

THE UNIVERSITY OF CALGARY

STRESS AND GENDER ROLES OF FARM MEN

BY

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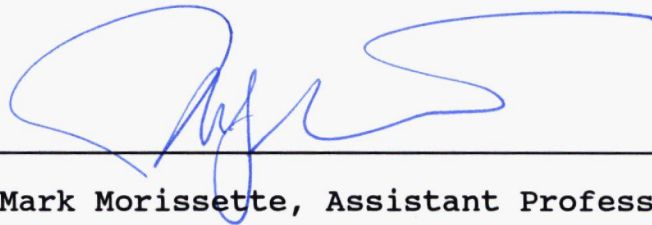
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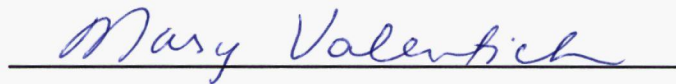
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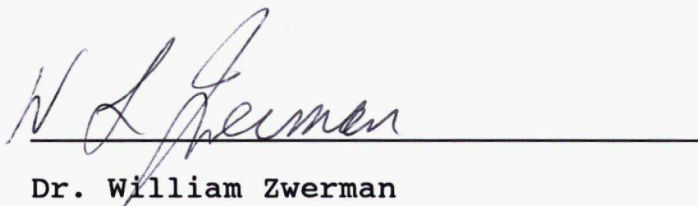
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "Stress and Gender Roles of Farm Men" submitted by Wilbert John Voth in partial fulfilment of the requirements for the degree of Master of Social Work.



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## **Abstract**

### **Stress and Gender Roles of Farm Men**

by

Wilbert John Voth

The farm family has been experiencing an increasing amount of economic stress. The rising costs of production, devaluation of land, and dropping prices of commodities such as grain all threaten the survival of the family farm. The economic problems facing our Canadian farmers have consequences for the farming enterprise itself, which in turn result in difficulties for the individual farmer and for the family as a whole.

The farm families' attempts to cope with the economic crisis often result in a variety of adjustment problems. For men or women, there may be a loss of fulfilment in terms of traditional roles, often leading to a need to work off the farm to augment the family income. These difficulties can have a negative impact both on the individual and on relationships, resulting in symptoms such as marital discord, poor communication, or even family violence.

The purpose of this study was to determine if there was an association between levels of perceived stress and gender role characteristics of farm men. In addition, other factors were analyzed to determine their association with stress. It was hypothesized that those farmers who were traditional in their gender role characteristics

(independent variable) would experience higher levels of stress (dependent variable) than those farmers who were androgynous.

Surveys were delivered in the County of Lethbridge #26, to 75 farmers who had been selected by way of nonprobability sampling. The two main scales used for this survey were the Index of Clinical Stress, measuring levels of stress, and the Bem Sex Role Inventory, which determined the farmers' gender role characteristics. Along with these instruments, questions about demographics and related issues were included.

The results of a oneway analysis of variance supported the hypothesis in that those farmers who were masculine experienced higher levels of stress than did those farmers who were androgynous (high levels of both masculine and feminine characteristics). Moreover, those farmers who were undifferentiated (low levels of both masculine and feminine characteristics) experienced the highest levels of stress.

It was concluded that social workers working with the rural population need to increase their awareness of the complexity of the farming environment. The recommendation was made that practitioners encourage and challenge farmers to begin to evaluate the consequences of strict adherence to masculinity, so that they might begin to experiment with and adopt a more flexible repertoire of gender characteristics, including both masculine and feminine characteristics.

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## **STRESS AND GENDER ROLES OF FARM MEN**

### **CHAPTER 1**

#### **Introduction**

##### **Problem Context and Identification**

The farm family has been experiencing an increasing amount of economic stress. The rising costs of production, devaluation of land, and dropping prices of commodities such as grain all threaten the survival of the family farm. The economic problems facing our Canadian farmers have consequences for the farming enterprise itself, which in turn result in difficulties for the individual farmer and the family as a whole.

The farm families' attempts to cope with the economic crisis often result in a variety of adjustment problems. For men or women, the need to work off the farm to augment the family income may become a necessity in many cases. This adds to the stress by imposing shifts in the traditional roles within which the farm families have operated (Vester, 1982). Most farm families who experience difficulty suffer from financial or relational stress; however it is not always certain which one is a result of the other (Davis-Brown & Salomon, 1987). Ultimately, the difficulties and resolution of family finances force a shift in role expectations. This process results in increased levels of stress, which in turn manifests itself in

psychological symptoms, such as depression, anxiety, and excessive worry. The physical symptoms of stress are manifest through headaches, stomach upset, chest pain, chronic pain, and an inability to perform certain tasks. Behavioral symptoms of stress are often seen in irritability, problems in sleeping, irrational behavior, fatigue, and aggressive behavior (Mackenzie, 1987). These individual factors have an impact on interpersonal relationships and result in symptoms such as marital discord, poor communication, or even family violence. These symptoms can be a result of unmet needs due to a lack of individual competencies such as coping skills or interpersonal skills, or a lack of external resources such as social supports and education (Brown & Soloman, 1987; Rothery, 1990).

There appears to be a need to develop programs/ information that will enable farm families to cope more effectively with their changing expectations and adaptation to new roles. For wives, there seems to have been a great deal of emphasis on their need for adjustment to these changing roles. Farm women action groups have developed programs and encouraged women to take active roles in farm management, become more informed about the farming processes and techniques, develop marketable skills, consider off farm employment, develop healthier self-esteem, and become more assertive, all of which seem quite nontraditional in terms

of femininity. However, the husbands' needs, by and large, have been shown little attention, even in the literature, aside from the educational components such as dealing with farm business, marketing, and production. Few, if any, programs or relevant information are available which address such farming issues as men's changing roles and expectations. Therefore, there is a need for a study to examine the dynamics of men's roles, and how they affect levels of stress. This in turn may enable men to effectively address personal and family problems arising from the farming crisis.

#### **Study Purpose**

The purpose of this study is to look at farm male (farmer) roles, in terms of traditional and androgynous characteristics, and their association with perceived stress. This may provide information as to whether or not androgynous role identification and behavior are indeed factors which are related to reduced farm men's personal levels of stress (since many men are experiencing increased stress as a result of the present farm economic crisis).

#### **Relevance**

Farming has been identified as one of the top 10% of the 130 highest stress occupations in the United States, by the U. S. National Institute for Occupational Safety and Health (in Jevne, 1979). We need to look at how the male farmer is coping with this situation.



Within our culture, the man has been identified (traditionally) as the breadwinner of the family (Farrell, 1986). This is no less the case in the farming community, and for this reason it is important to look at the impact of the current bad economic times. In the extreme form, a man sees his own importance in the size of his pay cheque or in his ability to access external rewards (Farrell; Gould, 1974). In the world of an unstable farming economy, this may have devastating effects on the farmers' sense of competence, and on their feelings about themselves, as the markets for the commodities which they produce begin to drop in price to significantly low levels, or to levels at which the farming operation may no longer be able to exist.

