>
<td>.342* (.466)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSAI</td>
<td>.139* (.245)</td>
<td>.181* (.226)</td>
<td>.181* (.226)</td>
<td>.690* (.181)</td>
<td>.680* (.202)</td>
<td></td>
</tr>
<tr>
<td>IOB</td>
<td>.174* (.201)</td>
<td>.174* (.201)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AABa</td>
<td>.368 (.117)</td>
<td>.296 (.095)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AABb</td>
<td>.526 (.066)</td>
<td>.624 (.079)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIR</td>
<td>-0.004 (-.019)</td>
<td>.623* (.491)</td>
<td>.559* (.411)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBa</td>
<td>.984* (.184)</td>
<td>.966* (.182)</td>
<td>-.251 (-.057)</td>
<td>-.056 (-.012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBb</td>
<td>.565* (.132)</td>
<td>.362 (.085)</td>
<td>.065 (.019)</td>
<td>-.146 (.039)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSTO</td>
<td>.549* (.098)</td>
<td>.272 (.046)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPR</td>
<td>1.330* (.278)</td>
<td>.811* (.179)</td>
<td>.797* (.202)</td>
<td>.639* (.152)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>.375* (.455)</td>
<td>.361* (.410)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MODEL 1: 192.300 (49 df)
MODEL 2: 148.356 (45 df)

CFI
MODEL 1: 0.867
MODEL 2: 0.904

* b-values that are significant at 0.05 level
Beta values are placed in brackets
Table 6.35a: A comparison of the two model (M1 - developed in Chapter 3) and M2 (with 3 paths freed based on the results of LM test), using BIC statistics

<table>
<thead>
<tr>
<th></th>
<th>Model 1 - The model developed in Chapter 3</th>
<th>Model 2 - The model with modifications based on LM test results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X² or L²</strong></td>
<td>192.300</td>
<td>148.356</td>
</tr>
<tr>
<td><strong>df</strong></td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td>192</td>
<td>192</td>
</tr>
<tr>
<td><strong>BIC</strong></td>
<td>$L^2 - (\text{df}) \log n$</td>
<td>$L^2 - (\text{df}) \log n$</td>
</tr>
<tr>
<td></td>
<td>192.300 - (49) log 192</td>
<td>148.356 - (45) log 192</td>
</tr>
<tr>
<td></td>
<td>192.300 - 257.617</td>
<td>148.356 - 236.587</td>
</tr>
<tr>
<td></td>
<td>- 65.317</td>
<td>- 88.231</td>
</tr>
<tr>
<td><strong>BIC difference</strong></td>
<td></td>
<td>22.914</td>
</tr>
</tbody>
</table>

In this case, too, the second model with an additional four parameters freed had the higher negative value and was, therefore, a better fitting model. Some similarities and differences were found in the results of path analysis (PA) and structural equation modeling (SEM), in terms of new relationships suggested. While both analyses suggest a positive relationship between satisfaction of successors and other family members with the succession process and 'trust in successor abilities and intentions', PA also suggested a positive relationship between 'perceived family harmony' and the 'satisfaction with the succession process'. This relationship was not confirmed by SEM results. Instead, a positive relationship between 'perceived family harmony' and the extent of 'succession planning' undertaken was suggested by SEM results. As the results of the Bayesian model testing indicate a more likely model by including a direct linkage between 'perceived family harmony' and the 'satisfaction with the succession process' (Table 6.31), as well as by including a linkage between 'perceived family harmony' and 'succession planning' in a modified model (Table 6.35a), these relationships need to be explored in future research.
6.8. Summary

The results of all the analyses undertaken have been presented in this chapter. An overview of these results is provided in this section. The collected data were analysed for different types of systematic biases that may be present. No substantial bias was found in groups based on the timing of succession - whether data were collected after or before succession had taken place, the timing at which the response was received, size of the business, the gender of the president and successor, the generations that they represented, or the ethnic background of the respondents' families. However, there was a significant difference in the responses of the three categories of respondents. While there was no significant difference in the responses of the successors and other family members, the responses of presidents varied from those of the other two categories of respondents for most variables. This finding led to the combining of the data collected from successors and other family members while leaving the presidents as a separate data set.

The indicators used for the twelve variables in the study ranged from 2-15. A combination of scale reliability tests and factor analysis was used for construction of scales. Table 6.36 provides a summary of the alpha values, number of original indicators, and number of indicators retained based on results of factor analysis and reliability tests for all the variables in this study. It is found that two dimensions each were revealed for two variables: ‘agreement to continue the business’, and ‘presence of an active advisory board’. These dimensions were treated as distinct in all the analysis that followed.
Table 6.36. Summary of the alpha values and number of indicators for all variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of original indicators</th>
<th>Number of indicators retained</th>
<th>Cronbach Alpha values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>5</td>
<td>5</td>
<td>0.9198</td>
</tr>
<tr>
<td>AIR</td>
<td>8</td>
<td>8</td>
<td>0.8929</td>
</tr>
<tr>
<td>PFB</td>
<td>4</td>
<td>3</td>
<td>0.4630</td>
</tr>
<tr>
<td>ACB</td>
<td>5</td>
<td></td>
<td>0.7373</td>
</tr>
<tr>
<td>ACB - a (Presidents)</td>
<td></td>
<td>3</td>
<td>0.7929</td>
</tr>
<tr>
<td>ACB - b (Fam. mem.)</td>
<td></td>
<td>2</td>
<td>0.7914</td>
</tr>
<tr>
<td>CI</td>
<td>3</td>
<td>3</td>
<td>0.4844</td>
</tr>
<tr>
<td>PSTO</td>
<td>2</td>
<td>2</td>
<td>0.6835</td>
</tr>
<tr>
<td>IOB</td>
<td>3</td>
<td>3</td>
<td>0.5690</td>
</tr>
<tr>
<td>TSAI</td>
<td>4</td>
<td>4</td>
<td>0.7249</td>
</tr>
<tr>
<td>PPR</td>
<td>5</td>
<td>2</td>
<td>0.7009</td>
</tr>
<tr>
<td>AAB</td>
<td>6</td>
<td></td>
<td>0.4604</td>
</tr>
<tr>
<td>AAB - a (Formal)</td>
<td></td>
<td>3</td>
<td>0.6838</td>
</tr>
<tr>
<td>AAB - b (Informal)</td>
<td></td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>SP</td>
<td>15</td>
<td>15</td>
<td>0.8594</td>
</tr>
<tr>
<td>SwSP</td>
<td>12</td>
<td>12</td>
<td>0.9312</td>
</tr>
</tbody>
</table>

AABa Presence of formal active board of directors
AABBb Presence of an informal board
ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP Satisfaction with the succession process
TSAI Trust in successors' abilities and intentions

The above summary table reveals that in case of most variables the alpha values are over 0.50. Alpha values lower than 0.50 were found in case of PFB (Payoffs from business), and CI (career interests). Thus, the results of hypotheses that use these variables should be interpreted with caution.
Three types of analyses: multiple regression, path analysis, and structural equation modeling were undertaken to test the hypotheses and to detect other relationships in the data not hypothesized in this study. A summary of the results of these analysis for both data sets is presented in Table 6.37. Sixteen hypotheses were proposed in the model developed in Chapter 3. However, as two dimensions each were found for two of the variables (‘agreement to continue the business’ and ‘presence of an active advisory board’) and the hypotheses that used each of these variables were tested for each dimension, the number of tested hypotheses increased to twenty-one.
Table 6.37. Summary of results of Multiple Regression, Path Analysis, and Structural Equation Modeling for both data sets

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>DEPENDENT VARIABLES</th>
<th>INDEPENDENT VARIABLES</th>
<th>RESULTS OF MULTIPLE REGRESSION AND PATH ANALYSIS</th>
<th>RESULTS OF STRUCTURAL EQUATION MODELING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Presidents</td>
<td>Successors and other family members</td>
</tr>
<tr>
<td>H1,</td>
<td>SwSP</td>
<td>AIR</td>
<td>*</td>
<td>***</td>
</tr>
<tr>
<td>H2.i</td>
<td>SwSP</td>
<td>ACBa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H2.ii</td>
<td>SwSP</td>
<td>ACBb</td>
<td>***</td>
<td>-</td>
</tr>
<tr>
<td>H3.</td>
<td>SwSP</td>
<td>PSTO</td>
<td>***</td>
<td>**</td>
</tr>
<tr>
<td>H4.</td>
<td>SwSP</td>
<td>PPR</td>
<td>-</td>
<td>**</td>
</tr>
<tr>
<td>H5.</td>
<td>SwSP</td>
<td>SP</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>SwSP</td>
<td>TSAI</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>H1a.</td>
<td>AIR</td>
<td>PFH</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>H2a.i</td>
<td>ACBa</td>
<td>PFB</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>H2a.ii</td>
<td>ACBb</td>
<td>PFB</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>H2b.i</td>
<td>ACBa</td>
<td>PFH</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H2b.ii</td>
<td>ACBb</td>
<td>PFH</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H3a.</td>
<td>PSTO</td>
<td>PFB</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H3b.</td>
<td>PSTO</td>
<td>AIR</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H3c.</td>
<td>PSTO</td>
<td>CI</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>PSTO</td>
<td>TSAI</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H4a.</td>
<td>PPR</td>
<td>TSAI</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>H4b.</td>
<td>PPR</td>
<td>IOB</td>
<td>-</td>
<td>**</td>
</tr>
<tr>
<td>H5a.</td>
<td>SP</td>
<td>PPR</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>H5b.i</td>
<td>SP</td>
<td>AABa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H5b.ii</td>
<td>SP</td>
<td>AABb</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H5c.i</td>
<td>SP</td>
<td>ACBa</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>H5c.ii</td>
<td>SP</td>
<td>ACBb</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level; ** significant at 0.01 level; *** significant at 0.001 level
AABa - Presence of formal active board of directors
AABb - Presence of an informal board
ACBa - Extent of Presidents commitment to continue the business
ACBb - Agreement of family members to continue business
AIR - Mutual acceptance on individual roles
CI - Career interests
IOB - Interests of incumbent outside the business
PFB - Payoffs from business
PFH - Perceived family harmony
PPR - Propensity of incumbent president to step aside
PST0 - Propensity of successor to take over
SP - Succession planning
SwSP - Satisfaction with the succession process
TSAI - Trust in successors' abilities and intentions

For the presidents data set, 9 out of 21 hypothesis (i.e., H1, 1a, 2a.i, 2b.i, 3, 3c, 4a, 5,
5a) received support from the results of both analyses - multiple regression and structural
equation modeling. Another three received support either from the results of multiple
regression (H3b) or structural equation modeling (H2.i., and 5c.i), but not from both analyses.
As structural equation modeling is a more powerful technique the results supported by it are
more representative of the data. The remaining nine hypotheses did not receive any support
from the presidents data set.

For the second data set, the results of both multiple regression and path analysis gave
consistent results. 11 out of 21 hypotheses (i.e., H1, 1a, 2a.i., 2b.i., 3c, 4, 4a, 4b, 5, 5a, and
5b.ii) received support using both analyses, while the other 10 hypotheses were not supported.

Overall, the model explained 58% and 66% of the variance in the satisfaction with
succession process for the presidents, and successors and other family members, respectively.
In addition to testing the hypothesized relationships, structural equation modeling and path analysis were used to detect other underlying significant relationships among variables in the model, suggested by the data. Both path analysis and structural equation modeling suggested a positive relationship between ‘trust in successor abilities and intentions’ (TSAI) and ‘the satisfaction with the succession process’ (SwSP), for the data collected from successors and other family members. While a positive link between these variables (TSAI-SwSP) for the presidents data set was suggested by the results of path analysis, this linkage was not revealed by the results of structural equation modeling. The path analysis also indicated another significant linkage between ‘perceived family harmony’ and the ‘satisfaction with succession process’ for successors and other family members, but this was not supported by the results of structural equation modeling. Instead, a positive association between ‘perceived family harmony’ and ‘succession planning’ was revealed by structural equation modeling. Two other important relationships among variables suggested by structural equation modeling for both data sets were between ‘trust in successors’ abilities and intentions’ and: (i) ‘propensity of successors to take over’, and (ii) ‘succession planning’.

On the whole, the analyses undertaken and presented in this chapter provide support for many of the hypothesized connections laid out in this research. Besides, some suggestions for future research are indicated by the results of structural equation modeling. The following chapter discusses the implications of this research study based on the results of the statistical analyses presented in this chapter.
CHAPTER 7

DISCUSSION AND IMPLICATIONS

This research study was directed towards developing and empirically testing a comprehensive model of the determinants of the satisfaction of family members with the succession process in family firms, and to determine the relative importance of each of these determinants. In order to achieve this end, a model of satisfaction with the succession process was developed by drawing together determinants suggested in the literature. Five primary determinants of the satisfaction with succession process were hypothesized in the model developed. These were: (1) Mutual acceptance of individual roles, (2) Agreement to continue the business\textsuperscript{21}, (3) Propensity of successor to take over, (4) Propensity of incumbent to step aside, and (5) Succession planning. A positive relationship between these determinants and the main dependent variable (satisfaction with the succession process) was hypothesized. In addition, hypotheses were developed for the factors that influence each of these determinants. Briefly, the hypothesized determinants of the satisfaction with the succession process and the hypothesized influencers of each of these determinants are:

1. Acceptance of individual roles,
   a. Perceived family harmony

2a. First dimension of ‘Agreement to continue the business’ i.e., Extent of presidents’ commitment to continue the business,
   a. Payoffs from business
   b. Perceived family harmony

\textsuperscript{21} The results of scale construction and factor analysis revealed two dimensions of this variable. Consequently, the variable was split into two dimensions: ‘Extent of president’s commitment to continue the business’, and ‘Agreement of family members to continue the business’, leading to the formation of a sixth determinant of the satisfaction with succession process.
2b. Second dimension of ‘Agreement to continue the business’, i.e., Agreement of family members to continue the business,
   a. Payoffs from business
   b. Perceived family harmony

3. Propensity of successor to take over,
   a. Payoffs from business
   b. Career interests of successors
   c. Acceptance of individual roles

4. Propensity of incumbent-president to step aside
   a. Trust in successor’s abilities and intentions
   b. Incumbent’s interests outside the business

5. Succession planning
   a. Propensity of president to step aside
   b. Presence of a formal active advisory board\(^{22}\)
   c. Presence of an informal advisory board
   d. Extent of president’s commitment to continue the business
   e. Agreement of other family members to continue the business.

This model was subjected to preliminary testing using the data from four case studies conducted on family firms that had experienced different qualities of succession experience. The pretesting indicated strong support for the model. Next, a set of three questionnaires was developed and sent to three family members (president/outgoing president, successor/designated successor, and another family member active in the firm) in each of the 604 member firms of the Canadian Association of Family Enterprises. A qualifying criterion for the participation of a firm was that the

\(^{22}\) Please note that two dimensions were found for the variable ‘Presence of an active advisory board’ and these two were treated as distinct variables (b and c).
event of succession, that is, the transfer of management control of the business from one family member to another, should either have taken place in the past five years, or be likely to take place in the next five years. A total of 84 member firms did not meet this requirement. Another 11 questionnaires were excluded because six firms had relocated and five were not interested in participating in the study. Out of the 509 qualifying firms, responses were received from 177 firms yielding a response rate of 34.77%. 142 responses were received from the successors, 118 from presidents, and 50 from other family members actively involved in the firm.

The collected data was subjected to various types of statistical analyses for different purposes. Briefly, MANOVAs were used to detect the presence of any systematic biases in the data based on the generation represented by the president and successor, their respective genders, timing of the event of succession (i.e., in the past or in future), timing when the response was received, the ethnic background of the owning family, and the respondent category. No substantial biases were found except in the respondent category. Specifically, the responses of presidents were found to be significantly different from those of successors and other family members. This in itself is an important and interesting finding of this research, both for researchers as well as members of family firms. This stresses the need for understanding the process of succession both from presidents' as well as successors' points of view. Surprisingly, other family members perceptions were quite similar to those of successors and differed significantly from those of presidents. This may be due to the suggestion in the literature that most of the time of president is spent in work related to the business, leaving for him/her little time to build communication links with his/her family. Other family members including the successor/s spend more time together and develop similar perceptions
with regard to the family business. This could also be due to the fact that it is the presidents who are being replaced and their situation is unique as compared to that of other family members involved in the business. In general, presidents of family firms have been found to lead their organization for a long period of time (e.g., Lansberg, 1988), and this may give them a different perspective of the business than other family members who have not been as closely associated with the business. Whatever, the reason for the difference in perceptions, this research confirms similar suggestions made by earlier researchers (e.g., Handler, 1989) that the president’s view of the business itself and of the relationships amongst different family members varies significantly from that of other family members. In the context of this research, the collected data from three categories of family members could be combined into two categories: (1) presidents, and (2) successors and other family members.

The other analyses undertaken in this research included exploratory factor analysis and reliability analysis (for scale construction), multiple regression (for testing of the sixteen hypotheses developed in this study), path analysis (for testing the relationship between the antecedent variables and the main dependent variable—satisfaction with the succession process), and structural equation modeling (for testing the relationships hypothesized and discovering other underlying relationships between variables in the two data sets). The results of hypotheses testing are summarised in Figures 7.1 and 7.2 for the two data sets. The principal findings of this research are discussed in the next section.
FIGURE 7.1: RESULTS OF HYPOTHESES TESTING FOR PRESIDENTS DATA SET

Perceived Family Harmony  
***H1a

Mutual Acceptance of Individual Roles  
H2b.i.

President's commitment to continue the business  
H2a.i.

Agreement of family members to continue the business  
***H2a.ii

Payoffs from business to family members  
H2b.ii

Career Interests  
H3a

Trust in successor's abilities and intentions  
***H3c

Incumbent's interests outside the business  
*H4a

Propensity of a Successor to take over  
H4b.

Propensity of an Incumbent to step aside  
H5b.i

Presence of a formal active advisory board  
H5b.ii

Succession Planning  
H5c.i

SATISFACTION WITH THE SUCCESSION PROCESS  
** H5

* support at 0.05 level;  ** support at 0.01 level;  *** support at 0.001 level;

No support using Multiple Regression was found for those hypotheses where there is no asterisk besides the hypothesis number.

Indicates paths suggested by the Structural Equation Modeling (SEM).

Indicates paths suggested by the Path analysis (PA).
FIGURE 7.2: RESULTS OF HYPOTHESES TESTING FOR SUCCESSORS AND OTHER FAMILY MEMBERS DATA SET

Perceived Family Harmony

Mutual Acceptance of Individual Roles

Payoffs from business to family members

H2b.i

President’s commitment to continue the business

H2a.i

Agreement of family members to continue the business

H2a.ii

Satisfaction with the succession process

H2b.ii

Career Interests

H3a

Propensity of a Successor to take over

H3

Incumbent’s interests outside the business

H4a

Propensity of an Incumbent to step aside

H4b

Presence of a formal active advisory board

H5b.i

Succession Planning

H5b.ii

Presence of an informal advisory board

H5a

Trust in successor’s abilities and intentions

H3c

* Support at 0.05 level; ** support at 0.01 level; *** support at 0.001 level;

No support using Multiple Regression was found for those hypotheses where there is no asterisk besides the hypothesis number.

--- Indicates paths suggested by the Structural Equation Modeling (SEM).

--- Indicates paths suggested by the Path analysis (PA).
7.1. Principal findings

The following are the principal findings of this study:

1. **Different perceptions of respondent groups:** The perceptions of presidents are significantly different from those of successors and other family members.