An economic crisis may tend to leave men with a sense of powerlessness, which in turn may lead men to seek the satisfaction of power acquisition within their own families (Bowl, 1985; Sawyer, 1980). If not able to control and be aggressive in their work, they may end up trying to fill that void within the home environment. As stated by Jevne (1979), the area of interpersonal relationships and communication has been identified as the second major cause of stress within the farm family. The traditionally feminine characteristics of dealing with emotions and expressing feelings are just not seen by men as acceptable means of dealing with their stress. Instead, they often seek power and control, thus thwarting the potential for

good communication or relationships (Farrell, 1986). Their reluctance to deal with their emotions amongst themselves may be seen as equivocal to a defence against any sign of weakness, impotence, or homosexuality. It becomes important that men be empowered to become more flexible in their attitudes toward accepting new roles and more effective means of communicating and working on relationships, in order to better meet their needs, and reduce their level of stress.

A consequence of men maintaining their traditional roles is that they become entrapped by their own "advantage". A man is constantly in a position of needing to prove that he is "in charge". Competition and one-upmanship become the norm, as men continually feel the need to prove themselves (Farrell, 1986; Norman, 1980, citing Robert Seidenberg). Hartley (1974) and Norman state that high anxiety and a low sense of self worth are characteristics with which men are faced. With a broader base from which to operate more cooperatively in terms of roles, men may be able to reduce their levels of stress. It is on this basis that the farm family is seen as having a healthy future (Vester, 1982).

The other family members are affected by the rigid traditional male role in that the male is often unable to express his feelings to them, and eventually may not even experience feelings, leading to less awareness of his inner

self, and often an inability to show affection in appropriate ways (Norman, 1980). Other costs to the family relate to the inappropriate role modelling the children receive, when the father is often out of the home, or models a distant, non-nurturing, and authoritarian type of adult. These characteristics will inevitably be passed on to the following generation.

The feminist movement, the need for some women to work off the farm, and the resulting shift in tasks are other considerations to be dealt with, in terms of their effect on farm men. For some men whose wives work outside the home, it may be expedient for them to begin taking more time to care for their children, do the cooking, clean the home, and take care of other nontraditional tasks, which have tended to be associated with feminine roles. This being the situation in many homes does not imply that these tasks will in fact be done by the husband who stays at home. On the contrary, it has been shown that by and large the woman who works outside the home is still expected to continue with the traditional duties of the homemaker (Greenglass, 1982; Zook, 1988). In the roles played by the couple, there has been shown to be a moderate positive correlation between their role congruence and their happiness (Lueptow, Guss, & Hyden, 1989). Berkowitz and Perkins (1984) state that there is a positive correlation between role incongruence and stress. In other words, if a couple are in agreement about

their traditional roles, the greatest degree of happiness is found. On the other hand, if the woman is more nontraditional, and the man remains traditional, the degree of stress increases. Therefore, there is a need to consider the impact of more flexibility in the role structure of farm couples.

With the changing nature of the prairie farm situation, and the changing roles of farm women, it is predicted that the consequences of attempting to maintain rigid roles while trying to cope with present day stresses will further threaten men's self image, and have a more negative impact on the relationships within the home. Men who adopt more androgynous roles (more of a balance/flexibility between masculine and feminine characteristics) will more than likely develop more appropriate means of adapting to new situations (Bem, 1975), find a greater sense of self-fulfilment, and ultimately experience less stress in times of difficulty (Chusmir, 1990).

There could be other benefits in terms of the community as well. Men who adopt more androgynous roles may become a greater emotional resource to one another, allowing each other to express and accept emotions, thus reducing the amount of experienced stress. They may also become more involved with activities in which their children are involved, thereby increasing the number of available resources within the community, and at the same time,

modelling helpful behavior. As well, in times of economic difficulty, the adjustment to more flexible roles will increase their options in terms of job opportunities.

In the context of social work practice, this study will identify areas in which rural social workers may need to focus some energy in terms of education and the development of programs to involve and challenge farmers (males) to consider and become more comfortable with alternate or more flexible role sets. In this way, social workers may help to empower farmers to become more able to fulfil their needs in not a dissimilar fashion to that in which women have been empowered over the past number of years.

#### **Researchability**

It is the writer's opinion that the issue of stress in terms of shifting roles for farm men is a researchable concern. With the data that this study could provide, it could be determined what impact traditional versus nontraditional roles have on men who are in the farming community. Just as studies, projects, and learning experiences have enabled women to take a more affirmative stance for themselves, so too can men become more aware and begin to address some of these important issues for themselves.

#### **Feasibility**

The data were accessible by means of a research survey, or interviews, which could be done within a specified period

of time. There continue to be inquiries from community organizations about what direction program development should take in the rural areas, and this type of study could prove beneficial and valuable for this purpose.

### **Ethical Acceptability**

There were no apparent inherent risks in undertaking such a study. The information gained from this study was aimed at recommending some avenues of further study, education or intervention through which the rural male population might be enabled to deal more effectively with stress.

In summary then, the farmer is coping, but not always adaptively. Economic stress is increasing. Social norms and expectations change more slowly than needs may often dictate in individual situations. Without the awareness, skills, resources, and support to enable men to become more flexible and adaptive in their roles, the change may occur even more slowly. It has not been shown that more androgynous roles do in fact reduce the levels of perceived stress for farmers. However it is the writer's opinion, based on the literature presented, that there is much to be gained in determining what the association is between perceived levels of stress and role identification for farm men. It may be as Bem (1974) and Norman (1980) have stated: the traditional roles may have outlived their usefulness.

The question of whether androgynous affiliation and stress are related needs to be studied. In the following chapter, the relevant literature about gender roles and stress, as they relate to farmers and men, will be reviewed.

## CHAPTER 2

### Literature Review

The purpose of this literature review is to consider a number of previous studies which address the issue of farm families, their roles, and the stress they are experiencing, and also to determine what factors one can look at in determining and addressing the emotional and adaptational needs of men.

#### Rural and Urban Differences

At the outset there is a need to address the differences between the rural and urban community in terms of roles. There are significant differences between urban and rural persons, regardless of sex. The greatest difference found was in terms of education, with urban persons having higher levels of schooling. Secondly, rural persons are more traditional than urban persons in terms of husband and father roles. However, between the sexes, it is concluded that women in general prefer egalitarianism more than men (Scanzoni & Arnett, 1987). From this position, the issue of traditionalism would seem to be even more relevant for the rural community than for the urban community.

A longitudinal study was done involving university alumni, which indicated that there has been a general decrease in traditionalism over a five year period (McBroom, 1984). For women, they were less traditional to begin with, but have also changed more than men, which means that the



gap between men and women is increasing. This suggests that there is a need to address the ever increasing gap between the men and women of our society in regards to sex roles (McBroom, 1984). An increasing disparity between the role expectations will more than likely increase stress levels, because enhancing interaction is difficult between partners whose roles are incongruent (Baker Miller & Mothner, 1971).

### Who Experiences Stress?

Stress and the farm family has been a subject that has received much attention. Stress is a major result of the farming economic crisis and usually affects farmers who are younger, more educated, and owners of larger operations (Bultena, Lasley, & Geller, 1986). In a survey done by Jevne (1979), economic concern was identified as the greatest indicator of stress in the farm family. Bultena et al. also suggested that economic distress is positively associated with a perceived deterioration in one's financial situation over time, psychological stress experienced over time, and negative changes in family-life patterns of money management. This study indicates that the stress is experienced differently by different groups of farmers.

Weigel, Weigel, and Blundall (1987) point out that stress is also experienced within the intergenerational farm families, especially by the younger generations. In order to curb the experiences of stress felt by farmers, they found that perceived support for the younger generation of

two generation farms was a possible factor in reducing stress. This would include the need for positive interaction, respect, optimism, and teamwork. This cannot be immediately generalized to the farm family as a single unit. However, it is the writer's opinion that this human need for support is still present and needs to be addressed, whether or not this support comes from within the family.

### Stress as it Relates to Roles

The need to supplement the family income, seek fulfilment in other activities outside the home, and gain more independence are all factors which contribute to off farm employment for women. By itself, a shift in behavior patterns can add stress to one's life. In terms of marital happiness, some research has shown that married women who hold traditional role values will exhibit higher levels of global and marital happiness than women who hold nontraditional values (Lueptow, Guss & Hyden, 1989; Felton, Brown, Lehmann, & Liberatos, 1980). However, in addition, Felton et al. found that women who were more nontraditional in their views were able to cope more effectively with incongruent situations (that is, where their goals and living situation were incompatible). These women experienced less stress than those who were more traditional. The second position supported by Lueptow et al. was that "divorced/separated women will have more nontraditional sex role values than divorced men or than

married women and men" (p. 387). However, this study does not really address the idea that men may experience higher levels of global and marital happiness if they are more nontraditional in their ideology. A prediction may be that for married couples, if men were more nontraditional, the women who are nontraditional may experience greater happiness as well.

In a study of the relationship between the marital stress of farm couples, and role congruence or role incongruence in terms of the wife's role, it was found that couples experienced greater stress when there was a lack of role congruence of the wife's role (the husband and wife differed in their expectations for the wife's role) (Berkowitz & Hedlund, 1979). For couples who were congruent in their role definitions and expectations, the reverse was found: they experienced less stress (Berkowitz & Hedlund, 1979; Berkowitz & Perkins, 1984). However, this position seemed to impose a given, in that only the male traditional role was considered, and only stress as it relates to that traditional role was addressed. Whenever there are new or different expectations of an individual, or when a person wishes not to play a particular role, role strain can be a result (Pearlin, 1983).

### **Predictors of Stress**

Even though Jevne (1979) indicated that financial pressure was the highest predictor of stress for farmers,

interpersonal relationships and communication were identified as the second major cause. Other studies identify similar factors related to stress. According to Berkowitz and Perkins (1984), and Keating (1987), the lack of support by the husband has been shown to be the strongest predictor of stress for farm women. The content of the farm and home tasks related to stress only minimally, indicating relationship issues are more important than tasks. This is important because it identifies a possible means by which men can play an integral part in reducing the stress experienced by women and, in turn, even by themselves, and that is by increasing the amount of support they give their wives. Haan (1982) indicated that lack of support in relationships exacerbates the stress response. It is suggested that the androgynous role characteristics of husbands are instrumental in reducing stress for wives, but the level of stress experienced by the husbands when they are more or less androgynous in their attitudes and behaviors is not addressed (Berkowitz & Perkins, 1984). One could only postulate that the reduction of stress for the wife could only positively affect the husband as well. Reciprocity is a factor that, if present, will more than likely reduce levels of stress (Pearlin, 1983).

In terms of stress experienced by men, Keating (1987) found that the greatest predictor of stress was the level of their personal resource of mastery: high stress farmers felt

that their fate was out of their hands. She indicated that for them, spousal support was not related to their stress, possibly because much of their support comes from the community, due to their farm role. Contrary to expectations, the ratio of debt load to gross sales was not a significant predictor of stress. Overall, personal mastery provided the greatest resource in alleviating stress. Keating and Farrell (1986) indicate that the acquisition of external rewards is central to men's self worth. Farrell further identifies that personal difficulty is the result of a deprivation of extrinsic and internal rewards.

Personal mastery is only one factor which Pearlin (1983) identifies as determining stress. Other factors Pearlin identifies are interpersonal conflicts, multiple roles which are incongruent, role captivity, loss of a role or the addition of a role, or role restructuring. He goes on to say that when people are under stress and cannot meet the demands of a particular role, they tend to give higher value to other peripheral characteristics which may give them temporary satisfaction, and yet not meet their long term need of validation.

Perhaps by becoming more androgynous, men can achieve a greater sense of mastery in their interpersonal relationships and in reducing their role conflicts. According to Felton et al. (1980), nontraditional views

during marital disruption are associated with decreased marital stress for women, but it does not appear that sex-role attitudes provide a coping function for men in marital disruption. Even though the sex-role attitudes for men do not appear to be a coping function during marital breakdown, that is not to say that sex-role attitudes cannot provide a coping function for men in everyday life. As Felton et al. pointed out, people who use a variety of coping strategies experience less stress than those who use only a narrow range of coping behaviors. Men who exhibit more nontraditional behavior in the way of giving support and allowing their wives to become more involved in decision making may help in reducing the incidence of their wives' anxiety, depression, and hostility (Hertsgaard & Light, 1984). The benefits would hardly stop with the wife; the husband could hardly avoid reaping some of the benefits of reduced stress for his wife.

#### **Characteristics and Comfort with Masculinity**

Men who choose female dominated occupations are more likely to have many of the characteristics attributed to women and score lower on the Bem masculinity scale than do men who are in traditional occupations. However, nontraditionally career oriented men have been shown not to experience role strain and to be more comfortable with their masculine sexuality and with themselves, than are men who are more traditional in their career orientation. It is

suggested that the reason is that these men do not have the same fear of femininity as do men who are more traditional (Chusmir, 1990). As well, men and women who have more androgynous characteristics are more flexible and adaptable when circumstances require it (Bem, 1975). It may be the role captivity which Pearlin (1983) discussed that may be a factor in restraining men from adopting other more flexible roles.

It was suggested that there is a growing trend toward more acceptance of men who are more nontraditional. It would seem that men would have a lot to gain from adopting less traditional characteristics, in terms of their gender identity and themselves in general. Since the greatest influences toward nontraditional job orientation and a healthy balance of male/female characteristics are the influence of significant females and a distant relationship with a father (Chusmir, 1990), it would stand to reason that a close relationship with a father who was more masculine would influence a son to become more traditional and less flexible in his acceptance of neutral or feminine characteristics. Conversely, if men adopt more affective characteristics, interaction with their children may help the children to become more psychologically secure and balanced (Messner, 1987).

Chusmir's (1990) study does not address stress specifically (only in general terms, such as men being

comfortable with themselves). In terms of androgynous characteristics, it only suggests the acceptance of more feminine characteristics by some males, and a lack of role strain for men who are more nontraditional, both of which could be associated with lower levels of stress.

In summary, the review of the literature confirmed the need for a study regarding factors that may enable men to adjust to the increasing demands of their role on the family farm. Stress on the farm is already at high levels, men's roles are beginning to shift, but the gap between the levels of role flexibility for men and women is increasing. Increased flexibility in role characteristics has been shown for some men to decrease the level of stress. As well, farm women who experience social support from their spouses experience lower levels of stress. The benefits of such behavior and attitudes may be as helpful for men as they are for women. There appears to be a knowledge gap in the area of farm men and their adjustment to the changing factors in their lives.



## CHAPTER 3

### Methodology

#### Research Question

The review of the literature led to the question of whether or not there is an association between experienced stress and the level of androgyny. Do farm men experience higher levels of perceived stress if they are more traditional in their behaviors, thoughts, and attitudes than do farm men who are more androgynous (flexible)?