2. **Most important determinants of the Presidents' satisfaction with succession process:** The three primary determinants of the satisfaction of the presidents with the succession process based on the results of multiple regression (table 6.17) are:

   1. Propensity of successor to take over (Beta value 0.3755),
   2. Succession planning (Beta value 0.2666), and
   3. Acceptance of individual roles among family members (Beta value 0.2064).

   The other hypothesized influencers of their satisfaction with succession process, that is, ‘propensity of presidents to step aside’, ‘extent of commitment of presidents to continue the business’, and ‘agreement among family members to continue the business’, were not found to be significantly associated with the presidents’ satisfaction with the succession process.

3. **Most important determinants of the satisfaction of successors and other family members with succession process:** For successors and other family members, too, three of the six primary determinants of the satisfaction with succession process were found to be statistically significant. These are:

   1. Succession planning (Beta value 0.4383),
   2. Acceptance of individual roles among family members (Beta value 0.4238), and
   3. Propensity of president to step aside (Beta value 0.1821).
The other three determinants: ‘propensity of successors to take over’, ‘extent of commitment of presidents to continue the business’, and ‘agreement among family members to continue the business’, were not found to be significantly associated with the satisfaction of successors and other family members with the succession process.

These results provide some interesting findings. First, neither of the determinants related to the commitment of family members to continue the business, that is, ‘extent of commitment of presidents to continue the business’, and ‘agreement among family members to continue the business’, was found to influence the satisfaction of any of the respondent categories with the succession process. While the extent of commitment to continue the business may vary among different family firms, as suggested by the studies on ethnicity (e.g., Dean, 1992; Wong, McReynolds, and Wong, 1992) and Mass Mutual study (1994), this varying commitment does not seem to influence the satisfaction of family members with the succession process. However, caution needs to be exercised in generalizing this finding as this may be specific to members of the Canadian Association of Family Enterprises (CAFE). As CAFE attracts members who have succession as an issue of interest, it is possible that members of this association may have a higher degree of commitment to continue their businesses than family firms in general. Although some variation was found among member firms with regard to this variable, this relationship should be subjected to further testing by using different data sets.

A second very interesting finding is related to the propensity of successors to take over the business and of presidents to step aside. While the ‘propensity of successors to take over the business’ is the most important influencer of the presidents’ satisfaction with the succession process,
their own propensity to step aside does not influence this satisfaction. On the other hand, it is the 'propensity of presidents to step aside' that is an important influencer of the successors and other family members satisfaction with the succession process, but the 'propensity of successors to take over the business' does not have any influence on their satisfaction with this process. This suggests that the respondents seem to attribute more importance to the behavior of others than to their own. While further research needs to be undertaken to understand the reasons for this finding, some explanation can be found in the attribution theory in social psychology. Originated by Fritz Heider (1958), this theory analyzes how people explain others' behavior, and make judgments about others'. While there are several distinct varieties of this theory, in its simplest version, it suggests that people attribute behavior either to internal causes—the person's disposition, traits; or to external causes—the person's situation. Further, there is a natural human desire to perceive and present oneself favorably (the self-serving bias), and possess control over ones behavior. Due to these two potent biases, individuals have a tendency to make 'fundamental attribution error', that is, to explain own behavior in terms of the situation (thus retaining the illusion of control over ones behavior), but hold others responsible for their behavior by attributing it to their inner dispositions and traits, while ignoring situational determinants (Ross, 1977). Attribution theorists point out, that this is due to the fact that we have a different perspective when observing than when acting. When we watch another person act, that person occupies the center of our attention and so seems to cause whatever happens. On the other hand, when we act, the environment commands our attention (Heider, 1958; Jones & Nisbett, 1971). This theory can be used in future research to further explore the reasons for this finding.
Third, an interesting finding related to the satisfaction with the succession process, was revealed by the results of Path Analysis (PA) and Structural Equation Modeling (SEM). Both these analyses suggested that another variable—'Trust in successors’ abilities and intentions’ has a significant influence on the satisfaction of the successors and other family members with the succession process. While a positive relationship between these two variables was also suggested by the PA results for the presidents’ data set, it was not supported by the SEM results. This result provides a partial confirmation for Handler’s (1989) suggestion that ‘the quality of succession experienced by next-generation family members is highly influenced by the ‘mutual respect and understanding’ between the founders/owner-managers and the next-generation family members. As she included the level of ‘trust, support, communication, feedback, and mutual learning’ in her description of ‘mutual respect and understanding’ (Handler, 1989: p.48), the confirmation provided by these results is only partial as the variable in this study includes only the element of ‘trust’.

Finally, the results of path analysis indicate a positive relationship between the extent of ‘perceived family harmony’ and the satisfaction with succession process experienced by successors and other family members. However, this relationship is neither supported by the results of SEM, nor found in the presidents’ data set.

4. Mutual acceptance of individual roles influenced by the perceived family harmony: For both data sets, perceived family harmony was found to have a positive relationship with the extent of mutual acceptance of individual roles among family members. This confirms suggestions in the literature that a positive social context provides for a valuable work environment that facilitates a
higher degree of acceptance of individual roles in the business (e.g., Dyer, 1986; Handler, 1989; Malone, 1992).

5. Factor influencing the 'agreement to continue the business': Two factors—'perceived family harmony' and 'pay-offs from the business' were hypothesized to influence the extent of commitment of presidents and other family members to continue the business. It was very interesting to find that for both data sets the agreement to continue the business (both of presidents and other family members) was positively associated with the 'payoffs from business' and not the 'perceived family harmony'. This suggests that family firms, like any other business organization, determine their continuity based on the potential payoffs from the business, and not on the extent of harmony that may be present among family members. This finding supports similar findings by Malone (1989), and the Mass Mutual survey (1994). However, it does not support the suggestions in the literature that at times family firms may decide to continue the business in the interest of family harmony, irrespective of its financial performance (e.g., Dunn, 1995; Malone, 1989).

6. Factor influencing the 'propensity of successors to take over the business': It was hypothesized that the propensity of successors would be positively influenced by: (1) the payoffs from the business, (2) mutual acceptance of individual roles, and (3) career interests of successors in the business. Surprisingly, no support was found for a positive relationship between the propensity of successors to take over the business and the extent of payoffs perceived from the business, in either data set. On the other hand, both groups of respondents agreed that the propensity of successors to take over the business is positively influenced by the alignment of career interests of
successors with the opportunities available in the business. Once again, this finding provides confirmation for Handler’s (1989) suggestion that a fit between the career interests of a successor and the opportunities available in the family firm is an important determining factor in the decision of a successor to join the business. Finally, a positive association between acceptance of individual roles and the successors’ propensity to take over the business was found only for presidents, using multiple regression. This result was neither found for the successors’ and other family members’ data set, nor backed by the structural equation modeling results. Although the findings related to the factors influencing the propensity of successors to take over the business are quite interesting, some caution needs to be used while interpreting them because of the low scale reliability of two variables involved in these relationships, payoffs from business (alpha value 0.4630) and career interests (alpha value 0.4844).

An important influencer of the propensity of successors to take over the business was revealed by the results of SEM. For both data sets, this analysis suggested a positive relationship between the trust that presidents had in the abilities and intentions of the successor (TSAI), and the propensity of successors to take over the business.

7. Factor influencing the ‘propensity of an incumbent president to step aside’: Once again, the trust that the incumbent president has in the abilities and intentions of the successor (TSAI) was found to have an influence on the propensity of an incumbent president to step aside.

The second hypothesized relationship, related to the ‘propensity of incumbent to step aside’ (PPR) was its positive association with the incumbent’s ‘interests outside the business’ (IOB). Interestingly, while this relationship was found when analyzing the data collected from successors
and other family members, it was not found in the data collected from the presidents themselves. It must be noted that while there was no significant difference in mean values for the extent of presidents’ interests outside the business in the two data sets (presidents, and successors and other family members), a significant difference in means was found in the ‘propensity of president to step aside’. A higher mean value for presidents’ propensity to retire was found in data collected from presidents themselves than that collected from other family members. Perhaps, this difference in linkage between PPR-IOB could be attributed to the difference in the propensity of president to retire in the two data sets. One may speculate that in absence of a clearly communicated plan of retirement by the president, successors and other family members involved in the business may be linking the extent of a president’s interest outside the business with his/her propensity to retire. Another explanation for this finding could be provided by the ‘attribution theory’ (explained on page 232). In order to explain their own behavior (their propensity to step aside), the presidents may be over-emphasizing the behavior of others (reflected in the variable—trust in successors’ abilities and intentions), and under-emphasizing their own (reflected in the variable—incumbent’s interests outside the business). As these are purely speculative possible explanations for this finding, it needs to be investigated in future research.

8. Factor influencing the extent of ‘succession planning’ undertaken: It was hypothesized that the extent of succession planning undertaken would be positively associated with: (1) the propensity of a president to step aside, (2) presence of a formal active advisory board, (3) presence of an informal advisory board, (4) extent of commitment of presidents to continue the business, and (5) agreement of other family members to continue the business. The results revealed a support for the
first hypothesized relationship between the propensity of an incumbent president to step aside and the extent of succession planning. No positive association, however, was found between the presence of either a formal or an informal advisory board and the extent of succession planning undertaken. This finding is contrary to the finding of a positive relationship between these variables in Malone’s (1989) study. In terms of a positive influence of the agreement to continue the business on succession planning, it was found that while the extent of commitment of presidents to continue the business was positively associated with the extent of succession planning undertaken, the commitment of other family members towards business continuity did not have any influence on succession planning. Overall, the results related to the influencers of succession planning reiterate the suggestions in the literature that succession planning is largely in the control of an incumbent president as it is his/her propensity to step aside and the extent of his/her commitment to continue the business that have a positive influence on the extent of succession planning undertaken.

9. Trust in successor abilities and intentions (TSAI)—an important variable: TSAI was found to be an important variable in this research. Not only was it found to have a positive influence on the propensity of presidents to step aside as was hypothesized, the results of structural equation modeling and path analysis suggest a strong influence of this variable with: (1) propensity of successors to take over, (2) the extent of satisfaction with the succession process experienced by the successors and other family members, and (3) the extent of succession planning undertaken. This result has important implications for all family members involved in a family firm.

The most important relationships suggested by the two data sets in this study are summarized in Figure 7.3. Briefly, this study revealed that perceived family harmony had a
significant impact on the mutual acceptance of individual roles. In turn, this acceptance of roles had a strong influence on the extent of satisfaction with the succession process experienced by all family members. Next, the alignment of career interests of successors with the business influenced the successors' propensity to take over the leadership of the business. This propensity, in turn, had a significant influence on the extent of satisfaction experienced by the incumbent presidents with the succession process. The trust that incumbent presidents had in the abilities and intentions of the successors was revealed as a very important variable. This trust had a significant influence on the propensity of successors’ to take over the business, propensity of incumbents’ to step aside, and the extent of succession planning undertaken. Moreover, it strongly influenced the satisfaction experienced by all family members with the succession process. Another variable that significantly influenced the satisfaction of all family members with the succession process was succession planning. This planning was positively associated to the propensity of incumbents to step aside. Finally, the satisfaction of successors and other family members with the succession process was influenced by the propensity of incumbent to step aside. These respondents believed that this propensity was influenced by the extent of interests the incumbents had outside the context of the business. However, the incumbents themselves did not report this relationship, but attributed their own propensity to step aside mainly to the extent of trust that they had in successors’ abilities and intentions. Beside relationships among variables depicted in Figure 7.3 and summarized above, it was found that the payoffs from business influenced extent of agreement among family members to continue the business. As the agreement among family members to continue the business was not
found to be significantly associated to the satisfaction with succession process, this relationship is not included in the figure.

**FIGURE 7.3: KEY RELATIONSHIPS SUGGESTED BY THE STUDY**

- Perceived Family Harmony → Mutual Acceptance of Individual Roles
- Alignment of Career Interests of Successors with the business → Propensity of a Successor to take over
- Trust in Successor's abilities and intentions → Propensity of an Incumbent to step aside
- Incumbent's interests outside the business → Satisfaction with the Succession Process

The limitations of this study are discussed in the next section. This section is followed by a discussion of the theoretical contributions and practical implications of this study. Implications for future research are discussed throughout the following three sections.
7.2. Limitations of the study

All scientific research has some flaws (Kerlinger, 1986). It is important to draw the reader's attention to the limitations of the study to enable him or her to draw independent conclusions as to the validity of the study's findings. Because of the limited scope of this study, and certain design features, it has the following limitations:

1. Survival bias. The study suffers from survival bias. Although the firms studied were at different stages of the succession process, the firms that were liquidated during or after succession were not be studied. While some of this bias is mitigated by including firms at different stages of the succession process, as some may not survive the process, it is difficult to clearly determine the number or identity of these firms at this time. Although the difficulty of reaching non-survivors is faced in most research conducted, this limitation should be kept in mind while interpreting the results of this study. While this study provides an understanding of the factors that are the important influencers of the satisfaction of family members with the succession process, future research can be directed towards gaining an understanding of the presence or absence of these factors in firms that did not survive as a result of the succession process.

2. Self-selection bias. As this study is directed towards CAFE members, the results of the study will have maximum relevance for this population. Because this is a large sample study, an argument can be made for the generalizability of the findings. However, a self-selection bias cannot be completely ruled out as membership in this organization is voluntary and may attract family firms with specific characteristics, such as, firms of members may be older, or larger than firms of non-
CAFE member family firms (Chrisman, Chua, Sharma, 1996). Future research using different respondent groups would be necessary to determine the generalizability of the findings of this study.

3. Problem of selective recall. As the firms in the study will be at different stages of the succession process, there may be a problem of selective recall or change of perceptions due to the actual performance of the business, or family reconciliation's, especially in cases where succession took place a few years ago. While the magnitude of this limitation is somewhat diminished by getting data from multiple sources and limiting the cut-off period for the succession event to five years, the reader needs to take this into account while deriving conclusions from the findings of the study.

4. Socio-cultural factors. Some social and cultural factors such as ethnicity, culture, and types of families involved in the firm may have a significant influence on the expectations of family members in a transition process, but these are not differentiated in this study. Although some of the influence of these factors is reduced by limiting the study to CAFE members and controlling for the ethnic background of family members, all socio-cultural factors cannot be controlled for in a study of this nature. Although no significant difference in perceptions was found in responses of different ethnic groups in this study, it should be noted that Anglo-Saxons made up the bulk of this sample. Therefore, the results will be most applicable to family firms managed by members of this background. Similar studies conducted on family firms with a larger diversity of ethnic backgrounds should provide an indication of the applicability of the findings of this study for firms owned by members of different ethnic backgrounds.
5. **Low scale reliability of some variables.** While the scale reliability of 12 out of 14 scales used in this study were high (alpha values greater than 0.50), low reliability's were found in case of 'payoffs from business' and 'career interests of successors'. Thus, the results of hypotheses that use these variables should be interpreted with caution, and attempts should be made to improve these scales.

6. **Firm performance.** The relationship between firm performance and the quality of succession experienced did not form part of this study. While the results of this study indicate the factors that determine the satisfaction of family members with the succession process, they do not suggest the type of linkage between the extent of satisfaction experienced and firm performance. This issue is important and deserves attention in future research.

Despite its limitations, this study makes significant contributions both to theory as well as management practice. Other stakeholders involved in family firms, for example, consultants, shareholders, suppliers, customers, and employees can also benefit from the results of this study. The theoretical and practical contributions of this study are discussed in the next two sections.

7.3. **Theoretical contributions**

The major contribution of this study is to consolidate existing knowledge on succession and empirically test a large number of variables proposed by various authors. An attempt has been made to develop a model of the satisfaction of family members with the succession process by drawing together determinants suggested in related literatures. To date, studies of the succession process have focused on fragments of the model presented here. For example, Handler (1992) studied the next-generation family members' experience of the succession process, and Davis (1982) focused on
the life cycle stage of the founder and the successor. By using a comprehensive model as a basis for an empirical study, the relative importance of the different factors influencing the satisfaction with the succession process can be better understood.

The model developed in this study is composed of fourteen variables (including two dimensions each for two of the variables). Scales were developed for each of these variables. While some support for scale development was found from the literature and parts of scales developed by some previous researchers (e.g., Handler, 1989; Lansberg & Astrachan, 1994; Malone, 1989; Olson, Russel, & Sprenkle, 1988; Rosenberg, 1991) were used, a majority of the scales were developed especially for this research. This provides an important contribution to the literature. Although some of the scales, for example, ‘payoffs from business’ and ‘career interests’, could be improved, most of the developed scales can be extremely useful for future research.

This is the first large sample study that is directed to understanding the perceptions of different family members with regard to the succession process. Data were collected from three different family members: president, successor, and other family member active in the business, from each family firm. This is a major contribution to the literature as it suggests one way of operationalizing a multiple respondent study. Moreover, the perceptions of presidents and other family members including the successors were found to be significantly different. While there have been suggestions in the literature that these perceptions may be different, this is the first time that an empirical confirmation has been provided. Future research should focus on finding ways to better align the perceptions of various family members as this may lead to greater satisfaction of all family members with the succession process.
In terms of analysis, parameters for the relationships among variables hypothesized in the developed model were estimated using multiple regression. Two variables found to positively influence the satisfaction of all family members with the succession process are: ‘Succession planning’, and ‘Mutual acceptance of individual roles’. Further, it was found that succession planning is largely under the control of the incumbent-president and is significantly influenced by his/her propensity to step aside and the extent of his/her commitment to continue the business. The propensity of incumbent to step aside, in turn, is influenced by the trust that the presidents had in the abilities and intentions of successors. In addition, this trust is an important influencer of the propensity of successors to take over as well as their satisfaction with the succession process. Therefore, the trust that presidents have in the intentions and abilities of a successor has significant influence on the extent of succession planning undertaken, propensity of presidents to step aside and successors to take over, and the extent of satisfaction with the succession process experienced by successors and other family members. It is interesting to note that the perceptions of presidents varied considerably from those of successors and other family members in terms of the trust that presidents have in successors abilities and intentions (TSAI). Presidents themselves perceived a higher level of trust in successors (mean 16.67, SD 2.82), than successors (mean 15.64, SD 2.99) and other family members actively involved in the business (mean 12.92, SD 3.28). This suggests some important directions for future research: (1) What mechanisms can be used by an incumbent president of a family firm to convey the trust he/she has in a successor to other members of his/her family?, and (ii) What mechanisms can be used to further increase the extent of trust that the incumbent president has in the abilities and intentions of a successor? An understanding of these
issues becomes important as the variable ‘trust in successors abilities and intentions’ was found to have important implications for the satisfaction family members derive from a succession process.

Considering the extent of suggestions made in the literature on the positive influences of having an advisory board in family firms, it was surprising not to find any significant relationship between the extent of succession planning undertaken and the presence of either a formal or an informal advisory board. This finding supports the suggestions of authors like Alderfer (1988), Ford (1988), and Jonovic (1989), that an advisory board may not be able to influence the extent of succession planning undertaken in family firms because of the ownership structure of these firms and the obligation that the directors may feel towards the owner-manager who appointed them. Future research can be directed towards understanding how boards could be made more effective in family firms. Perhaps, case studies on firms that have an effective board of advisors may provide important insights on this issue.

It was found that the satisfaction of presidents with the succession process is largely influenced by the propensity of successors to take over the business. This propensity, in turn, depends largely on the alignment of career interests of successors with the opportunities available in the business. The question that arises for researchers to explore further is what mechanisms family firms can use for better aligning the interests of successors with the opportunities in the firm.