#### Hypothesis

Farm men who have more androgynous gender roles will experience less severe stress than farm men who have more traditional masculine roles.

#### Variables

This study explores the relationship between the central variables of stress and gender roles as related to farmers. Each variable is now discussed in terms of the conceptual definition, the best suited operational definition of the variable for the study, and the measurement used to address the variable. Measurement will also be evaluated in terms of its reliability and validity.

##### 1. Stress (Dependent Variable)

Conceptual definition. Stress has been defined as the result of disparities between the demands of life and the resources available to meet those demands (Hartman & Laird, 1983; Rothery, 1990). Berkowitz and Hedlund (1979)

identified three levels of stress which are on a continuum from severe to mild stress. Severe stress can be incapacitating and is often associated with serious physical and/or mental disturbances (Zung & Cavenar, 1980). On the mild end of the continuum are the levels of stress which are constructive and empowering. The area in between these two extremes is medium stress, which is the level of stress that becomes problematic for an individual and begins to interfere with psychological stability, impairing the ability to perform normal tasks, and/or significantly affecting interpersonal relationships with those inside or outside the family (Berkowitz & Perkins, 1984).

Stress has also been defined in terms of the life events (stressors) which have an impact on our lives, or the personal experience one obtains from these events (Eberhardt & Pooyan, 1990).

Operational definition. For the purposes of this study, stress was operationally defined as a condition of internal strain or tension that a person feels in the face of environmental demand and internal conflict - medium stress (Berkowitz & Hedlund, 1979).

The intention was to focus on the perceived psychological and physiological stress of farmers. The level of perceived stress was obtained through the use of a self-report stress instrument which identified the farmers' thoughts, feelings, and behavior as indicators of stress.

Measurement of stress. Consideration was given to a number of scales. Many of the present scales measuring stress were developed for use with psychiatric patients, and therefore were not used. These scales focused on pathological symptoms of stress which were not seen as appropriate for use with the farming population (Langner, 1962; Zung & Cavenar, 1980).

Other scales used for farmers seemed improvised (Berkowitz & Perkins, 1984; Keating, 1987), or were indicators of the stressors experienced by the farmer (Eberhardt & Pooyan, 1990). From a 22 item scale developed by Langner (1962), Berkowitz and Perkins (1984) and Keating (1987) took a number of items which seemed to address the mental health issues of farmers as they relate to stress. These seemed appropriate because they addressed the farm issues. However, they were not substantiated in terms of a valid and reliable measurement of stress.

The scale chosen for use in this study, which addresses the symptoms of stress for people in general and covers many of the stressful concerns of farmers, was the Index of Clinical Stress (Hudson & Abell, 1990). This scale uses terminology which seemed that it would be palatable to the farmer. According to W. Hudson (personal communication, April 2, 1991) this scale would be quite appropriate for use with the farming population. The Walmyr Assessment Scales Scoring Manual (1990) indicates that the vocabulary is at a

grade four level. Twenty-five statements are listed, and the available response range of seven ratings is from 1, "none of the time", to 7, "all of the time". These statements do not include indicators of pathology, such as identifying fainting spells, tremors, or dizziness. Examples of items included in the Index of Clinical Stress (ICS) are: "I feel like I want to scream, I feel very calm and peaceful, I feel like I am stretched to the breaking point, I feel wound up like a coiled spring, and I feel that I can't keep up with all the demands on me"<sup>1</sup> (Abell, 1991, p. 13).

According to Abell (1991), the expected cutting score for the ICS is about 30, within the total range of 0 - 100 points (ratio level measurement), low scores indicating lower levels of stress and high scores indicating higher, more problematic levels of stress. The scores are computed on the basis of the total number of items completed. The mean score for the normative group was 28.96, SD = 18.73.

Reliability and validity. The ICS was the index of choice even though it was only recently developed and has therefore not been widely used. It was developed to measure subjective perceptions of stress. While many scales are developed by studying university students, the ICS was

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<sup>1</sup>. The entire ICS scale can be obtained from "Walmyr Publishing Company", P.O. Box 24779, Tempe, AZ. 85285-4779.

developed through a study of 265 patients and their family members at a medical center. Items that might be descriptors of anxiety were not included in order to avoid confusion between the two constructs of stress and anxiety. As well, to reduce the possibility of response bias, some of the statements were "negatively worded" (therefore, the reversed items' scores require reversing) (Abell, 1991).

The reliability for the ICS produced an  $\alpha = .963$ . The construct validity in terms of discriminant and convergent elements was also shown to have good preliminary support (Abell, 1991).

One potential problem with the process of self report is that men may respond in a very traditional manner and say that they do not experience stress (social desirability). Another difficulty was that of obtaining a scale which accurately reflects the perceptions of the farmers. The scales used by Keating (1987), and Berkowitz and Perkins (1984), did seem to address issues related specifically to farmers. However, these scales had not been shown to be validated.

Population response on the ICS. Forty-five out of 54 individuals (83%) completed the ICS. The mean score for the farming sample was 25.5,  $SD = 12.9$ ,  $SE = 1.9$ , with a range of 5 - 56. Thirty-three percent of the farmers scored over 30 and 66% scored under 30, with 30 being the expected cutting score.

## 2. Gender Roles (Independent Variable)

Conceptual definition. Gender roles are those roles which determine to a large extent what kinds of expectations we have in our relationships with others. Some examples of feminine characteristics would be nurturing, caring, warmth, and emotional strength. Masculine traits are characterized by mastery, control, and leadership in terms of family and society (Kimmel, 1987; Lueptow, Guss, & Hyden, 1989; Trebilcot, 1982). Androgynous (non-traditional) roles are those which incorporate high levels of characteristics from each of the traditional role sets of masculinity on one side and femininity on the other (Bem, 1981; Trebilcot, 1982).

Operational definition. Gender roles vary from masculine to feminine. The four categories used in this study were: androgynous, undifferentiated, masculine, and feminine. An androgynous role would be defined as one which exhibits characteristics, behaviors, and attitudes that incorporate high levels of both masculine and feminine traits. These would be seen as integrated, yet flexible, parts of a person's personality. For example, a farm man who had the feminine capabilities of being nurturing with the children, able and willing to take on domestic duties as needed, able to communicate on an emotional level to other family members, and able to perhaps share some of the role of breadwinner, while still maintaining the masculine characteristics of assertiveness and competence, could be

identified as one who has androgynous characteristics. Those individuals who do not have high levels of either masculine or feminine traits would be identified as undifferentiated (Bem, 1981).

Measurement of gender roles. There are a wide variety of scales and measures to choose from when considering this topic. In view of the time available, and with consideration given to the simplicity, the length of time taken to complete, and the validity of scales that have been used before, a standardized scale was chosen in order to measure gender roles.

Among the most common scales used for measuring gender roles is the Bem Sex Role Inventory (BSRI), which was first developed by Bem in 1974 and then reorganized by Bem in 1981. The BSRI measures male and female characteristics and treats them as independent traits rather than as opposite ends of a continuum, which Beere (1990) suggests is the more appropriate method of measuring gender roles.

The BSRI is an adjective scale and contains 20 items for each of the masculine, feminine, and neutral categories. Each adjective is rated on a seven point rating scale, from 1, "never or almost never true" to 7, "always or almost always true." The short form of the scale contains only 10 items related to each of the gender constructs, plus 10 neutral items. Sample items include feminine characteristics such as "affectionate, loves children,

sympathetic, and eager to soothe hurt feelings"<sup>2</sup> (Bem, 1974, p. 156), and masculine characteristics such as "defends own beliefs, individualistic, strong personality, and ambitious" (Bem, p. 156). Neutral items are included as well.

The results of the scale indicate the extent to which an individual confirms whether those characteristics are indicative of their self perception. The original manner of scoring the BSRI (Bem, 1974) was not seen to be as effective as the "Hybrid Method", which utilizes the differences in standard scores and the median splits (Bem, 1981).

Independent scores for each of the constructs (both masculine and feminine) are computed into standard scores. In this study, the scores were compared to normative t scores for males only, as opposed to the norm of female and male scores together, since the survey reflected only male responses. Then the difference between the two standard scores (feminine minus masculine score) is calculated, and indicates whether or not the individual is strongly sex-typed. Difference scores over +10 indicate strong feminine identification, and scores under -10 indicate strong identification with masculine characteristics. Where the difference between the feminine and masculine standard

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<sup>2</sup>. Complete copies of the BSRI can be obtained from Consulting Psychologist Press, Inc. 3803 E. Bayshore Road, Palo Alto, CA 94303.



scores is greater than -10 and less than +10, the gender role identification is computed on the basis of whether the raw scores are above or below the median splits for a normative sample. The femininity and masculinity medians for the short BSRI were 5.50 (F) and 4.80 (M). Those individuals who scored above the median scores for both femininity and masculinity, with a difference score between +10 and -10, were categorized as androgynous (Bem, 1981). All others with a difference score between +10 and -10 were categorized as undifferentiated.

It is important to note that an extreme score (high score) does not only mean that the person is more feminine or masculine, but it also means that the person divorces him/herself from those characteristics attributed to or considered more appropriate to the opposite sex.

Reliability and validity. The internal consistency of the BSRI was determined to be  $\alpha = .85$  on the masculinity scale,  $\alpha = .86$  on the femininity scale, and  $\alpha = .88$  for the difference scores (Bem, 1981). According to Beere (1990), these levels of reliability are acceptable requirements for a scale measuring attitudes and personality interests.

Test-retest reliability (for males) of the BSRI was found to have adequate levels of correlations: for masculinity,  $r = .76$ ; femininity,  $r = .91$ ; and difference scores,  $r = .85$ .

Social desirability was tested by administering the

Marlowe-Crowne Social Desirability Scale along with the BSRI. The correlations discovered indicated that the BSRI scores are not affected by a tendency to ascribe socially desirable characteristics to oneself (Bem, 1981).

In the development of the BSRI, two groups of undergraduate students were tested. Males scored significantly higher on the masculinity scale than did females, and conversely, the women scored consistently higher on the femininity scores than did the males (Bem, 1974). Other studies identified in Beere (1990) also support and verify these findings.

This particular scale has been used with a wide variety of populations, from the well-educated to those who are less educated, including upper, middle, and lower class people (Beere, 1990). This increases the likelihood that the scale is appropriate for the diversity of farmers, in terms of language and ease of completing.

Because of the length of the BSRI, the short form of the scale was chosen (Beere, 1990). According to Beere, the short form of the BSRI is a comparable scale which utilizes only half the original number of items in each of the categories of masculine, feminine, and neutral items. This in itself is a plus because of the reduced amount of time it takes to complete the inventory. As well, according to Payne (1985), the shortened form of the BSRI is a "psychometrically superior, factorially purer index of

instrumental and expressive traits" (p.179).

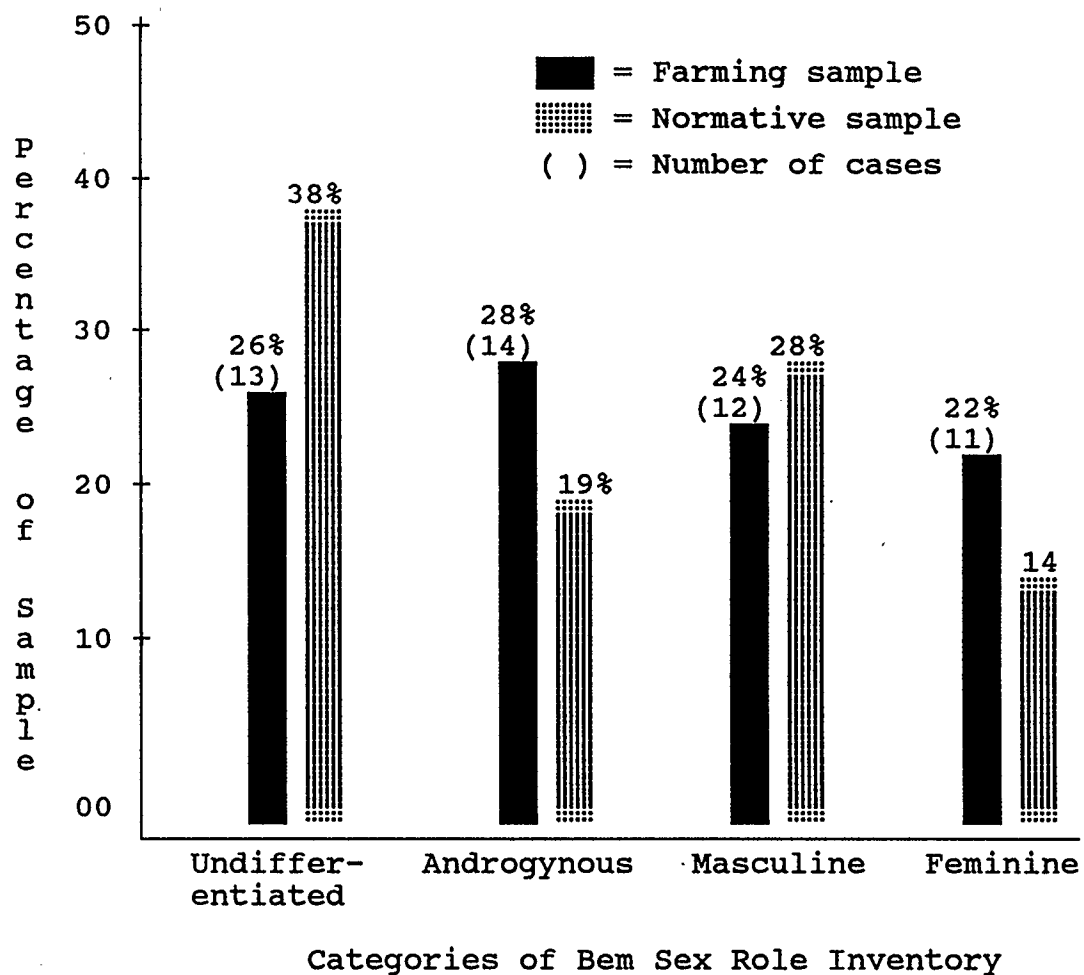
Another issue considered was the age of the inventory: is it still as applicable today as it may have been sixteen years ago? It must be emphasized that the scale has been reorganized and the methods of scoring have been altered (Bem, 1981). It appears that the items on the scale are quite appropriate and applicable to today's rural community.