In addition to testing of the hypothesized relationships, structural equation modeling was undertaken mainly to reveal other important relationships among variables suggested by the data. Some of the most important relationships among variables suggested by this analysis and further
tested in this study are between: (1) the extent of trust that the incumbent has in the intentions and abilities of a successor and the satisfaction of all family members with the succession process (TSAI - SwSP); (2) the extent of trust in successors' abilities and intentions and the extent of succession planning undertaken (TSAI - SP); (3) perceived family harmony and the extent of succession planning undertaken (PFH - SP - suggested by successors and other family members data set); and (4) trust in successors' abilities and intentions and the propensity of successors to take over the business (TSAI - PSTO).

While these relationships were used in the second model that was run using EQS and the overall strength of the model was tested by using Bayesian Information Criteria, some other suggested linkages were not subjected to further testing. A decision was made to explore only the most important suggested linkages based on the extent of change in the overall fit of the model they would cause, and whether they were suggested by one or both data sets. The linkages suggested by the results of Structural equation modeling but not tested in this study are listed below:

For presidents' data set positive linkages were suggested between:

(1) The extent of alignment of career interests of successors with the business and extent of succession planning undertaken (CI - SP),
(2) Payoffs from business and the incumbent's interests outside the business (PFB - IOB),
(3) Acceptance of individual roles in the context of the business and the trust that the incumbent has in the abilities and intentions of a successor (AIR - TSAI).

For successors and other family members data set positive linkages were suggested between the extent of:
(1) Satisfaction of successors and family members with the succession process and
   (a) Presence of an informal advisory board (SwSP - AABb), and
   (b) Interests of incumbent outside the context of the business (SwSP - IOB);

(2) Agreement among family members to continue the business and
   (a) Trust that the incumbent has in successors' abilities and intentions (ACBb - TSAI),
   (b) Presence of an active advisory board (ACBb - AABa);

(3) Commitment of presidents to continue the business and
   (a) his/her interests outside the business (ACBb - IOB);

(4) Acceptance of individual roles among family members and
   (a) Alignment of career interests of successors with the opportunities in the family firm
      (AIR - CI).

The above suggested relationships provide a basis for developing additional hypotheses in future research and subjecting them to rigorous testing.

Briefly, it can be stated that this study makes significant contribution to the literature in terms of its development of a comprehensive model of the determinants of satisfaction of family members with the succession process, its operationalization of variables in the model, its approach to testing the model by using a combination of qualitative and quantitative approach and collecting data from multiple respondents from each family firm, its findings of support for many hypothesized relationships in the model, its findings of non-support of other hypothesized relationships, and its identification of other significant relationships among variables in this model, which provide interesting directions for future research in this area of study. Besides these theoretical
contributions there are some significant implications of this study for practising managers. These implications are discussed next.

7.4. Implications for managerial practice

The most important finding of this study for the family firm managers is the clear indication that the perception of presidents are significantly different from those of other family members. This may come as a surprise to many family firm managers, and underscores the need for various family members involved in the business to make an attempt to understand the situation from the perspective of other family members involved in the business. For example, while the successors and other family members do not rate their own propensity to take over the business as an influencer of satisfaction with the succession process, this is an important determinant for the presidents’ satisfaction with the succession process. On the other hand, the presidents do not rate their own propensity to retire as being important to the succession process, but for other family members this is an important factor. Another vivid example of the extent of difference in perceptions among family members was found in terms of the perceived extent of trust that the president has in the abilities and intentions of a successor. While the presidents themselves stated the presence of a higher amount of trust (mean 16.67), both the successors and family members rated this much lower (15.64, and 12.92 respectively). As this variable was found to have significant influence on the satisfaction with succession process experienced by successors and other family members, as well as their propensity to take over the business, a closer alignment of the different perceptions would prove useful in these firms.
The findings indicate that the propensity of successors to take over the business is greatly influenced by the alignment of their career interests with the business. This has important implications both for the incumbent presidents as well as the successors themselves. All family members should make an attempt to find ways to better align the interests of successors with the opportunities in the family business. This may be done by reshaping the business in a way that would allow for the alignment of successors' interests with the business. This mechanism would not only attract successors to the business, it would also lead to the revitalization of the business and prevent the 'pleateauing' of the successors after a few years in the business (Malone & Jenster, 1992).

As mentioned earlier, the incumbent president’s trust in the abilities and intentions of a successor was found to be a very important determinant of the satisfaction of successors and other family members with succession process, propensity of successors to take over the business, as well as the extent of succession planning undertaken. This finding suggests that family members need to find and discuss ways in which this trust can be increased. One mechanism that may be used is for the incumbent president to have open discussions with the potential successors and convey his/her feelings about what capabilities he/she would like to see in the successor of the business. This clarification would help the successors to find out whether their abilities would fit in with the needs and requirements of the business, and aid them in making their career choice. If they choose to join the business, this clarification would provide them with a clear direction regarding which abilities they need to focus on for improvement. On the other hand, if they decide not to join the business after making an assessment of their abilities and interests and the requirements of the business, this
would prove to be beneficial to all concerned as successors could adopt a different career in which they could do well, and presidents would get more time to develop other successors who may prove to be better for the business.

It must be remembered that the mechanism that may lead to the trust in a successor’s abilities in one family firm may be entirely different from another. For example, the president of one firm may view a few years within the business as necessary to develop trust in a successor’s abilities, while another may view the need for university education as a critical ingredient. For another president the trust in a successors dealing’s with his/her siblings may be the most important factor to determine this trust. Thus, each family firm will have to develop its own mechanism to increase the incumbent’s trust in successors’ abilities and intentions and no generic solutions can be suggested.

The difference in perceptions between presidents and other family members (including successors) was also revealed in terms of the extent of succession planning (SP) undertaken, propensity of presidents to retire (PPR), and factors that influence this propensity. Presidents reported a significantly higher extent of succession planning undertaken as well as their propensity to step aside than other family members. Moreover, presidents did not report a positive relationship between their propensity to retire and the extent of their interests outside the business (IOB), although other family members reported a significant association between these two variables (PPR-IOB). This suggests that while presidents may have formulated a succession plan and have a higher propensity to retire, they do not convey these to other members of their family. These family members detect the president’s propensity to retire by the extent of involvement in activities he/she has outside the business. As president’s propensity to retire has a significant influence on the
satisfaction of successors and other family members with the succession process, presidents should
make an effort to share their succession plans with other family members.

The suggestions that the results of this study provide for the presidents of family firms
can be summarized as:

1. They should recognize that successors and other members of their family may have different
perceptions than theirs regarding the family business and the succession process. Specifically, other
family members experience a significantly lower extent of satisfaction with the succession process
than the presidents, and perceive the presence of a lower extent of ‘succession planning’,
‘propensity of presidents to retire’, ‘trust in successors’ abilities and intentions’, ‘perceived family
harmony’, and ‘acceptance of individual roles’. This suggests a need for better communication
between presidents and other members of their family to better align these perceptions.

2. Succession planning is important for the satisfaction of all family members with the succession
process, and it is largely in their control. As it is significantly influenced by the extent of their
commitment to continue the business, propensity to step aside, and the extent of trust that they
have in the abilities of a successor, and NOT by the presence of a formal or an informal board of
directors, they have to make sure that they initiate this process.

3. As their propensity to step aside has a significant influence on the extent of satisfaction that other
family members experience with the succession process, they should make an attempt to convey the
extent of their propensity to retire to other family members and find ways in which this propensity
can be increased. Other members of their family perceive that this propensity to step aside can be
increased by developing interests outside the context of the business. Although they do not
recognize this, development of such interests may prove valuable in helping them to move towards retirement.

4. As the extent of trust in the abilities and intentions (TSAI) of the successor held by them is not recognized either by the successors themselves or other family members, they should find ways to express themselves in this regard as TSAI has a strong influence on the propensity of successors to take over the business as well as the extent of satisfaction with the succession process that they experience.

5. The propensity of successors to take over the business is an important influencer of the extent of satisfaction that the presidents experience with the succession process. As this propensity is strongly associated with the alignment of the career interests of successors with the opportunities in the business and the incumbent presidents are in-charge of the business, they should make an attempt to create opportunities in the business to better align the career interests of successors with the business.

Suggestions that can be offered to successors and other family members based on the findings of this study are:

1. They should recognize that the presidents may have different perceptions than theirs regarding the family business and the succession process. Specifically, presidents experience a significantly higher extent of satisfaction with the succession process than successors and other family members, and perceive the presence of a higher extent of ‘succession planning’, ‘propensity of presidents to retire’, ‘trust in successors’ abilities and intentions’, ‘perceived family harmony’, and ‘acceptance of
individual roles'. This suggests a need for better communication between presidents and other members of their family to better align these perceptions.

2. Succession planning is important for the satisfaction of all family members with the succession process. Although the existing literature makes strong suggestions in favor of establishing an advisory board in family firms, no relationship was found in this study between the presence of either a formal or an informal advisory board and the extent of succession planning undertaken. Instead, this study suggests that succession planning is largely controlled by the presidents. However, one important influencer of succession planning is the extent of trust that the presidents have in the abilities and intentions of a successor. Successors should hold open discussion with presidents to understand their expectations for successors' abilities and find mechanisms to improve those abilities. In short, the successors need to find ways to increase the trust of presidents in their intentions as well as abilities.

3. The propensity of incumbent presidents to step aside influences the extent of satisfaction with the succession process that successors and other family members experience. Although in their opinion, this propensity is positively associated with the interests that presidents have outside the context of the business, this relationship is not perceived by the presidents themselves. In order to help the presidents ease into retirement, successors and other family members could find ways to help the incumbent president to develop interests outside the business.

4. The extent of satisfaction with succession process experienced by the presidents is significantly influenced by the propensity of successors to take over the business. As this propensity is largely determined by the extent of alignment of the successors' career interests with the business,
successors should make sure that the president of their firm understands their career interests. Moreover, an attempt should be made by successors and other family members to find mechanisms that would allow for a better fit between successors’ career interests and the family firm, and suggest these to the incumbent presidents.

7.5. Conclusion

An attempt has been made in this study to: (1) consolidate the suggestions in the literature and develop a comprehensive framework of the factors that influence the satisfaction of family members with the succession process, (2) to test the developed framework using in-depth interviews with members of four family firms, (3) to develop indicators for each of the variables in the model, (4) to collect data from multiple respondents from a large sample of family firms in Canada, (5) to use various methods of analysis to uncover the relationships among variables in the data collected, and (6) to test the hypothesized relationships among variables and suggest directions for future research. It is hoped that this theory testing study will provide both researchers in the field of family business as well as practising family business managers with interesting insights into the critical issue of succession in family firms.
REFERENCES


APPENDIX A: QUESTIONNAIRE ITEMS FOR VARIABLES

The independent and mediating variables

Variable name: Perceived family harmony
Definition used: Family harmony is defined as the degree of respect, trust, and understanding among family members.

Using the scale shown below, please indicate the extent of accuracy of the following statements as they pertain to relationships amongst members of your family during the succession process, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>Not at all accurate</th>
<th>Somewhat accurate</th>
<th>Moderately accurate</th>
<th>Fairly accurate</th>
<th>Completely accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Emotionally bonded with each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(b) Trusted each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(c) Respected each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(d) In harmony with each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(e) Communicated openly with each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Sources used:
For (d) - Malone (1989)
For a, b, c, e - Olson, Russell, & Sprenkle (1988).

Variable name: Mutual acceptance of individual roles.
Definition used: This refers to the extent to which family members accept their relative levels of involvement and control in the business.

1. Using the scale shown below, please indicate the extent of accuracy of the following statements as they pertain to relationships amongst members of your family during the succession process, by circling the appropriate number in each row.
(a) Accepted their roles or positions in the business.
(b) Accepted their relative ownership stakes.
(c) Understood their specific roles and responsibilities.
(d) Acknowledged each other’s achievements in the business.
(e) Encouraged each other to give their best efforts.
(f) Cooperated and worked as a team with other family members involved in the business.

Sources used:
'a' and 'b' - Handler (1989)
'c' - Rosenberg (1991)
'd' - Lansberg and Astrachan (1994)

2. Using the scale shown below, please indicate the accuracy of the following statements during the succession process, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>Not at all accurate</th>
<th>Somewhat accurate</th>
<th>Moderately accurate</th>
<th>Fairly accurate</th>
<th>Completely accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Family members freely expressed their opinions about day-to-day decisions in the business.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Variable name: Payoffs from business to the family members
Definition used: Perceived gains for the family members from continuation of the family business.

Using the scale shown below, please indicate the accuracy of the following statements during the succession process, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairly accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) The level of profitability achieved by our firm was about the highest possible in this industry.

(b) The long term financial gains available to family members from the continuation of our business were much higher than those available from its closure.

(c) The non-financial gains available to family members from the continuity of our business were much higher than those available from its closure.

(d) Our business had great potential for future expansion.

---

23 Please note that negatively coded questions are italicized.
**Variable name: Agreement to continue the business**

Definition used: Agreement to continue the business refers to the degree of agreement among family members with regard to the perpetuation of business and their willingness to work together to ensure its future.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all accurate</strong></td>
<td><strong>Somewhat accurate</strong></td>
<td><strong>Moderately accurate</strong></td>
<td><strong>Fairly accurate</strong></td>
<td><strong>Completely accurate</strong></td>
</tr>
<tr>
<td>(a) The outgoing president of our family business was deeply committed to continuing the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(b) The outgoing president of our family business wanted his / her children to enter the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(c) If none of the younger family members had joined the family firm, family members of the preceding generation would have been very disappointed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(d) All family members actively involved in the business were deeply committed to continuing the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(e) Members of our family who are not actively involved in the business were deeply committed to continuing the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Source used:
**Variable name: Career interests**
Definition used: The degree to which one's career needs can be satisfied in the context of the family business.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all accurate</td>
<td>Somewhat accurate</td>
<td>Moderately accurate</td>
<td>Fairly accurate</td>
<td>Completely accurate</td>
</tr>
</tbody>
</table>

(a) The successor's career needs and interests were closely aligned with the opportunities in the business.

(b) One of the major reasons that the successor joined the business was the opportunity for personal growth available in the business.

(c) The opportunities available to the successor from working in our family firm were much higher than those available from other careers.

**Variable name: Propensity of successor to take over.**
Definition used: The inclination of successor to take over the leadership of the family business.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all accurate</td>
<td>Somewhat accurate</td>
<td>Moderately accurate</td>
<td>Fairly accurate</td>
<td>Completely accurate</td>
</tr>
</tbody>
</table>

(a) The successor had a strong desire to take over the business.

(b) The successor had a great deal of confidence in his/her ability to run the business.
**Variable name: Incumbent's interests outside the business**
Definition used: Indicated by the level of interest and avocations that the predecessor has outside the context of the business.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all accurate</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Somewhat accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moderately accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fairly accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Completely accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) The outgoing president of our business was heavily involved in activities outside the context of the business.

(b) *Most of the time of our outgoing president was spent in work related to the business.*

(c) The outgoing president of our business was looking forward to the pursuit of activities outside the business.

---

**Variable name: Trust in successor's capabilities**
Definition used: This is indicated by the degree of confidence that the predecessor has in the abilities of the successor.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all accurate</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Somewhat accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moderately accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fairly accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Completely accurate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) The outgoing president of our business had a great deal of trust in the ability of the successor to run the business.

(b) *The educational background of the successor was not appropriate for the business.*
Variable name: **Trust in successor's intentions**
Definition used: This is indicated by the degree of confidence that the predecessor has in the integrity of the successor.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Not at all accurate</em></td>
<td><em>Somewhat accurate</em></td>
<td><em>Moderately accurate</em></td>
<td><em>Fairly accurate</em></td>
<td><em>Completely accurate</em></td>
</tr>
</tbody>
</table>

(a) The outgoing president of our business had a great deal of confidence in the integrity of the successor.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Variable name: **Propensity of an incumbent to step aside**
Definition used: This refers to the inclination of an incumbent family member manager to let go of the leadership of a family business to a successor.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Not at all accurate</em></td>
<td><em>Somewhat accurate</em></td>
<td><em>Moderately accurate</em></td>
<td><em>Fairly accurate</em></td>
<td><em>Completely accurate</em></td>
</tr>
</tbody>
</table>

(a) The outgoing president of our business was getting tired of running the business.

(b) There was nothing else that the outgoing president of our business wanted to accomplish with respect to the business.

(c) *The outgoing president of our business did not want to let go of the leadership of the business.*
(d) The outgoing president of our business felt that his or her presence in the business was necessary to keep it running.

(e) The outgoing president of our business felt that other family members should take over the leadership role for the good of the business.

<table>
<thead>
<tr>
<th>Variable name: Presence of an active advisory board.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition used: The presence of an active advisory board is indicated by the existence of an advisory board that meets at regular intervals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the scale shown below, please indicate the accuracy of the following statements during the succession process, by circling the appropriate number in each row.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not at all accurate</td>
<td>Somewhat accurate</td>
<td>Moderately accurate</td>
<td>Fairly accurate</td>
<td>Completely accurate</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>(a) We had a formal board of directors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(b) We had an informal board of directors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Our board of directors did not play an active role in determining the strategic direction of our business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(d) Our board met several times a year.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(e) Family members made major business decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(f) We did not involve outsiders for the most important decisions related to our business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**Variable name: Succession planning**

Definition used: Succession planning refers to explicit planning for the transfer of management control from one generation to the next.

Using the scale shown below, please indicate the **accuracy of the following statements during the succession process**, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all accurate</strong></td>
<td><strong>Somewhat accurate</strong></td>
<td><strong>Moderately accurate</strong></td>
<td><strong>Fairly accurate</strong></td>
<td><strong>Completely accurate</strong></td>
</tr>
<tr>
<td>(a) We did not have any written succession plan for passing on the management control of our business to the successor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(b) We had an unwritten succession plan for passing on the management control of our business to the successor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(c) A list of potential successors was developed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(d) Explicit succession criteria were developed for identifying the best successor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(e) Explicit efforts were made to train potential successors for their future role in the business</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(f) Explicit attention was given to familiarize the potential successors with the business prior to the succession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(g) Explicit attention was given to familiarize the potential successors with the employees of the business prior to the succession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(h) The decision of who the successor would be, was clearly communicated to family members active in the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
(i) The decision of who the successor would be, was clearly communicated to the key employees.

(j) We had a formal plan regarding the roles and responsibilities of the out-going president in the business, once leadership role was passed on to the successor.

(k) We had an unwritten understanding of the roles and responsibilities of the out-going president after the leadership was passed on to the successor.

(l) We developed a financial package for the out-going president’s retirement.

(m) Explicit decisions were made about how ownership of our business would be distributed after the succession.

(n) We had an understanding of what the business strategy would be after leadership was transferred to the successor.

(o) We had an explicit plan for the business after the transfer of leadership to the business.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(l)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(o)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The dependent variable**

**Variable name:** Satisfaction with the succession process.

Definition used: Satisfaction with the succession process refers to the degree of satisfaction of both stakeholders (predecessor and the successor) with the succession process itself.

1. Using the scale shown below, please indicate your extent of satisfaction with the following, by circling the appropriate number in each row.
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not at all satisfied</strong></td>
<td><strong>Satisfied to some extent</strong></td>
<td><strong>Moderately satisfied</strong></td>
<td><strong>Fairly satisfied</strong></td>
<td><strong>Completely satisfied</strong></td>
</tr>
<tr>
<td>(a) The manner in which the succession process was managed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(b) The process used to determine the potential candidates for the future leadership.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(c) The criteria used to select the successor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(d) The process used to train the successor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(e) The process used to familiarize the successor with the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(f) The process used to familiarize the successor with the employees of the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(g) The suitability of the chosen successor for your firm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(h) The manner in which the choice of successor was communicated to family members actively involved in the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(i) The manner in which the choice of successor was communicated to family members not actively involved in the business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(j) The manner in which the choice of successor was communicated to non-family managers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(k) The financial arrangements for the outgoing president of your firm upon his/her retirement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(l) The criteria used for determining the distribution of ownership after the transfer of leadership to the successor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Other variables

Variable name: Ethnic background

Please indicate the ethnic background of your family? 