According to Beere (1990), there is often a difference between attitude and behavior, and therefore the results are not always indicative of the real situation. However, we generally behave on the basis of our beliefs, and therefore the face value of the responses obtained from the sample population will be accepted.

Population response on the BSRI. The number of farmers who completed the Bem Sex Role Inventory (BSRI) was 50 (93%). Figure 1 displays the distribution of normative categories for men on the short form of the BSRI, as compared to the distribution of the sample of farmers on the BSRI.

Figure 1.

Frequencies of individuals in each of the Bem Sex Role Inventory categories, comparing the normative sample with the farming sample. (Total Number of cases = 50)



### **Questionnaire and Pretest**

In addition to the ICS and the BSRI, the survey included questions related to demographics and other possible influencing factors. These included subject areas related to relationships, coping ability, perceived support, satisfaction with farming, financial change and stress, and resources. Relevant factors will be presented and discussed in later chapters.

Before the survey was distributed, the entire questionnaire, including the instruments measuring stress and gender roles, was given to eight people: three individuals who were or are farmers, four individuals with farming background, and one farming consultant. This pretest was done for the purpose of obtaining feedback regarding readability, understandability, and applicability. According to the verbal and written feedback, the questionnaire was revised where necessary. Overall, the complete survey package was seen as appropriate for the farming population.

### **Research Design**

#### **Study Purpose and Goal**

The purpose of the study was to look at farm male roles in terms of traditional and androgynous characteristics. Further, this study could help to determine whether or not androgynous roles and behaviors are indeed factors which have an impact on reducing farm men's stress.

The literature suggests that farm families are experiencing increasing amounts of stress, as a result of the farming economic crisis and interpersonal difficulties within the family. In the first instance, there was a need for a survey to determine the present levels of stress in order to confirm this situation with farmers in southern Alberta. In the second instance, there was a need to address the issue of whether or not there is a relationship between levels of stress and the flexibility of gender roles. It is hypothesized that farmers who are more androgynous in their gender roles experience lower levels of stress than farmers who are less androgynous or more traditional.

#### Choice of Design - XO

In the selection of the best suited design for this study, it was necessary to consider the primary concepts identified within this study, these being stress (as the dependent variable), and gender roles (as the independent variable). In this study, the independent variable was not manipulated to determine its association with the dependent variable. The independent variable was measured and then compared to the dependent variable.

When considering whether or not to use a true experimental design, the time and resources available to complete the study, the manipulation of variables, control for intervening variables, and the random selection and/or

assignment of subjects to the experimental group were all taken into consideration. In terms of meeting all of the requirements of the true experimental study, the descriptive nature of this study did not lend itself to the use of an experimental design. This was because of the inability to manipulate the independent variable, to select the subjects randomly for the study, and to control for all the intervening variables.

For the purposes of this study, the posttest only one-group design (XO) was chosen,

where: X = gender role

O = perceived level of stress.

This was saying that if farmers are more androgynous, they experience lower levels of stress than those farmers who identify more strongly with masculine characteristics.

#### **Rationale for the Choice of the XO Design**

1. Men's studies, in terms of shifting male roles, have only begun to emerge during the last decade or two. Therefore, research identifying the current issues under study is relatively scarce, perhaps even nonexistent; hence, the lack of theories related to stress and gender roles as they relate to farmers. Therefore, this study is not explanatory, but descriptive, looking at the relationship between the two key variables.

2. This design is simple and addresses efficiently the purpose of the study as outlined, which is to determine

whether there is a relationship between stress and gender roles amongst farmers.

3. With the resources available, this design was appropriate to fulfill the objectives of the study.

#### **Advantages of Using the XO Design**

1. The XO design is simple and requires minimal resources to conduct. It seems that the principle of parsimony is best served by this design. Other forms of exploratory studies do not seem applicable because of the lack of empirical knowledge of stress as it relates to the gender roles of farmers. In addition, the independent variable is not being manipulated. Therefore other forms of exploratory studies, such as the posttest only multi-group design, posttest only comparison group design, or the pretest-posttest one group design were not seen as appropriate at this stage of research.

2. It will be possible to ascertain whether or not farmers in this particular study are experiencing stress and what their levels of androgyny are.

3. The XO design is appropriate to obtain information regarding the relationship between the variables (i.e. to determine the relationship between gender roles and levels of stress).

4. With the addition of the use of standardized tests, the XO design gives some semblance of the experimental characteristics.



### **Disadvantages of Using the XO Design**

1. This is the simplest of the descriptive exploratory research designs, and random selection or assignment is not used. This being the case, the results cannot be readily generalized to the rest of the population (Campbell & Stanley, 1963; Grinnell & Stothers, 1988). From this study, it will not be possible to know whether stress is actually caused by maintaining more traditional roles, or whether reduced stress is a result of acquiring more androgynous roles.

2. Campbell and Stanley (1963) state that because the XO design is not a scientific design which makes at least one comparison, any deductions or obtaining of absolute knowledge is an illusion. It is seen as the weakest of all the pre-experimental and explanatory designs. According to Boring (1954), research without control has little scientific value, but in terms of the original use of the word control, he says that all discovery is related to a difference in relation.

### **Difficulty in Implementing This Design**

The one difficulty foreseen in implementing this design was the distance issue, if farmers were to be contacted. The use of a phone or mail survey was considered. However, since the survey instrument was quite long, a phone survey did not seem to be an appropriate way of administering the questionnaire. The mail survey was another option. A

recent Quality of Life mail survey had been done by Barons - Eureka - Warner Family and Community Support Services within the County of Lethbridge #26. This survey used the phone book for a simple random sampling method, resulting in the inclusion of both rural and small town residents. The return rate of this mail survey was 35% (personal conversation, March, 1991, B. Drewry - Former Clinical Supervisor). According to O. Wain and C. Paul (personal conversation, March, 1991 - research consultants for the Dunvegan Group Ltd. of Calgary and the Advisory Group of Calgary respectively), to do a mail survey during the summer farming season could result in dismal returns of 10 - 15%. They recommended that personal contact was "crucial" in order to increase the response rate of the farming community.

It was hoped that random sampling could be done, to increase the generalizability of the study. However, this was not possible, since complete lists of farmers were not available, due to the confidentiality of the county records.

**Threats to Validity** (control of intervening variables)

The XO design has a number of characteristics which threaten the internal and external validity (Stanley & Campbell, 1963).

Internal validity. In terms of internal validity, weaknesses occur in the areas of history, maturation, selection, and mortality. Other threats such as testing,

instrumentation, and regression are not said to be influencing factors in this design (Stanley & Campbell, 1963).

History in the administration of this instrument may have been affected by the farmers' present situation. An example of this might be that farmers were getting ready to put the crop in and may have been quite optimistic about the coming year. This in itself may have affected the farmers' responses to the dependent variable of stress.

Maturation may have been an issue affecting the levels of stress. Those farmers who were older may have been less traditional in some areas than the younger generation, thereby affecting their levels of stress. Age was a variable included in the survey as a possible intervening variable.

Selection of subjects is a concern in the XO design because the results of the survey may not be readily generalized to the larger population. It was hoped that a random selection could be utilized, but this was not possible.

The XO design does not control for mortality. Even though there was only one administration of the survey, there were seven individuals who refused to respond to the survey. These individuals may have differed from the general population, so that the responses may not be balanced.

In this design the affects of testing and retesting are not threats to internal validity because only one test is administered.

In order to control for the threat of instrumentation, standardized tests were used to measure the levels of stress and the adherence to gender roles. As well, the entire questionnaire was pretested by about eight individuals of farming background. The delivery of the survey was done in a standardized way to ensure consistency. It was left up to the farmer to fill in the survey with the instructions provided.

Statistical regression is not a concern of this design because the questionnaire was only administered once, and the subjects were not selected on the basis of scores.

Reactive effects is one other threat to internal validity which Stothers and Grinnell (1988) list, in addition to the above mentioned factors. This refers to the effects of being in the study itself. In this study, the effects of differences of the control group versus the experimental group were not an issue. However, the act of filling out a questionnaire may affect the results for farmers who may want to present as more or less stressed than they really are, or may want to appear more traditional or nontraditional. According to Bem (1981), the BSRI itself acts as a control for social desirability response sets. Another control for social desirability was in the

presentation of the survey, as it was stressed that there were no preferred responses to the questionnaire. In addition, as in social work practice, an attempt was made to accept the clients at face value.

External validity. A number of threats to the external validity are listed in Campbell and Stanley (1963), and Stothers and Grinnell (1988). These are: pretest-treatment interactions, interaction affects of selection, reactive effects of experimental arrangements, and multiple treatment interference. In addition to these, Stothers and Grinnell include specificity of variables and researcher bias.

The study undertaken did not include a pretest as part of the actual study; therefore the pretest-treatment interaction was not a relevant factor.

For the purposes of this study, the interactive affect of selection could not have been controlled for by the use of random sampling. Therefore, there was potential for the engaging of individuals in the study who were more motivated to respond than others. However, those who would not be motivated in a random sample would not have filled out a questionnaire either.

The reactive effects could still be a problem within this study as pointed out earlier, and should be considered; however, Stanley and Campbell (1963) state that in the XO design, it is irrelevant.

Multiple treatment is not relevant in this study

because this is an ex post facto design. However, respondents were asked if they had been involved in counselling or information sessions regarding stress or issues related to relationship building, in order to determine the extent of the farmers' interaction with formal or informal resources. Influences such as these were not shown to have an effect on the results of this study.

The specificity of variables is a threat to the external validity because the results of this study may not be generalizable to other populations of farmers, due to variations in the types of farming operations and the location of the farms. For example, responses of the farmers from the southern irrigation district may be different from those of the central dry land farming district.

With the use of a self administered survey, the threat of researcher bias is not an issue with which to be too concerned. The respondents were informed that there were no right answers, and that all that was required was an honest, anonymous response.

### Sampling

#### The Sampling Frame

The respondents were full-time farmers (males) from the County of Lethbridge #26. The sampling frame was estimated to be about 2500 farmers. From this frame it was hoped that a sample of at least 40 individuals could be drawn by

delivering 75 questionnaires.

### **Nonprobability Sampling**

For the purposes of this study, a nonprobability sampling procedure was chosen. The probability sampling procedure was not seen as appropriate because of the inaccessibility of the exact population size of the group being surveyed. Lists of names and addresses were not available from sources such as the county administration office, nor through the District Agriculturist. The snowball sampling method was chosen because of difficulty in obtaining a list of possible respondents. Availability sampling was also used to gain access to respondents, because some individuals were unable or unwilling to give names of others who might be willing to fill out the questionnaire.

### **Demographics of the Sample**

In terms of the demographics, the mean age of the farmers was 42, which compares to the farmers' national average age of 48 in 1986 (Beyrouti, Dion, & Welsh, 1989).

In terms of marital status, 93% of the respondents were married, whereas 87% of the farmers in Canada were married according to the 1986 census (Beyrouti et al.). The remaining 7% were single (4%), divorced (2%), or living common-law (2%).

Farmers on the whole (70%, or 38) described themselves as having average health, while 24% (13) said their health

was above average, and 6% (3) indicated that their health was below normal. The total number indicating they had average or above average health was 94%.

The number of years of farming varied from 2 to 40 years, with the mean being 19 years, SD = 11. Sixty-two percent (33) of the farmers operate family farms, while the remaining farms are comprised of cooperatives, multigenerational farms, and outside partnerships, these being 21% (11), 11% (6), and 6% (3) respectively.

#### Data Collection Methods

The data collection was done by delivering the questionnaires to the farmers and requesting that they fill them out. It was hoped that the personal contact would decrease problems with survey returns and with unanswered questions, as the farmers would have an opportunity to ask any questions they might have, and be more likely to fill out a questionnaire that was personally delivered. Through the personal contact, encouragement was given to be direct and honest about the responses. By leaving the questionnaire with the farmers, they were able to fill it out on their own time, this being less time-consuming than a face-to-face interview (20 - 30 minutes as compared to one or one and a half hours). Furthermore, a face-to-face interview may have been too intimidating, considering the type of information required. As pointed out by Marshall and Rossman (1989), the process of research is based on



reciprocity, and one must provide a sensitivity to the farmers in their own situation.

Respondents were advised of their right to refuse to complete the questionnaire, and were told that all information would remain confidential and anonymity would be maintained. Seven farmers declined the invitation to consider assisting with the study, so questionnaires were not left with these farmers. Individuals willing to consider participation in the study were further briefed on the purpose, procedure and contents of the survey by way of a cover letter.

Each respondent was supplied with two pre-addressed and stamped envelopes: one in which they would return the anonymous questionnaire; and the second in which they would return a form with their name and address, on which they would indicate whether or not they wanted a copy of the study results' summary, and which would be entered in a draw for a gift certificate from a local restaurant. The recommendation for ensuring personal contact and using incentives was encouraged by O. Wain and C. Paul (personal conversation, March, 1991).

Because of the limited time available for the study, since the farmers' spring and summer work was fast approaching, the added incentives were included, and a deadline for the completion of surveys was imposed. No letters of reminder were sent out because of the adequate

response rate and because the farmers' field work had already begun.

One limitation of the self-administered questionnaire is that there can be unanswered questions due to confusion or misunderstanding. However, in the cover letter, the farmers were invited to phone collect if they had further questions. Another problem considered was that some farmers' wives might fill out the questionnaires for them, but it was emphasized in person, on the cover letter, and in the questionnaire that only the male farmer was to respond.

#### Return Rate

Seventy-five questionnaires were personally delivered to full-time farmers. Of these, 54 were returned before the cutoff date, yielding a 72% response rate. All of the responses were used in the analysis, even though a small portion of the farmers failed to complete the entire questionnaire.

#### Data Analysis

Aside from the ICS and the BSRI (which were both completed by 42 farmers, or 78%), the remainder of the questionnaire was completed by most farmers. There seemed to be some confusion about how to answer two of the questions, so those questions were not always completed. Other questions which were not applicable to some farmers were not answered (i.e. those few farmers who were not married did not fill out the questions requesting

information about wives).

A data analysis of all questions and variables was done. The demographic data was analyzed with descriptive statistics. The levels of stress, the perceptions of gender roles, and their interaction with other variables of a demographic nature were analyzed with the use of crosstabs, t tests, regression analysis, and analysis of variance. These results will be outlined in the following chapter.

## CHAPTER 4

### Study Results

This chapter reports the findings of the survey given to farmers in the County of Lethbridge #26. The findings will be described in light of the analysis done on the variables considered. The level of significance acceptable for this study was determined to be .050 or greater.