Variable name: Gender of incumbent and successor

Please circle the gender of the following family members -

Outgoing president of your business  Male  Female
Management successor  Male  Female

If there is more than one successor please indicate the number of male and female successors

_____ Male  _____ Female

Variable name: Generation/s running the business

In the context of your business please indicate the generation the following family members represent -

Outgoing president
1st  2nd  3rd  4th  5th  6th  _____ any other
Management successor
1st  2nd  3rd  4th  5th  6th  _____ any other

Other demographic information asked for:

Firm performance

1. Using the scale provided below, please indicate the following, by circling the appropriate number in each row.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all profitable</td>
<td>Significantly less profitable than our competitors</td>
<td>About the same as our competitors</td>
<td>Higher than our competitors</td>
<td>Significantly higher than our competitors</td>
<td></td>
</tr>
</tbody>
</table>

(a) Current profitability of your business vis-à-vis your direct competitors.  

(b) Profitability of your business vis-à-vis your direct competitors prior to the active involvement of the successor in your business.  

1  2  3  4  5
2. What is the approximate gross revenue of your company in 1995?

- $100,000 to $249,999
- $250,000 to $499,999
- $500,000 to $999,999
- > $50,000,000

Legal status of the company.

What is the legal status of your company?

- Sole Proprietorship
- Partnership
- Private Corporation
- Publicly traded corporation

Respondents position in the company

What is your position in the family firm?

- Outgoing president of our family business
- Past president of our family business
- Successor
- Designated successor
- Potential successor
- Any other family member (please indicate)

Qualifying questions (placed as the first question of the questionnaire)

Has the leadership of the firm been passed on to a successor in the past five years?

Yes

If yes, please indicate the year in which such control was passed on

No

If no, please indicate whether the current leader is likely to retire in the next 5 years

Yes

No

Please note

If your answer to ANY of the above questions was YES, PLEASE GO TO THE NEXT SECTION.

If your answer to BOTH the above questions was NO, PLEASE STOP HERE and RETURN THIS QUESTIONNAIRE IN THE ENCLOSED ENVELOPE. We thank you for your cooperation.
Question related to a request for summary results (placed as a last question).

Would you like to receive a copy of the summary results of this study?
Yes_______  No_______

If you have any comments regarding the questionnaire, or any information that you would like to add regarding the succession process of your company, please provide this in the space below.

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE AND MAKING A VALUABLE CONTRIBUTION TO INCREASING UNDERSTANDING AND KNOWLEDGE OF FAMILY FIRMS.

Please return this questionnaire in the enclosed self-addressed stamped envelope.
APPENDIX B: COVER LETTER FOR THE FIRST MAILING

University of Calgary Logo

Name
Position
Address

Dear (name),

The University of Calgary, in conjunction with the Canadian Association of Family Enterprises, is conducting a major study of the factors that influence the succession process in family firms. In order to understand different viewpoints on the process of family business succession, we have enclosed three copies of a questionnaire. We would appreciate it if the following family members would complete these copies:

Green copy - Outgoing or Retired President of your family business
White copy - Successor or Potential Successor (s)
Yellow copy - Other Family Member Active in your family business

Please complete the copy of the questionnaire that applies to your position, as fully and as accurately as possible. The other copies should be passed on to the appropriate family members. If there is more than one potential successor (or active family member) please feel free to photo-copy the questionnaire or contact us so that we will send you additional copies. If on the other hand, there is no family member in one of the three categories mentioned above, please ignore that questionnaire.

To maintain validity, each questionnaire should be completed independently without consultation among family members and returned separately in the stamped, self-addressed envelopes enclosed. The questionnaire should take approximately 20 minutes to complete.

Your responses will be treated with complete confidentiality. Names of individuals and companies will not appear in the study. Only aggregate data and summary statistics will be reported. Each questionnaire has an ID number so that we may check your name off our mailing list when your questionnaire has been returned. To ensure confidentiality, data will be stored in two separate files. The first will contain company names and ID numbers and will be destroyed upon completion of the study. The second will contain only your responses to the survey and ID number.

If you would like to receive a summary of the results please indicate this on the last page of the questionnaire. If you have any questions regarding the study please call us at either of the numbers provided below or fax us at (403) 282-0095. Thank you for your cooperation and valuable contribution to our study.

Sincerely,

Pramodita Sharma  
Doctoral Candidate  
Faculty of Management  
(403) 220-8164

Dr. James J. Chrisman  
Professor and Co-Director  
Venture Development  
(403) 220-7247
March 21, 1996

Name
Position
Address

Dear (name),

The University of Calgary, in conjunction with the Canadian Association of Family Enterprises, is conducting a major study of the factors that influence the succession process in family firms. In the last week of February, we mailed you three copies of a questionnaire - to be filled by different family members working in your family firm.

If you and other family members in your firm, have already completed and returned the questionnaires to us, please accept our sincere thanks. If not, we request that you do so at your earliest possible convenience. Your response is extremely important for the validity of our study.

If by some chance you did not receive the questionnaires, or they got misplaced, please call us at either of the numbers provided below or fax us at (403) 282-0095 and we will mail you another set of questionnaires today. We thank you for your time and co-operation.

Sincerely,

Pramodita Sharma
Doctoral Candidate
Faculty of Management
(403) 220-8164

Dr. James J. Chrisman
Professor and Co-Director
Venture Development
(403) 220-7247
APPENDIX D: COVER LETTER FOR THE SECOND MAILING

University of Calgary Logo

Name
Position
Address

Dear (name),

The University of Calgary, in conjunction with the Canadian Association of Family Enterprises, is conducting a major study of the factors that influence the succession process in family firms. In the last week of February, we mailed you a set of three questionnaires to be filled out by different family members working in your family firm. As of today, we have not yet received your completed questionnaires. If you have already completed and returned them, please accept our sincere thanks. If not, we request that you do so at the earliest, as your responses are extremely important to the validity of our study. Although we have received a number of responses, we would like to incorporate your views on the succession issue in family firms, in the results of our study.

In the event that the previous set has been misplaced, a replacement set is enclosed. We would appreciate it if the following family members would complete the three enclosed copies of the questionnaire:

- Green copy: Outgoing or Retired President of your family business
- White copy: Successor or Potential Successor (s)
- Yellow copy: Other Family Member Active in your family business

Please complete the copy of the questionnaire that applies to your position, as fully and as accurately as possible. The other copies should be passed on to the appropriate family members. If there is more than one potential successor (or active family member) please feel free to photo-copy the questionnaire or contact us so that we will send you additional copies. To maintain validity, each questionnaire should be completed independently without consultation among family members and returned separately in the stamped, self-addressed envelopes enclosed. The questionnaire should take approximately 20 minutes to complete.

Your responses will be treated with complete confidentiality. Names of individuals and companies will not appear in the study. Only aggregate data and summary statistics will be reported. Each questionnaire has an ID number so that we may check your name off our mailing list when your questionnaire has been returned.

If you would like to receive a summary of the results please indicate this on the last page of the questionnaire. If you have any questions regarding the study please call us at either of the numbers provided below or fax us at (403) 282-0095. Thank you for your cooperation and valuable contribution to our study.

Sincerely,

Pramodita Sharma
Doctoral Candidate
Faculty of Management
(403) 220-8164

Dr. James J. Chrisman
Professor and Co-Director
Venture Development
(403) 220-7247
Appendix E: Copy of summary results sent to the respondents

Summary results of the survey on ‘Factors influencing the succession process in family firms’ conducted jointly by The University of Calgary and The Canadian Association of Family Enterprise (CAFE)

Dear CAFE member (name),

You may recall completing and sending back a questionnaire sent to you around March 1996. We have now completed our study and would like to present you with a brief description of the results.

**Aim of the study:** This is the FIRST large scale study in Canada aimed towards gaining an understanding of the factors that influence the satisfaction of various family members with the succession process in family firms. The results presented here are based on 118 responses from the presidents, 142 from the successors, and 50 from other family members active in 177 CAFE member firms.

**The research model:** Based on the literature on succession in family firms, and the suggestions of leading experts in this area, we hypothesized that the satisfaction of family members with the succession process would be directly influenced by the extent of:

1. Succession planning undertaken.
2. Propensity of president to step aside,
3. Propensity of successor to take over,
4. Agreement among family members to continue the business, and
5. Mutual acceptance among family members regarding their individual roles in the business.

**Key findings:**
1. Different perceptions of family members: The most surprising and interesting finding of our study was the difference in the perceptions of family members. We asked over 90 questions to three distinct categories of family members - presidents, successors, and other family members actively involved in the business. Specifically, the perceptions of presidents (or outgoing family members) varied considerably from those of successors and other family members. The following key differences in perceptions were observed:
   i. Presidents experienced a higher degree of satisfaction with the succession process,
   ii. Presidents reported a higher degree of succession planning,
   iii. Presidents reported having a higher extent of trust in the abilities and intentions of successors than was recognized by the successors themselves or by other family members actively involved in the business.
   iv. Presidents reported a higher propensity to retire than was perceived by successors and other family members,
   v. Presidents perceived greater harmony amongst family members,
   vi. Presidents perceived a higher degree of acceptance among family members regarding their roles in the business. However, this acceptance was not reported by successors and other family members.
The above differences suggest that although family members may be working very closely together for extended periods of time, their perceptions may vary considerably along some very important dimensions. Based on this finding we suggest that family members should recognize the possibility of differences in perceptions in their own firm and develop mechanisms for communicating and reconciling those differences.

2. Factors affecting the satisfaction with the succession process. The following table indicates the factors that influence satisfaction for presidents, successors and other family members:

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>PRESIDENTS</th>
<th>SUCCESSORS AND OTHER FAMILY MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Succession planning</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>2. Propensity of president to step aside</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>3. Propensity of successor to take over</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>4. Agreement among family members to continue the business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mutual acceptance among family members regarding their individual roles in the business</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

OTHER IMPORTANT FACTORS:
- a. Trust that president has in successors abilities and intentions
- b. Extent of perceived family harmony

3. SUCCESSION PLANNING is positively influenced by:
   i. The propensity of president to hand over the leadership of their firm to other family members, and
   ii. The extent to which he/she has in the abilities and intentions of a successor.

Interestingly, the presence of neither a formal nor an informal active advisory board had an influence on the extent of succession planning undertaken in family firms.

4. PROPENSITY OF PRESIDENT TO HAND OVER THE LEADERSHIP of the business to a successor is positively influenced by:
   Trust that the president has in the abilities and intentions of a successor.

5. PROPENSITY OF SUCCESSORS TO TAKE OVER THE BUSINESS is positively influenced by:
   i. Extent to which the career interests of successors align with the business, and
   ii. Trust that the president has in the abilities and intentions of a successor.

6. MUTUAL ACCEPTANCE AMONG FAMILY MEMBERS REGARDING THEIR ROLES IN BUSINESS is positively influenced by:
   i. The extent of perceived family harmony present.
KEY SUGGESTIONS:

1. For presidents who plan to transfer the management control of their businesses to other family members in the next few years:

   a. Recognize that successors and other family members outside your family may have different perceptions regarding the future of the business and the roles and responsibilities of future family members. Make sure these major roles and responsibilities for all family members involved in the business are clearly articulated.

2. Succession planning is important for the satisfaction of all family members with the succession process.

3. Find mechanisms to convey the current state of your business and intentions of successors.

4. Succession planning is an important step to develop and maintain the succession planning process.

5. Make sure that all family members, including those outside your family, are aware of and understand the career interests and needs of the successors, and get involved in which family members. Develop means outside the business may prove to be helpful.

6. Develop clear roles and responsibilities for all family members involved in the business. Make sure that career needs can be fulfilled with opportunities within the business.

7. As you pass the business down to the next generation, you need to understand how this trust can be developed or lost.

8. Presidents are more likely to undergo succession planning if they have trust in the abilities and intentions of future family members. Presidents should make an attempt to convey their career interests to the presidents and all family members.

9. Presidents are more likely to undergo succession planning if they have trust in the abilities and intentions of future family members.

10. President should find mechanisms in which these career needs could be fulfilled with opportunities in the future.

11. Help the president to develop clear roles and responsibilities for all family members involved in the business.
We hope that you find these results interesting and that they help you to better manage succession process in your firm. Please accept our sincere gratitude for helping make our study a success. If you would like any further clarifications or would like to make any comments please contact us at the addresses provided below.

Sincerely,

Pramodita Sharma  
School of Business Administration  
Faculty of Management  
Dalhousie University  
Halifax, NS  
B3H 3J5  
(902) 494-6742

James J. Chrisman  
Associate Dean (Research)  
Faculty of Management  
University of Calgary  
Calgary, AB  
T2N 1N4  
(403) 220 7247
Appendix F: ADDITIONAL ANALYSES CONDUCTED

Section 1: Scale reliability tests for the four dimensions of 'succession planning'

Table F1a. Indicators for the first factor of 'Succession Planning' - Plan for future of business and role of past president: Results of scale reliability tests.
Table F1b. Indicators for the second factor of 'Succession Planning' - Successor's training: Results of scale reliability tests.
Table F1c. Indicators for the third factor of 'Succession Planning' - Criteria for successor's selection: Results of scale reliability tests.
Table F1d. Indicators for the first factor of 'Succession Planning' - Communication of successor's appointment: Results of scale reliability tests.

Section 2: Regressions for responses of successors only (excluding responses of other family members)

Table F2a. Regression results of the mediating variables on the satisfaction with the succession process (SwSP - dependent variable).
Table F2a.i. Regression results of the mediating variables on the FIRST DIMENSION of the satisfaction with the succession process (SwSP-a).
Table F2a.ii. Regression results of the mediating variables on the SECOND DIMENSION of the satisfaction with the succession process (SwSP-b).
Table F2b. Regression results of the perceived family harmony (PFH) on mutual acceptance of individual roles (AIR - dependent variable).
Table F2c. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on extent of commitment of presidents to continue the business (ACBa - dependent variable).
Table F2d. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on agreement of family members to continue the business (ACBb - dependent variable).
Table F2e. Regression results of the payoffs from business (PFB), career interests of successors (CI), and acceptance on individual roles (AIR) on the propensity of successor to take over (PSTO - dependent variable).
Table F2f. Regression results of the trust in successor capabilities and intentions (TSAI), and incumbent's interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable).
Table F2g. Regression results of the trust in successor capabilities (TSA) and intentions (TSI), and incumbent's interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable).
Table F2h. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on 'succession planning' (SP - dependent variable).
Table F2i. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE FIRST DIMENSION OF SUCCESSION PLANNING: Plan for future of business and role of past president.

Table F2j. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE SECOND DIMENSION OF SUCCESSION PLANNING: Successor’s training.

Table F2k. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE THIRD DIMENSION OF SUCCESSION PLANNING: Criteria for successor’s selection.

Table F2l. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE FOURTH DIMENSION OF SUCCESSION PLANNING: Communication of successor’s appointment.

Table F2m. Regression results of the six antecedent variables on satisfaction with succession process (SwSP - dependent variable).

Table F2n. Regression results of the six antecedent variables on satisfaction with succession process (SwSP - dependent variable), using two dimensions of ‘trust in successors’ abilities and intentions’.

Table F2o. Regression results of the mediating variables (using four dimensions of succession planning) on the satisfaction with the succession process (SwSP).

Section 3: Regression results using the two dimensions of the variable—‘trust in successors’ capabilities and intentions’

Table F3a. Regression results of the trust in successor capabilities (TSA) and intentions (TSI), and incumbent’s interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable).

Section 4: Regression results using the two dimensions of the dependent variable—satisfaction with the succession process (SwSP)

Table F4a. Regression results of the mediating variables on the FIRST DIMENSION of the satisfaction with the succession process (SwSP-a).

Table F4b. Regression results of the mediating variables on the SECOND DIMENSION of the satisfaction with the succession process (SwSP-b).
Section 5: Regression results using the four dimensions of the variable - succession planning

Table F5a. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on THE FIRST DIMENSION OF SUCCESSION PLANNING: Plan for future of business and role of past president.

Table F5b. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on THE SECOND DIMENSION OF SUCCESSION PLANNING: Criteria for successor's selection.

Table F5c. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on THE THIRD DIMENSION OF SUCCESSION PLANNING: Successor's training.

Table F5d. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on THE FOURTH DIMENSION OF SUCCESSION PLANNING: Communication of successor's appointment.

Table F5e. Comparison of the regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) for the four dimensions of SUCCESSION PLANNING.

Section 6: Regression results using of the mediating variables (using four dimensions of succession planning) on the two dimensions of the dependent variable - satisfaction with the succession process (SwSP)

Table F6a. Regression results of the mediating variables (using four dimensions of succession planning) on the FIRST DIMENSION of the satisfaction with the succession process (SwSP-a).

Table F6b. Regression results of the mediating variables (using four dimensions of succession planning) on the SECOND DIMENSION of the satisfaction with the succession process (SwSP-b).

Section 7: Results of testing for RESPONDENT bias in the constructed scales using MANOVAs - for the firms with multiple responses

Table F7a. Results of testing for RESPONDENT bias in the constructed scales using MANOVAs - for the firms with multiple responses.
SECTION 1: SCALE RELIABILITY TESTS FOR THE FOUR DIMENSIONS OF ‘SUCCESSION PLANNING’

Table F1a. Indicators for the first factor of ‘Succession Planning’—Plan for future of business and role of past president: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.7612</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items:</strong></td>
<td></td>
</tr>
<tr>
<td>1. We had a formal plan regarding the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td>0.7139</td>
</tr>
<tr>
<td>2. We had an unwritten understanding of the roles and responsibilities of the out-going president in the business once leadership was transferred to the successor.</td>
<td>0.7388</td>
</tr>
<tr>
<td>3. A financial package was developed for the out-going president’s retirement.</td>
<td>0.7245</td>
</tr>
<tr>
<td>4. Explicit decisions were made about how ownership of our business would be distributed after the successor takes over.</td>
<td>0.7204</td>
</tr>
<tr>
<td>5. We had an understanding of what the business strategy would be after leadership was transferred to the successor.</td>
<td>0.7130</td>
</tr>
<tr>
<td>6. We had an explicit plan for the business after the transfer of leadership to the successor.</td>
<td>0.7020</td>
</tr>
<tr>
<td>7. We did not have any written succession plan for transferring the management control of our business to the successor.</td>
<td>0.7503</td>
</tr>
<tr>
<td>8. We had an unwritten succession plan for transferring the management control of our business to the successor.</td>
<td><strong>0.7918</strong></td>
</tr>
</tbody>
</table>

Table F1b. Indicators for the second factor of ‘Succession Planning’—Successor’s training: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.8643</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Explicit efforts were made to train potential successors for their future role in the business.</td>
<td><strong>0.9060</strong></td>
</tr>
<tr>
<td>2. Explicit attention was given to familiarize the potential successors with the business prior to the succession.</td>
<td><strong>0.8416</strong></td>
</tr>
<tr>
<td>3. Explicit attention was given to familiarize the potential successors with the employees of the business prior to the succession.</td>
<td><strong>0.7545</strong></td>
</tr>
</tbody>
</table>
Table F1c. Indicators for the third factor of ‘Succession Planning’—Criteria for successor’s selection: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.6538</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items:</td>
<td></td>
</tr>
<tr>
<td>1. A list of potential successors was developed.</td>
<td></td>
</tr>
<tr>
<td>2. Explicit succession criteria were developed for identifying the best successor.</td>
<td></td>
</tr>
<tr>
<td>Alpha if item deleted</td>
<td>-</td>
</tr>
</tbody>
</table>

Table F1d. Indicators for the first factor of ‘Succession Planning’—Communication of successor’s appointment: Results of scale reliability tests

<table>
<thead>
<tr>
<th>CRONBACH’S ALPHA</th>
<th>0.8497</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items:</td>
<td></td>
</tr>
<tr>
<td>1. The decision of who the successor would be, was clearly communicated to family members active in the business.</td>
<td></td>
</tr>
<tr>
<td>2. The decision of who the successor would be, was clearly communicated to key non-family managers.</td>
<td></td>
</tr>
<tr>
<td>Alpha if item deleted</td>
<td>-</td>
</tr>
</tbody>
</table>

A comparison of the alpha values of the four dimensions of succession planning with the alpha values of Succession Planning using all 15 indicators: Although the above scale reliability tests suggest strong alpha values (0.7612, 0.8643, 0.6538, 0.8497) for the indicators in the four dimensions (or factors) of ‘Succession Planning’, only one of the four values exceeds the alpha value of 0.8594 achieved by using all the 15 indicators.
SECTION 2: REGRESSIONS FOR RESPONSES FROM SUCCESSORS ONLY (EXCLUDING RESPONSES OF OTHER FAMILY MEMBERS)

Table F2a. Regression results of the mediating variables on the satisfaction with the succession process (SwSP - dependent variable).

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd. b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p tailed</th>
<th>one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR (H1)</td>
<td>0.4725 (0.1203)</td>
<td>0.3199</td>
<td>3.928</td>
<td>0.0002***</td>
<td>1.564</td>
<td></td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>-0.3888 (0.3584)</td>
<td>-0.0828</td>
<td>-1.085</td>
<td>0.2810</td>
<td>1.373</td>
<td></td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>0.2408 (0.2741)</td>
<td>-0.0632</td>
<td>-0.878</td>
<td>0.3823</td>
<td>1.220</td>
<td></td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>0.3235 (0.4235)</td>
<td>0.0531</td>
<td>0.764</td>
<td>0.4471</td>
<td>1.139</td>
<td></td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.8632 (0.2985)</td>
<td>0.2038</td>
<td>2.891</td>
<td>0.0049**</td>
<td>1.172</td>
<td></td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.4596 (0.0788)</td>
<td>0.4972</td>
<td>5.832</td>
<td>0.0000***</td>
<td>1.713</td>
<td></td>
</tr>
<tr>
<td>CONSTANT</td>
<td>8.9294 (4.9737)</td>
<td>1.795</td>
<td>0.0761</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² 0.6351
Adj. R² 0.6097
F.stat. 24.9503
Prob. F 0.0000***
N 93

* significant at 0.05 level.  ** significant at 0.01 level.  *** significant at 0.001 level
ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP Satisfaction with the succession process

A comparison of the above results of the Successors-only data set with the results of the 'Successors and other family members’ data set: While the variables found significant in
both cases are the same, the overall $R^2$ value for ‘successors and other family members’ combined data set is higher than that of the successors’ data set alone (0.6580 as compared to 0.6097).

Table F2a.i. Regression results of the mediating variables on the FIRST DIMENSION of the satisfaction with the succession process (SwSP-a)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd. b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR (H1)</td>
<td>0.3572 (0.1120)</td>
<td>0.2647</td>
<td>3.188</td>
<td>0.0020 **</td>
<td>1.499</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>-0.4116 (0.3461)</td>
<td>-0.0949</td>
<td>-1.189</td>
<td>0.2375</td>
<td>1.385</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>-0.3145 (0.2692)</td>
<td>-0.0897</td>
<td>-1.168</td>
<td>0.2459</td>
<td>1.284</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>0.5433 (0.4172)</td>
<td>0.0943</td>
<td>1.302</td>
<td>0.1962</td>
<td>1.142</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.8672 (0.2804)</td>
<td>0.2199</td>
<td>3.092</td>
<td>0.0026 **</td>
<td>1.099</td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.4371 (0.0763)</td>
<td>0.5006</td>
<td>5.726</td>
<td>0.0000 ***</td>
<td>1.662</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>4.6423 (4.9179)</td>
<td>0.944</td>
<td></td>
<td>0.3477</td>
<td></td>
</tr>
</tbody>
</table>

R² 0.5861
Adj. R² 0.5585
F.stat. 21.2416
Prob. F 0.0000***
N 97

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP-a The FIRST DIMENSION OF Satisfaction with the succession process

No significant difference was found between the above results using the first dimension (10 indicators) of the Satisfaction with Succession Process with the results when all 12
indicators were used for this variable (Table F2a), and similar regression results of ‘successors and other family members’ data set’ (Table F3a).

Table F2a.ii. Regression results of the mediating variables on the SECOND DIMENSION of the satisfaction with the succession process: Financial and ownership distribution after transfer of leadership (SwSP-b)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR (H1)</td>
<td>0.0290 (0.0313)</td>
<td>0.0971</td>
<td>0.928</td>
<td>0.3556</td>
<td>1.588</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>0.0284 (0.0957)</td>
<td>0.0284</td>
<td>0.297</td>
<td>0.7672</td>
<td>1.324</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>-0.0053 (0.0742)</td>
<td>-0.0065</td>
<td>-0.072</td>
<td>0.9430</td>
<td>1.215</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>-0.1669 (0.1079)</td>
<td>-0.1364</td>
<td>-1.547</td>
<td>0.1252</td>
<td>1.129</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.1331 (0.0764)</td>
<td>0.1520</td>
<td>1.743</td>
<td>0.0846</td>
<td>1.103</td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.0927 (0.02111)</td>
<td>0.4794</td>
<td>4.395</td>
<td>0.0000***</td>
<td>1.726</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.9595 (1.3098)</td>
<td>2.259</td>
<td></td>
<td>0.0261*</td>
<td></td>
</tr>
</tbody>
</table>

R² = 0.3451  Adj. R² = 0.3037  F.stat. = 8.3429  Prob. F = 0.0000***  N = 102

* significant at 0.05 level.  ** significant at 0.01 level.  *** significant at 0.001 level

ACBa Extent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP-b Second dimension of Satisfaction with the succession process: Financial and ownership distribution after transfer of leadership.

No significant differences were found between the above results using the second dimension (2 indicators) of the Satisfaction with Succession Process with the results when
all 12 indicators were used for this variable (Table F2a), and similar regression results of ‘successors and other family members’ data set’ (Table F3b): No significant differences are found amongst these results and either the results using all 12 indicators for the satisfaction with succession process, or the results using the combined data of successors and other family members.

Table F2b. Regression results of the perceived family harmony (PFH) on mutual acceptance of individual roles (AIR - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH (H1a)</td>
<td>1.2101</td>
<td>0.8314</td>
<td>16.798</td>
<td>0.0000***</td>
<td>1.000</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>7.8528</td>
<td>5.3498</td>
<td></td>
<td>0.0000***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td>0.6913</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td></td>
<td></td>
<td></td>
<td>0.6889</td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td></td>
<td></td>
<td></td>
<td>282.1864</td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td></td>
<td></td>
<td></td>
<td>0.0000***</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td>128</td>
<td></td>
</tr>
</tbody>
</table>

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level
AIR - Mutual acceptance on individual roles
PFH - Perceived family harmony

A comparison of the above results of the Successors-only data set with the results of the ‘Successors and other family members’ data set: No significant difference is observed either in terms of the significance of variables or the overall R² values (0.6889 and 0.6991), between the results of these two analyses.
Table F2c. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on extent of commitment of presidents to continue the business (ACBa - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB (H2a)</td>
<td>0.3776 (-0.0759)</td>
<td>0.4113</td>
<td>4.975</td>
<td>0.0000***</td>
<td>1.033</td>
</tr>
<tr>
<td>PFH (H2b)</td>
<td>0.0213 (0.0337)</td>
<td>0.0522</td>
<td>0.632</td>
<td>0.5286</td>
<td>1.033</td>
</tr>
<tr>
<td>CONS.</td>
<td>3.0463 (0.9765)</td>
<td>3.120</td>
<td></td>
<td>0.0023**</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.1796</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.1663</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td>13.5697</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0000***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A comparison of the above results of the Successors only data set with the results of the ‘Successors and other family members’ data set: No significant difference is observed either in terms of the significance of variables or the overall R² values (0.1663 and 0.1710), between the results of these two analyses.

Table F2d. Regression results of the perceived family harmony (PFH) and payoffs from business (PFB) on agreement of family members to continue the business (ACBb - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB (H2a)</td>
<td>0.2925 (0.0930)</td>
<td>0.2710</td>
<td>3.144</td>
<td>0.0021**</td>
<td>1.029</td>
</tr>
<tr>
<td>PFH (H2b)</td>
<td>-0.0759 (0.0425)</td>
<td>-0.1539</td>
<td>-1.786</td>
<td>0.0765</td>
<td>1.029</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>9.9674 (1.2162)</td>
<td>6.459</td>
<td></td>
<td>0.0040**</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.0831</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.0687</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.stat.</td>
<td>5.7558</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0040**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A comparison of the above results of the Successors-only data set with the results of the 'Successors and other family members' data set: No significant difference is observed either in terms of the significance of variables or the overall $R^2$ values (0.0687 and 0.0669), between the results of these two analyses.

Table F2e. Regression results of the payoffs from business (PFB), career interests of successors (CI), and acceptance on individual roles (AIR) on the propensity of successor to take over (PSTO - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB (H3a)</td>
<td>-0.0242</td>
<td>-0.0346</td>
<td>-0.416</td>
<td>0.6783</td>
<td>1.104</td>
</tr>
<tr>
<td></td>
<td>(0.0582)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIR (H3b)</td>
<td>-0.0107</td>
<td>-0.0464</td>
<td>-0.554</td>
<td>0.5805</td>
<td>1.123</td>
</tr>
<tr>
<td></td>
<td>(0.0193)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI (H3c)</td>
<td>0.3806</td>
<td>0.5304</td>
<td>6.294</td>
<td>0.0000***</td>
<td>1.136</td>
</tr>
<tr>
<td></td>
<td>(0.0605)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSTANT</td>
<td>4.2366</td>
<td>1.376</td>
<td>0.0000***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.8725)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2$ | 0.2620
Adj. $R^2$ | 0.2432
F.stat. | 13.9642
Prob. F | 0.0000***
N | 122

* significant at 0.05 level. ** significant at 0.01 level *** significant at 0.001 level

AIR Mutual acceptance on individual roles
CI Career interests
PFB Payoffs from business
PSTO Propensity of successor to take over
A comparison of the above results of the Successors-only data set with the results of the 'Successors and other family members' data set: No significant difference is observed either in terms of the significance of variables or the overall $R^2$ values (0.2432 and 0.2203), between the results of these two analyses.

Table F2f. Regression results of the trust in successor capabilities and intentions (TSAI), and incumbent’s interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd. b (SE)</th>
<th>Beta</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSAI (H4a)</td>
<td>0.2280</td>
<td>0.2684</td>
<td>3.335</td>
<td>0.0011**</td>
<td>1.001</td>
</tr>
<tr>
<td>IOB (H4b)</td>
<td>0.1968</td>
<td>0.2386</td>
<td>2.965</td>
<td>0.0036**</td>
<td>1.001</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>0.9986</td>
<td>0.842</td>
<td></td>
<td>0.4013</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>Adj. R²</th>
<th>F.stat.</th>
<th>Prob. F</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1326</td>
<td>0.1196</td>
<td>10.2386</td>
<td>0.0001***</td>
<td>137</td>
</tr>
</tbody>
</table>

* significant at 0.05 level. ** significant at 0.01 level. ***significant at 0.001 level

IOB Interests of incumbent outside the business
PPR Propensity of incumbent president to step aside
TSAI Trust in successors’ abilities and intentions
TSA Trust in successors’ abilities
TSI Trust in successors’ intentions

A comparison of the above results of the Successors-only data set with the results of the 'Successors and other family members' data set: No significant difference is observed either in terms of the significance of variables or the overall $R^2$ values (0.1196 in both cases), between the results of these two analyses.
Table F2g. Regression results of the trust in successors' capabilities (TSA) and intentions (TSI), and incumbents interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSA (H4a.i)</td>
<td>0.1919 &lt;br&gt;(0.0835)</td>
<td>0.1994</td>
<td>2.298</td>
<td>0.0231*</td>
<td>1.159</td>
</tr>
<tr>
<td>TSI (H4a.ii)</td>
<td>0.4498 &lt;br&gt;(0.3009)</td>
<td>0.1306</td>
<td>1.495</td>
<td>0.1373</td>
<td>1.175</td>
</tr>
<tr>
<td>IOB (H4b)</td>
<td>0.1907 &lt;br&gt;(0.0670)</td>
<td>0.2312</td>
<td>2.847</td>
<td>0.0051**</td>
<td>1.016</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>0.4601 &lt;br&gt;(1.3847)</td>
<td>0.332</td>
<td>0.7402</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²          | 0.1363   |
Adj. R²     | 0.1168   |
F.stat.     | 6.9950   |
Prob. F     | 0.0002***|
N           | 137      |

A comparison of the above results separating the two dimensions of 'Trust in successors' abilities and intentions' with results of Table 6.21 when the variable is treated as having one dimension only, and similar analysis conducted on the other two data sets (Table F4a):

Some interesting results are revealed by comparing the results presented in above tables and Table 6.21. 'Trust in successors' abilities and intentions' (TSAI) is found to be significantly associated with the 'Propensity of incumbents to step aside' (PPR) for all data sets (tables 6.21 and F2f). However, when the two dimensions of the variable are split, only one dimension - 'trust in successors abilities' (TSA) has a positive influence on PPR for successors data set (Table F2g). Surprisingly, none of the individual dimensions is found to be significantly associated with the PPR for presidents or successors and other family members (Table F4a). This suggests that while successors perceive that there is a higher extent of propensity of
presidents to step aside when the presidents have trust in their (the successors) abilities, this relationship is not perceived either by the presidents themselves or other family members actively involved in the business. Although there was a significant difference in the mean for the variable ‘trust in successors’ abilities and intentions’ among the three respondent categories (means are: P - 16.67; S - 15.61; FM - 15.64), and between presidents (mean 7.23), and successors and other family members (mean 5.99) data sets for the ‘propensity of presidents to step aside’, there is no clear explanation for this finding.

Table F2h. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on ‘succession planning’ (SP - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd. b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR (H5a)</td>
<td>1.0343 (0.4239)</td>
<td>0.2304</td>
<td>2.440</td>
<td>0.0164*</td>
<td>1.127</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.3901 (0.2790)</td>
<td>0.1288</td>
<td>1.398</td>
<td>0.1651</td>
<td>1.073</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>-0.0499 (0.5092)</td>
<td>-0.0388</td>
<td>-0.098</td>
<td>0.9221</td>
<td>1.056</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>1.6193 (0.4997)</td>
<td>0.3150</td>
<td>3.240</td>
<td>0.0016**</td>
<td>1.195</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>-0.1929 (0.3958)</td>
<td>-0.0469</td>
<td>-0.487</td>
<td>0.6270</td>
<td>1.172</td>
</tr>
<tr>
<td>Constant</td>
<td>22.4073 (6.1304)</td>
<td>3.655</td>
<td>4.0469</td>
<td>0.0004***</td>
<td></td>
</tr>
</tbody>
</table>

R² = 0.1930
Adj. R² = 0.1535
F.stat. = 4.8797
Prob. F = 0.0005***
N = 108

* significant at 0.05 level. ** significant at 0.01 level *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBaExtent of Presidents commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
A comparison of the above results of the Successors only data set with the results of the ‘Successors and other family members’ data set: No significant difference is observed either in terms of the significance of variables or the overall \( R^2 \) values (0.1535 and 0.1491), between the results of these two analyses.

Table F2i. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE FIRST DIMENSION OF SUCCESSION PLANNING: Plan for future of business and role of past president

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR (H5a)</td>
<td>0.9503</td>
<td>0.3412</td>
<td>3.809</td>
<td>0.0002***</td>
<td>1.077</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.2743</td>
<td>0.1447</td>
<td>1.627</td>
<td>0.1067</td>
<td>1.061</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.3185</td>
<td>0.0697</td>
<td>0.792</td>
<td>0.4301</td>
<td>1.038</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.4967</td>
<td>0.1547</td>
<td>1.664</td>
<td>0.0991</td>
<td>1.160</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.1884</td>
<td>0.0731</td>
<td>0.796</td>
<td>0.4276</td>
<td>1.130</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>6.8597</td>
<td>1.881</td>
<td>0.0627</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| R²            | 0.1950     |        |         |             |      |
| Adj. R²       | 0.1577     |        |         |             |      |
| F.stat.       | 5.2316     |        |         |             |      |
| Prob. F       | 0.0002***  |        |         |             |      |
| N             | 114        |        |         |             |      |

* significant at 0.05 level   ** significant at 0.01 level   *** significant at 0.001 level

IVs:
- PPR: Propensity of incumbent president to step aside
- AABa: Presence of an active advisory board
- AABb: Extent of Presidents' commitment to continue the business
- ACBb: Agreement of family members to continue business
- ACBa: Extent of Presidents' commitment to continue the business
- CONSTANT: Constant

Significant at 0.05 level: *
Significant at 0.01 level: **
Significant at 0.001 level: ***

AABa: A formal active board of directors
AABb: An informal board of directors
ACBa: Extent of Presidents' commitment to continue the business
ACBb: Agreement of family members to continue business
PPR: Propensity of incumbent president to step aside
SP: Succession planning
Table F2j. Regression results of the ‘propensity of president to step aside’ (PPR), 'presence of an active advisory board' (AB), and ‘agreement to continue the business’ (ACB) on THE SECOND DIMENSION OF SUCCESSION PLANNING: Criteria for successor’s selection

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR (H5a)</td>
<td>-0.0150</td>
<td>-0.0179</td>
<td>-0.186</td>
<td>0.8524</td>
<td>1.086</td>
</tr>
<tr>
<td></td>
<td>(0.0807)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.1249</td>
<td>0.2187</td>
<td>2.284</td>
<td>0.0243*</td>
<td>1.075</td>
</tr>
<tr>
<td></td>
<td>(0.0547)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>-0.1286</td>
<td>-0.0935</td>
<td>-0.988</td>
<td>0.3252</td>
<td>1.050</td>
</tr>
<tr>
<td></td>
<td>(0.1301)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.0258</td>
<td>0.0266</td>
<td>0.263</td>
<td>0.7934</td>
<td>1.206</td>
</tr>
<tr>
<td></td>
<td>(0.0982)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.0177</td>
<td>0.0229</td>
<td>0.230</td>
<td>0.8186</td>
<td>1.169</td>
</tr>
<tr>
<td></td>
<td>(0.0771)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.4536</td>
<td>2.114</td>
<td></td>
<td>0.0368*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.1606)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²           | 0.0535
Adj. R²      | 0.0108
F.stat.      | 1.2543
Prob. F      | 0.2889
N             | 117

* significant at 0.05 level
** significant at 0.01 level
*** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of President’s commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
Table F2k. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE THIRD DIMENSION OF SUCCESSION PLANNING: Successor’s training

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR (H5a)</td>
<td>0.1463 (0.1398)</td>
<td>0.0973</td>
<td>1.042</td>
<td>0.2974</td>
<td>1.068</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>-0.0544 (0.0953)</td>
<td>-0.0531</td>
<td>-0.570</td>
<td>0.5697</td>
<td>1.074</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.2295 (0.2267)</td>
<td>0.0934</td>
<td>1.012</td>
<td>0.3137</td>
<td>1.054</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.4296 (0.1674)</td>
<td>0.2491</td>
<td>2.567</td>
<td>0.0116*</td>
<td>1.165</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.0292 (0.1341)</td>
<td>0.0212</td>
<td>0.218</td>
<td>0.8278</td>
<td>1.152</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>5.3437 (2.0309)</td>
<td></td>
<td>2.631</td>
<td>0.0097**</td>
<td></td>
</tr>
</tbody>
</table>

R²: 0.0942
Adj. R²: 0.0538
F.stat.: 2.3310
Prob. F: 0.0469
N: 118

* significant at 0.05 level  ** significant at 0.01 level  *** significant at 0.001 level

AABa  A formal active board of directors
AABb  An informal board of directors
ACBa  Extent of Presidents commitment to continue the business
ACBb  Agreement of family members to continue business
PPR   Propensity of incumbent president to step aside
SP    Succession planning
Table F2l. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE FOURTH DIMENSION OF SUCCESSION PLANNING: Communication of successor’s appointment

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPR (H5a)</td>
<td>0.2209</td>
<td>0.1851</td>
<td>2.000</td>
<td>0.0481*</td>
<td>1.080</td>
</tr>
<tr>
<td>(H5b.i)</td>
<td>0.0782</td>
<td>0.0973</td>
<td>1.059</td>
<td>0.2919</td>
<td>1.064</td>
</tr>
<tr>
<td>(H5b.ii)</td>
<td>-0.1042</td>
<td>-0.0534</td>
<td>-0.586</td>
<td>0.5589</td>
<td>1.046</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.2898</td>
<td>0.2151</td>
<td>2.239</td>
<td>0.0272*</td>
<td>1.162</td>
</tr>
<tr>
<td>(H5c.ii)</td>
<td>-0.2983</td>
<td>-0.2726</td>
<td>-2.827</td>
<td>0.0056**</td>
<td>1.172</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>6.3870</td>
<td>3.986</td>
<td></td>
<td>0.0001***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.6023)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²: 0.1505
Adj. R²: 0.1108
F.stat.: 3.7914
Prob. F: 0.0034**
N: 113

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

A comparison of the regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) for the four dimensions of SUCCESSION PLANNING (Tables E2i to E2l) with similar results for the successors and other family members data set (Table F4e): Significant differences in results were found between the two data sets: successors only, and successors and other family members combined, in case of only one dimension of
succession planning - the fourth dimension. While in the combined data set only one variabe - Propensity of incumbent to step aside (PPR) was found to be significantly associated with the ‘communication of successor’s appointment’ (SP-d), in the successors-only data set two variables: ‘President’s commitment to continue the business’ (ACB-a), and ‘Commitment of other family members to continue the business’ (ACB-b) were found to be positively associated with SP-d.

Table F2m. Regression results of the six antecedent variables on satisfaction with succession process (SwSP - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>1.1533 (0.1736)</td>
<td>0.5862</td>
<td>6.643</td>
<td>0.0000***</td>
<td>1.268</td>
</tr>
<tr>
<td>PFB</td>
<td>0.2605 (0.3485)</td>
<td>0.0628</td>
<td>0.747</td>
<td>0.4568</td>
<td>1.148</td>
</tr>
<tr>
<td>CI</td>
<td>0.2626 (0.3717)</td>
<td>0.0605</td>
<td>0.706</td>
<td>0.4818</td>
<td>1.194</td>
</tr>
<tr>
<td>TSAI</td>
<td>0.7926 (0.2948)</td>
<td>0.2242</td>
<td>2.689</td>
<td>0.0086**</td>
<td>1.131</td>
</tr>
<tr>
<td>IOB</td>
<td>-0.2714 (0.2971)</td>
<td>-0.0781</td>
<td>-0.913</td>
<td>0.3635</td>
<td>1.190</td>
</tr>
<tr>
<td>AAB-a</td>
<td>-0.0655 (0.2358)</td>
<td>-0.0228</td>
<td>-0.278</td>
<td>0.7817</td>
<td>1.094</td>
</tr>
<tr>
<td>AAB-b</td>
<td>0.7362 (0.5651)</td>
<td>0.1061</td>
<td>1.303</td>
<td>0.1962</td>
<td>1.081</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>5.0915 (6.3909)</td>
<td>0.797</td>
<td>0.4278</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = 0.4717
Adj. R² = 0.4287
F.stat. = 10.9683
Prob. F = 0.0000***
N = 94

* significant at 0.05 level.  ** significant at 0.01 level  *** significant at 0.001 level

AABa A formal active board of directors  AABb An informal board of directors
CI Career interests  IOB Interests of incumbent outside the business
PFB Payoffs from business  PFH Perceived family harmony
SwSP Satisfaction with the succession process  TSAI Trust in successors’ abilities and intentions
A comparison of the above results of the Successors-only data set with the results of the ‘Successors and other family members’ data set: In this case, no significant difference is observed in terms of the significance of variables. However, some difference is found in the overall $R^2$ values in the two data sets (0.4287 for successors only and 0.4701 for successors and other family members).

Table F2n. Regression results of the six antecedent variables on satisfaction with succession process (SwSP - dependent variable), using two dimensions of ‘trust in successors’ abilities and intentions’

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd. b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFH</td>
<td>1.0979 (0.1779)</td>
<td>0.5581</td>
<td>6.172</td>
<td>0.0000***</td>
<td>1.342</td>
</tr>
<tr>
<td>PFB</td>
<td>0.3109 (0.3491)</td>
<td>0.0749</td>
<td>0.891</td>
<td>0.3757</td>
<td>1.162</td>
</tr>
<tr>
<td>CI</td>
<td>0.2948 (0.3710)</td>
<td>0.0679</td>
<td>0.795</td>
<td>0.4289</td>
<td>1.199</td>
</tr>
<tr>
<td>TSA</td>
<td>0.4783 (0.3781)</td>
<td>0.1169</td>
<td>1.265</td>
<td>0.2093</td>
<td>1.402</td>
</tr>
<tr>
<td>TSI</td>
<td>2.4870 (1.3177)</td>
<td>0.1748</td>
<td>1.887</td>
<td>0.0625</td>
<td>1.408</td>
</tr>
<tr>
<td>IOB</td>
<td>-0.2970 (0.2964)</td>
<td>-0.0855</td>
<td>-1.002</td>
<td>0.3192</td>
<td>1.195</td>
</tr>
<tr>
<td>AAB-a</td>
<td>-0.1187 (0.2382)</td>
<td>-0.0412</td>
<td>-0.498</td>
<td>0.6195</td>
<td>1.127</td>
</tr>
<tr>
<td>AAB-b</td>
<td>0.6922 (0.5637)</td>
<td>0.0998</td>
<td>1.228</td>
<td>0.2228</td>
<td>1.085</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>1.8507 (6.8215)</td>
<td>0.271</td>
<td>0.891</td>
<td>0.7868</td>
<td></td>
</tr>
</tbody>
</table>

| R²         | 0.4823         |
| Adj. R²    | 0.4335         |
| F.stat.    | 9.8973         |
| Prob. F    | 0.0000***      |
| N          | 94             |

* significant at 0.05 level. ** significant at 0.01 level *** significant at 0.001 level
AABa - A formal active board of directors AABb - An informal board of directors
CI - Career interests IOB - Interests of incumbent outside the business
PFB - Payoffs from business PFH - Perceived family harmony
SwSP - Satisfaction with the succession process TSAi - Trust in successors’ abilities and intentions
TSA - Trust in successors’ abilities TSI - Trust in successors’ intentions
A comparison of the above results of the successors-only data set with the results of similar analysis using the ‘Successors and other family members’ data set (Table F4b), and the analysis on the successors-only data set (Table F2m) using the two dimensions of the variable - TSAI: While the successors and other family members’ data set revealed a positive relationship of two variables - ‘trust in successors’ abilities’ (TSA) and ‘perceived family harmony’ (PFH) on the main dependent variable - ‘satisfaction with the succession process (SwSP) in Table F4b, no significant association is found between TSA and SwSP in this data set.

This result is also different from the results presented in Table F2m, as in that table ‘trust in successors’ abilities and intentions’(TSAI) was found to be positively associated with SwSP. However, the above results suggest that none of the dimensions of TSAI, that is, TSA and TSI are positively related to SwSP.

Table F2o. Regression results of the mediating variables (using four dimensions of succession planning) on the satisfaction with the succession process (SwSP)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Unstd.b (SE)</th>
<th>Beta B</th>
<th>t value</th>
<th>p one tailed</th>
<th>VIFs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR (H1)</td>
<td>0.4625 (0.1170)</td>
<td>0.3132</td>
<td>3.952</td>
<td>0.0942</td>
<td>1.460</td>
</tr>
<tr>
<td>ACB - a (H2a)</td>
<td>-0.0948 (0.2702)</td>
<td>-0.0249</td>
<td>-0.351</td>
<td>0.0002***</td>
<td>1.594</td>
</tr>
<tr>
<td>ACB - b (H2b)</td>
<td>-0.6030 (0.3562)</td>
<td>-0.1284</td>
<td>-1.693</td>
<td>0.7266</td>
<td>1.277</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>0.4150 (0.4102)</td>
<td>0.0681</td>
<td>1.012</td>
<td>0.3146</td>
<td>1.151</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.6881 (0.2999)</td>
<td>0.1625</td>
<td>2.294</td>
<td>0.0243*</td>
<td>1.273</td>
</tr>
<tr>
<td>SP - a</td>
<td>-0.2471 (0.3372)</td>
<td>-0.0508</td>
<td>-0.733</td>
<td>0.4657</td>
<td>1.222</td>
</tr>
<tr>
<td>SP - b</td>
<td>0.2292 (0.2133)</td>
<td>0.0821</td>
<td>1.075</td>
<td>0.2856</td>
<td>1.480</td>
</tr>
<tr>
<td>SP - c</td>
<td>1.1139 (0.2778)</td>
<td>0.2999</td>
<td>4.009</td>
<td>0.0001***</td>
<td>1.421</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>SP - d</td>
<td>0.5325 (0.1202)</td>
<td>0.3519</td>
<td>4.432</td>
<td>0.0000***</td>
<td>1.600</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>8.3119 (4.8436)</td>
<td>1.716</td>
<td>0.0899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td></td>
<td>0.6730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td></td>
<td></td>
<td>0.6375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td></td>
<td></td>
<td>0.6375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SP - c</th>
<th>1.1139 (0.2778)</th>
<th>0.2999</th>
<th>4.009</th>
<th>0.0001***</th>
<th>1.421</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP - d</td>
<td>0.5325 (0.1202)</td>
<td>0.3519</td>
<td>4.432</td>
<td>0.0000***</td>
<td>1.600</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>8.3119 (4.8436)</td>
<td>1.716</td>
<td>0.0899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td></td>
<td>0.6730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td></td>
<td></td>
<td>0.6375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob. F</td>
<td></td>
<td></td>
<td>0.6375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I* significant at 0.05 level.  ** significant at 0.01 level   *** significant at 0.001 level
ACBa: Extent of Presidents commitment to continue the business
ACBb: Agreement of family members to continue business
AIR: Mutual acceptance on individual roles
PPR: Propensity of incumbent president to step aside
PSTO: Propensity of successor to take over
SP-a: Plan for future of business and role of past president or retiring president in it
SP-b: Criteria for successor selection
SP-c: Successor training
SP-d: Communication of successor’s appointment
SwSP: Satisfaction with the succession process.

A comparison of the above results of the successors-only data set with the results of the
'Successors and other family members’ data set: In this case, no significant difference is
observed in terms of the significance of variables. However, some difference is found in the
overall $R^2$ values in the two data sets (0.6375 for successors only and 0.6864 for successors
and other family members).
SECTION 3: REGRESSION RESULTS USING THE TWO DIMENSIONS OF THE DEPENDENT VARIABLE - SATISFACTION WITH THE SUCCESSION PROCESS (SwSP)

Table F3a. Regression results of the mediating variables on the FIRST DIMENSION of the satisfaction with the succession process (SwSP-a)

<table>
<thead>
<tr>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IVs</strong></td>
<td><strong>Unstd. b (SE)</strong></td>
</tr>
<tr>
<td>AIR (H1)</td>
<td>0.2971 (.1106)</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>0.2179 (.3071)</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>0.2816 (.1990)</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>1.6048 (.4263)</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.3151 (.3448)</td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.1532 (.0612)</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>3.6229 (.4092)</td>
</tr>
</tbody>
</table>

| R² | 0.5433 | 0.5818 |
| Adj. R² | 0.5047 | 0.5607 |
| F.stat. | 14.0767 | 27.5902 |
| Prob. F | **0.0000*** | **0.0000*** |
| N | 78 | 126 |

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level.

ACB-a Extent of Presidents commitment to continue the business
ACB-b Agreement of family members to continue business
AIR Mutual acceptance on individual roles
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP-a The FIRST dimension of Satisfaction with the succession process.

A comparison of the above results using the first dimension (10 indicators) of the Satisfaction with Succession Process with the results when all 12 indicators were used for this variable (i.e., Table 6.17): Most of the indicators (10 out of 12) used for the dependent
variables, ‘Satisfaction with the succession process’ were used for this dimension. As might be expected, no significant difference is observed in terms of the significance of variables between the results using this dimension and those when all indicators were used. However, some difference is found in the overall $R^2$ values in the two data sets. In case of both data sets, the $R^2$ values are higher when all 12 indicators are used to form the scale for the satisfaction with the succession process (0.5047 and 0.5726 for the presidents data set; and 0.5607 and 0.6580 for the successors and other family members data set).

Table F3b. Regression results of the mediating variables on the SECOND DIMENSION of the satisfaction with the succession process: Financial and ownership distribution after transfer of leadership (SwSP-b)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th></th>
<th>Sucessors and other family members</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. B (SE)</td>
<td>Beta</td>
<td>t value</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>p one tailed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VIFs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unstd. B (SE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beta</td>
<td>t value</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>P one tailed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VIFs</td>
<td></td>
</tr>
<tr>
<td>AIR (H1)</td>
<td>0.0364 (.0331)</td>
<td>0.1032</td>
<td>1.100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.2747</td>
<td>1.351</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0497 (.0276)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1682</td>
<td>1.803</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0738</td>
<td>1.638</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>0.2039 (.0892)</td>
<td>0.2184</td>
<td>2.286</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0250 *</td>
<td>1.401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.0191 (.0832)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0.0190</td>
<td>-0.230</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.8188</td>
<td>1.288</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>0.0474 (.0569)</td>
<td>0.0734</td>
<td>0.833</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.4076</td>
<td>1.192</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0356 (.0644)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0451</td>
<td>0.551</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.5825</td>
<td>1.260</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>0.2486 (.1162)</td>
<td>0.2105</td>
<td>2.139</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0356 *</td>
<td>1.485</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1.834 (.0971)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1.1466</td>
<td>-1.888</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0614</td>
<td>1.135</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.0028 (.0996)</td>
<td>0.0025</td>
<td>0.028</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.9777</td>
<td>1.221</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0928 (.0685)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1063</td>
<td>1.355</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1779</td>
<td>1.158</td>
</tr>
<tr>
<td>SP (H5)</td>
<td>0.0684 (.0177)</td>
<td>0.3753</td>
<td>3.868</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.00002 ***</td>
<td>1.445</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0867 (.0180)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.4730</td>
<td>4.808</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.00000 ***</td>
<td>1.822</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>-9.052 (1.173)</td>
<td>-0.772</td>
<td>0.4427</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.8079 (1.078)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.606</td>
<td>0.0103</td>
</tr>
</tbody>
</table>

R²: 0.4982 | F.stat.: 12.7397 | Prob. F: 0.0000*** |
Adj. R²: 0.4591 | F.stat.: 11.3817 | Prob. F: 0.0000*** |
N: 82 | N: 127 |

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

ACBA - Extent of Presidents commitment to continue the business
ACBB - Agreement of family members to continue business
AIR - Mutual acceptance on individual roles
PPR - Propensity of incumbent president to step aside
PSTO - Propensity of successor to take over
SP - Succession planning
SwSP-b - The second dimension of Satisfaction with the succession process: Financial and ownership distribution after transfer of leadership.

A comparison of the above results using the second dimension (2 indicators) of the Satisfaction with Succession Process with the results when all 12 indicators were used for this variable (i.e., Table 6.17): The results of factor analysis (Table 6.14b) on the indicators of the ‘Satisfaction with the succession process’ suggested that two items (8&9) related to the extent of satisfaction of the respondent with the financial and ownership distribution after the transfer of leadership, formed a distinct dimension. The scale reliability tests suggested a minor increase in alpha values if these two items were dropped. While a decision was made to retain all the indicators for scale construction of this scale, the above analysis was conducted to reveal any differences in results on these two dimensions.

By comparing the above results with those in Table 6.17, some significant differences are found. Specifically, it is found that the ‘acceptance of individual roles’ (AIR) does not have any significant influence on the extent of satisfaction with the financial and ownership distribution after transfer of leadership for both data sets. Although the overall extent of satisfaction for presidents with the succession process was not significantly associated with the extent of their commitment to continue the business (ACB-a), satisfaction with the financial and ownership distribution was found to be positively associated with this variable. Thus, for presidents it is their own commitment to continue the business, propensity of successor to take over, and succession planning that positively influence their satisfaction with the financial and ownership distribution after transfer of leadership. For successors and other family members, this satisfaction is positively associated only with the extent of ‘succession planning’.
Surprisingly, even the propensity of the incumbent president to step aside (PPR) does not have a significant influence on the satisfaction of these family members with the financial and ownership distribution after transfer of leadership, although this variable was found to significantly influence their overall satisfaction with the succession process (SwSP).
SECTION 4: REGRESSION RESULTS USING THE TWO DIMENSIONS OF THE VARIABLE - 'TRUST IN SUCCESSORS' CAPABILITIES AND INTENTIONS'

Table F4a. Regression results of the trust in successor capabilities (TSA) and intentions (TSI), and incumbent's interests outside the context of the business (IOB) on the propensity of an incumbent to step aside (PPR - dependent variable)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta</td>
</tr>
<tr>
<td>TSA (H4a.i)</td>
<td>0.1053 (.0726)</td>
<td>0.1430</td>
</tr>
<tr>
<td>TSI (H4a.ii)</td>
<td>0.4994 (.2835)</td>
<td>0.1737</td>
</tr>
<tr>
<td>IOB (H4b)</td>
<td>0.0444 (.0612)</td>
<td>0.0681</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>3.4051 (1.432)</td>
<td>2.378</td>
</tr>
<tr>
<td>R²</td>
<td>0.0691</td>
<td>0.0958</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.0428</td>
<td>0.0809</td>
</tr>
<tr>
<td>F.stat.</td>
<td>2.6246</td>
<td>6.4271</td>
</tr>
<tr>
<td>Prob. F</td>
<td>0.0543</td>
<td>0.0004***</td>
</tr>
<tr>
<td>N</td>
<td>110</td>
<td>186</td>
</tr>
</tbody>
</table>

* significant at 0.05 level. ** significant at 0.01 level *** significant at 0.0001 level

IOB - Interests of incumbent outside the business
PPR - Propensity of incumbent president to step aside
TSAI - Trust in successors’ abilities and intentions
TSA - Trust in successors’ abilities
TSI - Trust in successors’ intentions

A comparison of the above results separating the two dimensions of 'Trust in successors’ abilities and intentions’ with results of Table 6.21 when the variable is treated as having one dimension only: This table reveals some surprising results. While TSAI was found to be significantly related to the Propensity of incumbent president to step aside (PPR) for both data sets (Table 6.21), the two dimensions individually do not show any significant relationship to this dependent variable. While all the indicators loaded heavily on one factor and were
internally consistent (Tables 6.10a and 6.10b), there does not seem to be any obvious explanation for these results.

**Table F4b. Regression results of the six antecedent variables on satisfaction with succession process (SwSP - dependent variable), using the two dimensions of ‘trust in successors’ abilities and intentions’**

<table>
<thead>
<tr>
<th>IVs (Antecedents)</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta b</td>
</tr>
<tr>
<td>PFB</td>
<td>0.6782 (.3741)</td>
<td>0.1831</td>
</tr>
<tr>
<td>CI</td>
<td>0.9219 (.4722)</td>
<td>0.2104</td>
</tr>
<tr>
<td>TSA</td>
<td>1.1654 (.4134)</td>
<td>0.3128</td>
</tr>
<tr>
<td>TSI</td>
<td>0.8286 (.840)</td>
<td>0.0505</td>
</tr>
<tr>
<td>IOB</td>
<td>0.0914 (.3040)</td>
<td>0.0293</td>
</tr>
<tr>
<td>AAB-a</td>
<td>0.3697 (.2337)</td>
<td>0.1510</td>
</tr>
<tr>
<td>AAB-b</td>
<td>-0.0211 (.5639)</td>
<td>-0.0035</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>3.4259 (8.604)</td>
<td>0.398</td>
</tr>
</tbody>
</table>

| R²                | 0.3736                               | 0.5054 |
| Adj. R²           | 0.3020                               | 0.4698 |
| F.stat.           | 5.2190                               | 14.1791 |
| Prob. F           | 0.0000***                            | 0.0000*** |
| N                 | 79                                   | 120    |

* significant at 0.05 level.    ** significant at 0.01 level    *** significant at 0.001 level

AAABa A formal active board of directors
AAABb An informal board of directors
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
SwSP Satisfaction with the succession process
TSA Trust in successors’ abilities
TSI Trust in successors’ intentions
A comparison of the above results separating the two dimensions of ‘Trust in successors’ abilities and intentions’ with results of Table 6.23 when the variable is treated as having one dimension only: Some interesting results are revealed by comparing the results in these two tables (Table F4b and Table 6.23). While ‘trust in successors’ abilities and intentions’ (TSAI) is found to be significantly associated with the ‘satisfaction with the succession process’ (SwSP) in Table 6.23, it is only one dimension of TSAI - trust in successors’ abilities that has a positive influence on SwSP for both data sets.
SECTION 5: REGRESSION RESULTS USING THE FOUR DIMENSIONS OF THE VARIABLE - SUCCESSION PLANNING

Table F5a. Regression results of the 'propensity of president to step aside' (PPR), 'presence of an active advisory board' (AB), and 'agreement to continue the business' (ACB) on THE FIRST DIMENSION OF SUCCESSION PLANNING: Plan for future of business and role of past president.

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta</td>
</tr>
<tr>
<td>PPR (H5a)</td>
<td>1.0231 (.3612)</td>
<td>0.2849</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.3347 (.1771)</td>
<td>0.1886</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.1546 (.432)</td>
<td>0.0359</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.5156 (.3276)</td>
<td>0.1789</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.1969 (.2279)</td>
<td>0.0953</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>7.5381 (3.786)</td>
<td>1.991</td>
</tr>
</tbody>
</table>

R² 0.2131 0.1738
Adj. R² 0.1651 0.1449
F.stat. 4.4417 6.0159
Prob. F 0.0012** 0.0000***
N 88 149

* significant at 0.05 level.  ** significant at 0.01 level.  *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of president's commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
Table F5b. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE SECOND DIMENSION OF SUCCESSION PLANNING: Criteria for successor’s selection

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta</td>
</tr>
<tr>
<td>PPR (H5a)</td>
<td>0.0572 (.1498)</td>
<td>0.0428</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.0577 (.0728)</td>
<td>0.0875</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.0307 (.1775)</td>
<td>0.0191</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.0138 (0.133)</td>
<td>0.0130</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.0593 (.0922)</td>
<td>0.0773</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.4636 (1.553)</td>
<td></td>
</tr>
</tbody>
</table>

R²           | 0.0183 | 0.0677 |
Adj. R²      | 0.0415 | 0.0366 |
F.stat.      | 0.3129 | 2.1791 |
Prob. F      | 0.9040 | 0.0594 |
N            | 90     | 156    |

* significant at 0.05 level.  ** significant at 0.01 level  *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
Table F5c. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE THIRD DIMENSION OF SUCCESSION PLANNING: *Successor’s training*

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. B (SE)</td>
<td>Beta</td>
</tr>
<tr>
<td>PPR (H5a)</td>
<td>0.5817 (.2206)</td>
<td>0.2825</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>-1.695 (.1061)</td>
<td>-1.682</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>0.0457 (.2609)</td>
<td>0.0185</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.1029 (.1976)</td>
<td>0.0617</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>0.0457 (.2609)</td>
<td>0.0185</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>7.2998 (2.288)</td>
<td>3.191</td>
</tr>
</tbody>
</table>

| R²          | 0.1064               | 0.0981 |
| Adj. R²     | 0.0532               | 0.0683 |
| F.stat.     | 1.9998               | 3.2859 |
| Prob. F     | 0.0870               | 0.0076**|
| N           | 90                   | 157    |

* significant at 0.05 level. ** significant at 0.01 level *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
Table F5d. Regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) on THE FOURTH DIMENSION OF SUCCESSION PLANNING:

*Communication of successor’s appointment*

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE) Beta</td>
<td>Unstd. b (SE) Beta</td>
</tr>
<tr>
<td>PPR (H5a)</td>
<td>0.1705 (.1422) 0.1274</td>
<td>0.2862 (.0962) 0.2405</td>
</tr>
<tr>
<td>AABa (H5b.i)</td>
<td>0.0802 (.0689) 0.1220</td>
<td>0.0917 (.0648) 0.1154</td>
</tr>
<tr>
<td>AABb (H5b.ii)</td>
<td>-1.508 (.1718) -0.0923</td>
<td>-0.0688 (.1618) -0.0340</td>
</tr>
<tr>
<td>ACBa (H5c.i)</td>
<td>0.3039 (.1286) 0.2817</td>
<td>0.1948 (.1171) 0.1427</td>
</tr>
<tr>
<td>ACBb (H5c.ii)</td>
<td>-1.007 (.0807) -1.123</td>
<td>-0.0511 (.0955) -0.0467</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>4.9704 (1.490) 3.336</td>
<td>3.4625 (1.348) 2.569</td>
</tr>
</tbody>
</table>

R² Adj. R² F.stat. Prob. F N
0.1219 0.0690 2.3042 0.0518 89 0.0996 0.0687 3.2297 0.0085** 152

- *significant at 0.05 level.
- **significant at 0.01 level
- ***significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
Table F5e. Comparison of the regression results of the ‘propensity of president to step aside’ (PPR), ‘presence of an active advisory board’ (AB), and ‘agreement to continue the business’ (ACB) for the four dimensions of SUCCESSION PLANNING

<table>
<thead>
<tr>
<th></th>
<th>Presidents data set</th>
<th>Successors and other family members data set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SP</td>
<td>SA</td>
</tr>
<tr>
<td>PPR</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>AABa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AABb</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ACBa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ACBb</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.1568</td>
<td>.1651</td>
</tr>
</tbody>
</table>

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
PPR Propensity of incumbent president to step aside
SP Succession planning
SP-a Plan for future of business and role of past president or retiring president in it
SP-b Criteria for successor selection
SP-c Successor training
SP-d Communication of successor’s appointment
**SECTION 6: REGRESSION RESULTS USING OF THE MEDIATING VARIABLES (USING FOUR DIMENSIONS OF SUCCESSION PLANNING) ON DEPENDENT VARIABLE - SATISFACTION WITH THE SUCCESSION PROCESS (SWSP)**

Table F6a. Regression results of the mediating variables (using four dimensions of succession planning) on the satisfaction with the succession process (SwSP)

<table>
<thead>
<tr>
<th>IVs</th>
<th>Presidents responses</th>
<th>Successors and other family members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstd. b (SE)</td>
<td>Beta B</td>
</tr>
<tr>
<td>AIR (H1)</td>
<td>0.2785 (.1189)</td>
<td>0.1953</td>
</tr>
<tr>
<td>ACB-a (H2a)</td>
<td>0.2403 (.3267)</td>
<td>0.0635</td>
</tr>
<tr>
<td>ACB-b (H2b)</td>
<td>0.5415 (.2197)</td>
<td>0.2026</td>
</tr>
<tr>
<td>PSTO (H3)</td>
<td>1.8514 (.4589)</td>
<td>0.3461</td>
</tr>
<tr>
<td>PPR (H4)</td>
<td>0.4399 (.3762)</td>
<td>0.0939</td>
</tr>
<tr>
<td>SP - a</td>
<td>-0.0043 (.2787)</td>
<td>-0.0112</td>
</tr>
<tr>
<td>SP - b</td>
<td>-0.0527 (.2171)</td>
<td>-0.0217</td>
</tr>
<tr>
<td>SP - c</td>
<td>1.2856 (.3508)</td>
<td>0.3384</td>
</tr>
<tr>
<td>SP - d</td>
<td>0.1085 (.1331)</td>
<td>0.0776</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>1.2419 (.594)</td>
<td>0.2700</td>
</tr>
</tbody>
</table>

| R² | 0.6619 | 0.7101 |
| Adj. R² | 0.6165 | 0.6964 |
| F.stat. | 14.5749 | 29.904 |
| Prob. F | 0.0000*** | 0.0000*** |
| N | 77 | 120 |

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
PPR Propensity of incumbent president to step aside
PSTO Propensity of successor to take over
SP-a Plan for future of business and role of past president or retiring president in it
SP-b Criteria for successor selection
SP-c Successor training
SP-d Communication of successor’s appointment
SwSP Satisfaction with the succession process.
A comparison of the above results separating the four dimensions of 'Succession planning' with results of Table 6.17 when the variable is treated as having one dimension only: Some interesting results are revealed by comparing the results in these two tables (Table F6a and Table 6.17). While 'succession planning' (SP) is found to be significantly associated with the 'satisfaction with the succession process' (SwSP) in table 6.17 for both data sets, it is only one dimension of SP i.e., successor training that is associated with the presidents satisfaction with the succession process. On the other hand, the satisfaction of successors and other family members is positively related to the two dimensions - 'successor training' and 'communication of successors appointment'. This suggests that while the presidents feel satisfied with the succession process if they are satisfied with the training of the successors, other members of the family value clear communication of the successors appointment, in addition to the training.
SECTION 7: RESULTS OF TESTING FOR RESPONDENT BIAS IN THE CONSTRUCTED SCALES USING MANOVAS - FOR THE FIRMS WITH MULTIPLE RESPONSES

Table F7a. Results of testing for RESPONDENT bias in the constructed scales using MANOVAs - for the firms with multiple responses

<table>
<thead>
<tr>
<th>Construct</th>
<th>P-S-FM</th>
<th>P-S</th>
<th>P-FM</th>
<th>S-FM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Sig F.</td>
<td>0.009**</td>
<td>0.039*</td>
<td>0.005**</td>
<td>0.374</td>
</tr>
<tr>
<td>AAB-a</td>
<td>0.938</td>
<td>0.942</td>
<td>0.736</td>
<td>0.763</td>
</tr>
<tr>
<td>AAB-b</td>
<td>0.151</td>
<td>0.062</td>
<td>0.807</td>
<td>0.258</td>
</tr>
<tr>
<td>ACB-a</td>
<td>0.800</td>
<td>0.750</td>
<td>0.694</td>
<td>0.499</td>
</tr>
<tr>
<td>ACB-b</td>
<td>0.098</td>
<td>0.031*</td>
<td>0.700</td>
<td>0.228</td>
</tr>
<tr>
<td>AIR</td>
<td>0.029*</td>
<td>0.026*</td>
<td>0.018*</td>
<td>0.487</td>
</tr>
<tr>
<td>CI</td>
<td>0.574</td>
<td>0.550</td>
<td>0.581</td>
<td>0.307</td>
</tr>
<tr>
<td>IOB</td>
<td>0.423</td>
<td>0.240</td>
<td>0.319</td>
<td>0.944</td>
</tr>
<tr>
<td>PFB</td>
<td>0.486</td>
<td>0.753</td>
<td>0.236</td>
<td>0.338</td>
</tr>
<tr>
<td>PFH</td>
<td>0.044*</td>
<td>0.037*</td>
<td>0.030*</td>
<td>0.494</td>
</tr>
<tr>
<td>PPR</td>
<td>0.031*</td>
<td>0.030*</td>
<td>0.016*</td>
<td>0.465</td>
</tr>
<tr>
<td>PSTO</td>
<td>0.488</td>
<td>0.588</td>
<td>0.271</td>
<td>0.386</td>
</tr>
<tr>
<td>SP</td>
<td>0.042*</td>
<td>0.048*</td>
<td>0.038*</td>
<td>0.421</td>
</tr>
<tr>
<td>SwSP</td>
<td>0.016*</td>
<td>0.016*</td>
<td>0.012*</td>
<td>0.451</td>
</tr>
<tr>
<td>TSAI</td>
<td>0.000***</td>
<td>0.063</td>
<td>0.000***</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

| SCALES WITH SIG. DIFF.     | 6/14  | 6/14  | 6/14  | 1/14  |

The overall Sig. F. values are based on Pillai’s trace test.

* significant at 0.05 level. ** significant at 0.01 level. *** significant at 0.001 level

AABa A formal active board of directors
AABb An informal board of directors
ACBa Extent of presidents commitment to continue the business
ACBb Agreement of family members to continue business
AIR Mutual acceptance on individual roles
CI Career interests
IOB Interests of incumbent outside the business
PFB Payoffs from business
PFH Perceived family harmony
PPR Propensity of incumbent-president to step aside
PSTO Propensity of successor to take over
SP Succession planning
SwSP Satisfaction with the succession process
TSAI Trust in successors’ abilities and intentions
APPENDIX G. COPIES OF PROGRAMS USED FOR STRUCTURAL EQUATIONS MODELING (EQS)

Presented in this appendix are the copies of the following four EQS programs used for Structural Equation Modeling:

1. For testing the ORIGINAL MODEL using the PRESIDENT'S DATA SET.

2. For testing the MODIFIED MODEL using the PRESIDENT'S DATA SET.

3. For testing the ORIGINAL MODEL using the SUCCESSOR’S AND FAMILY MEMBERS DATA SET.

4. For testing the MODIFIED MODEL using the SUCCESSOR’S AND FAMILY MEMBERS DATA SET.
TITLE
Test of complete model for PRESIDENTS DATA SET

SPECIFICATIONS
VARIABLES=14; CASES=118;
METHODS=ML;
MATRIX=CORRELATION;

LABELS
V1=SATISFACTION; V2=HARMONY; V3=PAYOFFS; V4=CAREER INTERESTS;
V5=TRUST IN ABILITIES AND INTENTIONS; V6=OUTSIDE INTERESTS;
V7=ACTIVE FORMAL BOARD; V8=INFORMAL BOARD; V9=ACCEPTANCE OF ROLES;
V10=FAMILY MEMBERS AGREEMENT TO CONTINUE; V11=PRESIDENT'S DESIRE TO CONTINUE;
V12=SUCCESSION TAKING OVER; V13=PRESIDENT RETIRING; V14=SUCCESSION PLANNING;

EQUATIONS
V1=1*V9+1*V10+1*V11+1*V12+1*V13+1*V14+E1;
V9=1*V2+E9;
V10=1*V2+1*V3+E10;
V11=1*V2+1*V3+E11;
V12=1*V3+1*V4+1*V9+E12;
V13=1*V5+1*V6+E13;
V14=1*V7+1*V8+1*V10+1*V11+1*V13+E14;

VARIANCES
E1=*; E9 TO E14=+; V2 TO V8=;

COVARIANCES
V2 TO V8=;

MATRIX
1.000
.3597 1.000
.2578 .1675 1.000
.4073 .3634 .3051 1.000
.5040 .4003 .1338 .3178 1.000
.0108 -.0495 -.1327 -.1266 -.0449 1.000
.1950 .0627 .0439 .0461 .0698 .0319 1.000
.0343 .0658 .0610 .0383 .0368 .0654 .1031 1.000
.5234 .7888 .1669 .3469 .4189 .0297 .1060 .0770 1.000
.4322 .1950 .3782 .2465 .1839 -.1458 .1610 .1434 .3324 1.000
.1898 .0720 .2863 .2331 .0138 -.1012 -.0361 -.0637 .1631 .4190 1.000
.5894 .3158 .3005 .4887 .4747 .0157 .0617 -.0672 .3720 .3377 .2105 1.000
.3626 .2446 .1871 .0571 .1927 .0524 .0946 -.0239 .2589 .1941 -.0027 .2217 1.000
.5587 .2596 .2073 .3776 .4241 -.0344 .1581 .0161 .3698 .3357 .1577 .3982 .3398 1.000

STANDARD DEVIATIONS
8.54 4.32 2.40 1.98 2.82 2.81 3.89 1.54 6.30 2.34 3.43 1.78 1.94 12.45

LMTEST
WTEST

END
Test of complete model for PRESIDENTS DATA SET

VARIABLES=14; CASES=118;
METHODS=ML;
MATRIX=CORRELATION;

LABELS
VL=SATISFACTION; V2=HARMONY; V3=PAYOFFS; V4=CAREER INTERESTS;
V5=TRUST IN ABILITIES AND INTENTIONS; V6=OUTSIDE INTERESTS;
V7=ACTIVE FORMAL BOARD; V8=INFORMAL BOARD; V9=ACCEPTANCE OF ROLES;
V10=FAMILY MEMBERS AGREEMENT TO CONTINUE; V11=PRESIDENT'S DESIRE TO CONTINUE;
V12=SUCCESSION TAKING OVER; V13=PRESIDENT RETIRING; V14=SUCCESSION PLANNING;

EQUATIONS
VL=1*V9+1*V10+1*V1+1*V12+1*V13+1*V14+E1;
V9=1*V2+E9;
V10=1*V2+1*V3+E10;
V1=1*V2+1*V3+E11;
V12=1*V3+1*V4+1*V5+1*V9+E12;
V13=1*V5+1*V6+E13;
V14=1*V5+1*V7+1*V8+1*V9+1*V11+1*V13+E14;

V2 TO V6=*

VARIANCES
E1=*

COVARIANCES
V2 TO V6=*

MATRIX
1.000
.3597 1.000
.2678 .1675 1.000
.4073 .3634 .3051 1.000
.5040 .4003 .3138 .3178 1.000
.0108 -.0495 -.1327 -.1268 -.0449 1.000
.1950 .6272 .0439 .0461 .0698 .0319 1.000
.0343 .0658 .0610 .0383 .0368 .0654 .1031 1.000
.5234 .7888 .1669 .3469 .4189 .0297 .1060 .0770 1.000
.4322 .1950 .3782 .2465 .1839 -.1458 .1610 .1434 .3324 1.000
.1898 .0722 .2863 .2331 .0138 -.1012 -.0361 -.0637 .1631 .4190 1.000
.5894 .3158 .3005 .4887 .4747 .0157 .0617 -.0672 .3720 .3377 .2105 1.000
.3626 .2446 .1871 .0571 .1927 .0524 .0946 -.0239 .2589 .1941 -.0027 .2217 1.000
.5587 .2596 .2073 .3776 .4241 -.0344 .1581 .0161 .3698 .3357 .1577 .3982 .3398 1.000

STANDARD DEVIATIONS
8.54 4.32 2.40 1.98 2.82 2.81 3.89 1.54 6.30 2.34 3.43 1.78 1.94 12.45

/IMTEST
/WTEST
/END
/TITLE
Test of complete model for SUCCESSORS AND FAMILY MEMBERS DATA SET
/SPECIFICATIONS
VARIABLES=14; CASES=192;
METHODS=ML;
MATRIX=CORRELATION;
/LABELS
V1=SATISFACTION; V2=HARMONY; V3=PAYOFFS; V4=CAREER INTERESTS;
V5=TRUST IN ABILITIES AND INTENTIONS; V6=OUTSIDE INTERESTS;
V7=ACTIVE FORMAL BOARD; V8=INFORMAL BOARD; V9=ACCEPTANCE OF ROLES;
V10=FAMILY MEMBERS AGREEMENT TO CONTINUE; V11=PRESIDENT'S DESIRE TO CONTINUE;
V12=SUCCESSION TAKING OVER; V13=PRESIDENT RETIRING; V14=SUCCESSION PLANNING;
/EQUATIONS
V1=V9+1*V10+1*V11+1*V12+1*V13+1*V14+E1;
V9=1*V2+E9;
V10=1*V2+1*V3+1*E10;
V11=1*V2+1*V3+1*E11;
V12=1*V3+1*V4+1*V9+1*E12;
V13=1*V5+1*V6+1*E13;
V14=1*V7+1*V8+1*V10+1*V11+1*V13+1*E14;
/VARIANCES
E1=1; E9 TO E14=1; V2 TO V8=1;
/COVARIANCES
V2 TO V8=1;
/MATRIX
1.000
.6202 .1000
.2197 .1951 1.000
.3199 .2380 .2893 1.000
.4837 .3456 .0934 .2076 1.000
.0823 .1960 .1005 .1218 .0300 1.000
.1528 .1373 .1060 .0984 .0452 .0404 1.000
.1434 .0073 .1529 .1642 .0096 .0130 .1699 1.000
.7112 .8372 .2381 .3262 .3342 .2091 .1754 .0050 1.000
.1786 .1193 .4273 .1253 .0091 .1848 .1494 .1204 .1987 1.000
.0869 .0092 .2714 .0864 .2287 .0028 .2248 .1290 .0442 .3842 1.000
.2801 .1515 .1861 .5040 .3174 .0695 .0478 .0502 .1542 .1075 .1395 1.000
.3911 .2343 .0341 .0134 .2318 .2077 .0458 .0187 .2335 .0788 .1246 .0926 1.000
.7138 .3874 .2068 .2565 .3200 .1165 .1708 .1289 .5700 .2794 .2008 .2801 .2689 1.000
/STANDARD DEVIATIONS
11.2800 5.6700 2.5100 2.4400 3.1600 2.9200 3.8500 1.5200 7.8700 2.2700 2.8300 1.7800 2.5500
/LMTEST
/WTEST
/END
TITLE
Test of complete model for SUCCESSORS AND FAMILY MEMBERS DATA SET

/SPECIFICATIONS
VARIABLES=14; CASES=192;
METHODS=ML;
MATRIX=CORRELATION;

/LABELS
V1=SATISFACTION; V2=HARMONY; V3=PAYOFFS; V4=CAREER INTERESTS;
V5=TRUST IN ABILITIES AND INTENTIONS; V6=OUTSIDE INTERESTS;
V7=ACTIVE FORMAL BOARD; V8=INFORMAL BOARD; V9=ACCEPTANCE OF ROLES;
V10=SUCCESSORS AGREEMENT TO CONTINUE; V11=PRESIDENT'S DESIRE TO CONTINUE;
V12=SUCCESSOR TAKING OVER; V13=PRESIDENT RETIRING; V14=SUCCESSION PLANNING;

/EQUATIONS
V1=1*V5+1*V9+1*V10+1*V11+1*V12+1*V13+1*V14+E1;
V9=1*V2+E9;
V10=1*V2+1*V3+E10;
V11=1*V2+1*V3+E11;
V12=1*V3+1*V4+1*V5+1*V9+E12;
V13=1*V5+1*V6+E13;
V14=1*V5+1*V2+1*V7+1*V8+1*V10+1*V11+1*V13+E14;

/VARIANCES
E1=.; E9 to E14=.; V2 to V8=.;

/COVARIANCES
V2 to V8=.;

/MATRIX
1.000
.6202 1.000
.2197 .1951 1.000
.3199 .2380 .2803 1.000
.4837 .3456 .0934 .2076 1.000
.0823 .1960 .1005 .1218 .0300 1.000
.1528 .1373 .1060 .0984 -.0452 .0404 1.000
.1434 .0073 .1529 .1642 -.0096 .0130 .1699 1.000
.7112 .8372 .2381 .3262 .3342 .2091 .1764 .0050 1.000
.1786 .1193 .4273 .1253 .0091 .1848 .1494 .1204 .1987 1.000
.0869 -.0092 .2714 .0864 .2287 .0028 .2248 .1290 .0442 .3842 1.000
.2801 .1515 .1861 .5040 .3174 .0695 .0478 .0502 .1542 .1075 .1359 1.000
.3911 .2343 -.0341 .0134 .2318 .2077 -.0458 .0187 .2335 .0788 -.1246 .0926 1.000
.7138 .3874 .2068 .2565 .3200 .1165 .1708 .1289 .5700 .2794 .2008 .2801 .2689 1.000

/STANDARD DEVIATIONS
11.28 5.67 2.51 2.44 3.16 2.92 3.85 1.52 7.87 2.27 2.83 1.78 2.53 12.24

/LTEST
/WTEST

/END
APPENDIX G. TESTING FOR THE REGRESSION ASSUMPTION OF LINEARITY

Presented in this appendix are the scatter diagrams of the following dependent variables upon the independent variables for each of the regression models, for both data sets. A clear lack of curvilinear relationship indicates linearity of data.

1. DV - Satisfaction with the succession process (SwSP)
   IVs - Acceptance of Individual roles (AIR)
     - Agreement to continue the business (ACB)
     - President’s commitment to continue the business (ACBa)
     - Agreement of other family members to continue the business (ACBb)
     - Propensity of successor to take over (PSTO)
     - Propensity of incumbent / president to step aside (PPR)
     - Succession planning (SP)

2. DV - Acceptance of Individual roles (AIR)
   IV - Perceived family harmony (PFH)

3. DV - Agreement to continue the business (ACB)
   IVs - Perceived family harmony (PFH)
     - Payoffs from the business (PFB)

3a. DV - President’s commitment to continue the business (ACBa)
   IVs - Perceived family harmony (PFH)
     - Payoffs from the business (PFB)

3b. DV - Agreement of other family members to continue the business (ACBb)
   IVs - Perceived family harmony (PFH)
     - Payoffs from the business (PFB)

4. DV - Propensity of successor to take over (PSTO)
   IVs - Career interests (CI)
     - Payoffs from the business (PFB)
     - Acceptance of individual roles (AIR)

5. DV - Propensity of incumbent president to step aside (PPR)
   IVs - Interests outside the business (IOB)
     - Trust in successors abilities and intentions (TSAI)

6. DV - Succession planning (SP)
   IVs - Presence of a formal active advisory board (AABa)
     - Presence of an informal advisory board (AABb)
     - Propensity of incumbent / president to step aside (PPR)
     - President’s commitment to continue the business (ACBa)
     - Agreement of other family members to continue the business (ACBb)
Partial Residual Plot

DV: SwSP        IV: AIR

President's data set

Acceptance of Individual roles
Partial Residual Plot

DV: SwSP  IV: AIR

Successors and other family members data set

Acceptance of individual roles
Partial Residual Plot

DV: SwSP  IV: ACB

President's data set

Agreement to continue the business
Partial Residual Plot

DV: SwSP
IV: ACB

Successor's and other family members data set

Agreement to continue the business
Partial Residual Plot

DV: SwSP    IV: ACBa

President's data set

President's commitment to continue business
Partial Residual Plot
DV: SwSP     IV: ACBa

Successor's and other family members data set

President's commitment to continue the business
Partial Residual Plot
DV: SwSP    IV: ACBb

President's data set

Agreement among family members to continue business
Partial Residual Plot

DV: SwSP  IV: ACB₆

Successor's and other family members data set

Agreement of other family members to continue the business
Partial Residual Plot
DV: SwSP  IV: PSTO

President's data set

Propensity of successor to take over
Partial Residual Plot

DV: SwSP    IV: PSTO

Successors and other family members data set

Propensity of successor to take over
Partial Residual Plot

DV: SWSP    IV: PPR

President's data set

Propensity of incumbent to step aside
Partial Residual Plot

**DV:** SwSP    **IV:** PPR

Successors and other family members data set

Propensity of incumbent to step aside
Partial Residual Plot

DV: SwSP    IV: SP

President's data set

Succession Planning
Partial Residual Plot

DV: SwSP  IV: SP

Successors and other family members data set

Succession planning
Scatterplot
AIR and PFH Presidents data set

Perceived family harmony
Scatterplot
AIR and PFH
Successors and other family members data set

Perceived family harmony
Partial Residual Plot

DV: ACB  IV: PFH

President's data set

Perceived family harmony
Partial Residual Plot

DV: ACB  IV: PFH

Successor's and other family members data set

Perceived family harmony
Partial Residual Plot

DV: ACB    IV: PFB

President's data set

Payoffs from business
Partial Residual Plot

DV: ACB       IV: PFB

Successors and other family members data set

Payoffs from business
Partial Residual Plot
DV: ACBa     IV: PFH
President's data set

Perceived Family Harmony
Partial Residual Plot

DV: ACBa    IV: PFH

Successor's and other family members data set

Perceived family harmony
Partial Residual Plot
DV: ACBa   IV: PFB

President's data set

Payoffs from business
Partial Residual Plot

DV: ACBa  IV: PFB

Successor's and other family members data set

Payoffs from the business
Partial Residual Plot

DV: ACBb  IV: PFH

Perceived family harmony
Partial Residual Plot

DV: ACBb    IV: PFH

Successor's and other family members data set

Perceived family harmony
Partial Residual Plot

DV: ACBb  IV: PFB

President's data set

Payoffs from business
Partial Residual Plot

DV: ACBb     IV: PFB

Successor's and other family members data set

Payoffs from business
Partial Residual Plot

DV: PSTO  IV: CI

Presidents data set

Career interests
Partial Residual Plot

DV: PSTO
IV: CI

Successors and other family members data set

Career interests of successors
Partial Residual Plot

DV: PSTO  IV: PFB

Presidents data set

Payoffs from business
Partial Residual Plot

DV: PSTO  IV: PFB

Successors and other family members data set

Payoffs from business
Partial Residual Plot

DV: PSTO

IV: AIR

Presidents data set

Acceptance of individual roles
Partial Residual Plot

DV: PSTO  IV: AIR

Successors and other family members data set

Acceptance of individual roles
Partial Residual Plot

DV: PPR  IV: IOB

Presidents data set

Interest outside the business
Partial Residual Plot

DV: PPR  IV: IOB

Successors and other family members data set

Interest outside the business
Partial Residual Plot

DV: PPR    IV: TSAI

Presidents data set

Trust in successor’s abilities and intentions
Partial Residual Plot

DV: PPR    IV: TSAI

Successors and other family members data set

Trust in successor's abilities and intentions
Partial Residual Plot

DV: SP  IV: AABa

President's data set

Presence of a formal active advisory board
Partial Residual Plot

DV: SP  IV: AABa

Successor's and other family members data set

Presence of a formal active advisory board
Partial Residual Plot

DV: SP  IV: AABb

President's data set

Presence of an informal advisory board
Partial Residual Plot

DV: SP  IV: AABb

Successor's and other family members data set

Presence of an informal advisory board
Partial Residual Plot

DV: SP
IV: PPR

Presidents data set

Propensity of incumbent president to step aside
Partial Residual Plot

DV: SP  IV: PPR

Successors and other family members data set

Propensity of incumbent president to step aside
Partial Residual Plot

DV: SP     IV: ACBa

President's data set

President's commitment to continue the business
Partial Residual Plot

DV: SP  IV: ACBa

Successor's and other family members data set

President's commitment to continue the business
Partial Residual Plot

Dv: SP  IV: ACBb

President's data set

Agreement of family members to continue the business
Partial Residual Plot

DV: SP  IV: ACBb

Successor's and other family members data set

Agreement of family members to continue the business
Presented in this appendix are:
(i) The histograms of the standardized residuals of the dependent variables over values of independent variables for each of the regression equation, and
(ii) The normal probability plots of regression standardized residuals of the dependent variables over values of independent variables for each of the regression equations. The trend lines indicate normality of data.

The dependent variables are:
1. Satisfaction with the succession process (SwSP)
2. Acceptance of individual roles (AIR)
3. Agreement to continue the business (ACB)
   - President's commitment to continue the business (ACBa)
   - Agreement of other family members to continue the business (ACBb)
4. Propensity of successor to take over the business (PSTO)
5. Propensity of president to step aside (PPR)
6. Succession planning (SP)
Histogram

Dependent Variable: SwSP

Presidents data set

Regression Standardized Residual

Std. Dev = .97
Mean = 0.00
N = 77.00
Histogram

Dependent Variable: SwSp

Successors and other family members data set

Regression Standardized Residual
Histogram

Dependent Variable: Acceptance of Ind. roles

Presidents data set

Std. Dev = 1.00
Mean = 0.00
N = 105.00

Regression Standardized Residual
Histogram

Dependent Variable: Acceptance of ind. roles

Successors and other family members data set

Regression Standardized Residual

Std. Dev = 1.00
Mean = 0.00
N = 159.00
Dep. Var.: Agreement to continue business

Presidents data set

Histogram

Regression Standardized Residual

Std. Dev = .99
Mean = 0.00
N = 98.00

-2.25 -1.75 -1.25 -0.75 -0.25 0.25 0.75 1.25 1.75
-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00 1.50 2.00

Frequency
Dep. Var.: Agreement to continue business
Successors and other family members data set

Histogram

Regression Standardized Residual

Std. Dev = .99
Mean = 0.00
N = 160.00
Histogram
Dependent Variable: ACBa

President's data set

Regression Standardized Residual

Std. Dev = .99
Mean = -.00
N = 101.00
Histogram

Dependent Variable: ACBa

Successor's and other family members data set

Frequency

Regression Standardized Residual

Std. Dev = .99
Mean = .00
N = 163.00
Histogram

Dependent Variable: ACBb

President's data set

Std. Dev = .99
Mean = -.00
N = 169.00

Regression Standardized Residual
Histogram

Dependent Variable: ACBb

Successor's and other family members data set

Regression Standardized Residual

Std. Dev = .99
Mean = -.00
N = 103.00
Histogram

Dep. Var.: Propensity of successor to take over Presidents data set

Regression Standardized Residual

Std. Dev = .99
Mean = 0.00
N = 102.00
Histogram

Dep. Var.: Propensity of successor to take over successors and other family members data set

Regression Standardized Residual

Std. Dev = 0.99
Mean = 0.00
N = 160.00
Histogram
Dep. Var.: Propensity of president to step aside

Presidents data set

Regression Standardized Residual

Std. Dev = .99
Mean = 0.00
N = 110.00
Dep Var: Propensity of incumbent to step aside
Successors and other family members data set

Histogram

Std. Dev = .99
Mean = 0.00
N = 137.00

Regression Standardized Residual
Histogram

Dependent Variable: Succession Planning

Successors and other family members data set

\[ \text{Mean} = 0.83 \]

\[ \text{Std. Dev} = 0.99 \]

\[ N = 150.00 \]
Normal Plot of Regression Std. Residual

Dependent Variable: SwSP

Successors and other family members data set
Normal Plot of Regression Std. Residual
Dependent Variable: SwSP

Presidents data set
Normal Plot of Regression Standardized Residual
Dependent Variable: Acceptance of ind. roles
Presidents data set

Expected Cum %

Observed Cum %
Normal Plot of Regression Std. Residual

Dependent Variable: Acceptance of ind. roles

Successors and other family members data set

Observed Cum %

Expected Cum %
Normal Plot of Regression Standardized Residual
Dep. Var.: Agreement to continue business
Presidents data set

Observed Cum %
Normal Plot of Regression Std. Residual
Dep. Var.: Agreement to continue business
Successors and other family members data set

Observed Cum %

Expected Cum %
Normal Plot of Regression Standardized Residual
Dependent Variable: ACBa
President's data set
Normal Plot of Regression Standardized Residual

Dependent Variable: ACBa

Successor's and other family members data set
Normal Plot of Regression Standardized Residual

Dependent Variable: ACBb

President's data set
Normal Plot of Regression Standardized Residual

Dependent Variable: ACBb

Successor's and other family members data set
Normal Plot of Regression Std. Residual
Dep. Var.: Propensity of successor to take over Presidents data set
Normal Plot of Regression Std. Residual

Dep. Var.: Propensity of successor to take over

Successors and other family members data set
Normal Plot of Regression Std. Residual

Dep. Var.: Propensity of incumbent to step aside

Presidents data set

Expected Cum %

Observed Cum %
Normal Plot of Regression Std. Residual
Dep Var: Propensity of incumbent to step aside
Successors and other family members data set
Normal Plot of Regression Std. Residual
Dependent Variable: Succession Planning
Presidents data set

Observed Cum %

Expected Cum %
Normal Plot of Regression Std. Residual
Dependent Variable: Succession Planning
Successors and other family members data set
Presented in this appendix are the scatter plots for standardised residuals over values of the dependent variables. A lack of the detection of any visible fan shape in the plot indicates that there has been no violation of the assumption of homoscedasticity.

The dependent variables are:

1. Satisfaction with the succession process (SwSP)
2. Acceptance of individual roles (AIR)
3. Agreement to continue the business (ACB)
   - President's commitment to continue the business (ACBa)
   - Agreement of other family members to continue the business (ACBb)
4. Propensity of successor to take over the business (PSTO)
5. Propensity of president to step aside (PPR)
6. Succession planning (SP)
Scatterplot

Dependent Variable: SwSP

Presidents data set
Scatterplot
Dependent Variable: SwSP
Successors and other family members data set

SwSP vs. Residuals
Scatterplot

Dependent Variable: Acceptance of individual roles

Successors and other family members data set

Acceptance of individual roles
Scatterplot

Dependent Variable: Acceptance of individual role

Presidents data set

Acceptance of Individual roles
Scatterplot

Dep. Var.: Agreement to continue business

Successors and other family members dataset

Agreement to continue the business
Scatterplot

Dep. Var.: Agreement to continue business

Presidents data set

Agreement to continue the business
Scatterplot

Dependent Variable: ACBa

President's data set

President's commitment to continue the business
Scatterplot
Dependent Variable: ACBa
Successor's and other family members data set

President's commitment to continue the business
Scatterplot

Dependent Variable: ACBb

President's data set

Agreement of family members to continue the business
Scatterplot

Dependent Variable: ACBb

Successor's and other family members data set

Agreement of family members to continue the business
Scatterplot

Dep. Var.: Propensity of successor to take over

Presidents data set

Propensity of successor to take over
Scatterplot

Dep. Var.: Propensity of successor to take over

Successors and other family members data set

Propensity of successor to take over
Scatterplot

Dep. Var.: Propensity of incumbent to step aside

Presidents data set

Propensity of incumbent to step aside
Dep Var: Propensity of incumbent to step aside

Successors and other family members data set
Scatterplot

Dependent Variable: Succession Planning

Presidents data set

Succession Planning