Two components will be presented, one outlining the association of the two main variables and the results pertaining to the major hypothesis, and the other presenting demographics and comparisons of additional factors. Where appropriate, tables will be used to aid in the description of the analysis.

#### Association of Farmers' Stress to Gender Roles

Because the BSRI is a categorical level measurement and the ICS is considered a ratio level measurement, a oneway analysis of variance was conducted to determine if there were significant differences between the groups of farmers who identified with the different categories of gender role characteristics. Contrast analysis (Tukey-B) was conducted to determine between which groups the differences existed.

The null hypothesis stated that there would be no significant differences in the levels of stress for those farmers who were traditional (masculine) and those who were nontraditional (androgynous). A statistically significant

difference of  $p < .0001$  in this analysis provided support to reject the null hypothesis. Differences were found between the categories of masculinity and androgyny in the mean scores of the ICS. The mean stress score of 29 was produced for the group of farmers who were characterized as masculine. For those who were characterized as androgynous, the mean score was 18. Even though the mean score of the masculine group was not above the estimated cutting score of 30, it was about 11 points higher than the mean score of the androgynous group (see Table 1 and Figure 2).

Although not predicted, a statistically significant difference in the mean ICS scores was also found between the undifferentiated group's mean score of 40 and the feminine group's mean score of 20. Those who were undifferentiated showed higher (possibly problematic) levels of stress, while those who were feminine showed lower (nonproblematic) levels of stress.

Interestingly, the greatest difference which was statistically significant was found (not predicted) between the group which was androgynous and the group which identified themselves as undifferentiated. The mean scores on the ICS were 18 for the androgynous group and 40 for the undifferentiated group, indicating the greatest difference in scores between any two groups, a difference of 22 points.

**Table 1**

Oneway Analysis of Variance for the Index of Clinical  
Stress by Categories of the Bem Sex-Role Inventory

Category	Number of cases	ICS mean	Standard deviation	Standard error
Undiffer.	9	39.9	9.52	3.17
Androgynous	12	18.4	9.09	2.62
Masculine	12	29.3	10.67	3.08
Feminine	9	19.8	11.65	3.88

df 3      F Ratio    9.02      Probability < .0001

Contrast Analysis - Tukey-B Procedure

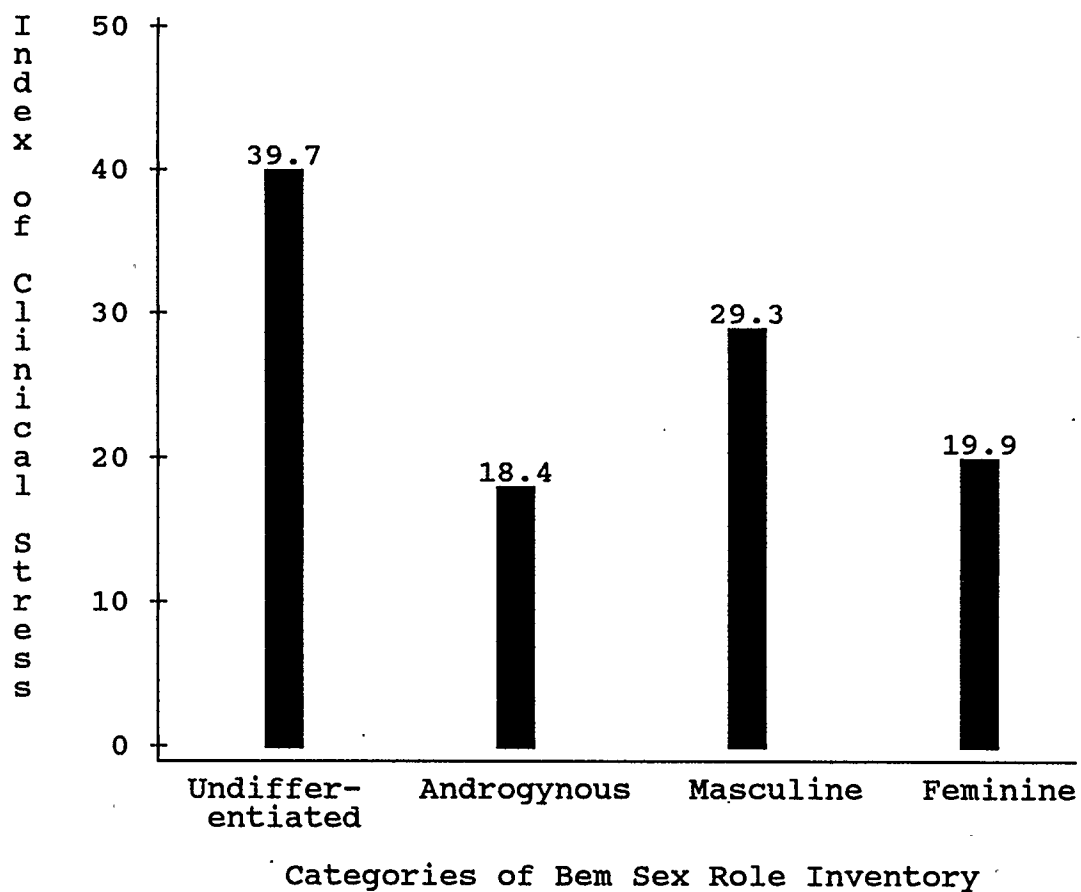
Pairs of groups significantly different at the .050 level  
were:

Androgynous    -    Undifferentiated  
Androgynous    -    Masculine  
Feminine        -    Undifferentiated

Note. All nonsignificant oneway interactions in this  
analysis were omitted.

**Figure 2.**

Mean Index of Clinical Stress scores according to gender role categories. (The suggested cutting score is 30).



### Regression Analysis of the ICS with the BSRI

Through the use of dummy variables, the categorical level measure of gender roles was used to do a regression analysis of the ICS. To create the dummy variables, each category of the BSRI (undifferentiated, androgynous, masculine, and feminine) was treated as a separate variable and was assigned a score for each of the cases, depending on whether it was present or absent (1 or 0), thus allowing the categories to be treated as interval variables. The correlation computed for the entire model produced an  $r^2$  value of .44, suggesting that up to 44% of the variance of experienced levels of stress can be explained by the gender role characteristics.

The analysis using the stepwise regression suggests, at the first step, statistically significant findings ( $p < .0001$ ): 30% ( $r^2 = .30$ ) of the variance in the ICS scores can be explained by knowing that someone is undifferentiated.

The second step in the regression shows a significant relationship at  $p < .0000$ , and suggests that at this step, when the variable of masculinity is added to the equation, the correlation increases in strength, with an  $r^2 = .42$ . At this step, 42% of the variance in the ICS can be explained by knowing that an individual is undifferentiated or masculine.

After this step, a significant relationship of at least



.05 correlation was no longer present. Consequently, the variables of androgyny and femininity were not entered into the equation.

**Table 2**

Stepwise Regression of Gender Characteristics on the ICS

**Step one - Undifferentiated**

Variable	Multiple R	R <sup>2</sup>	<u>SE</u>	<u>t</u> value	Prob.
Undiff.	.54803	.30034	10.89508	18.45804	.0001

**Variables in equation**

Variable	B	SE B	Beta	T	Sig T
Undiff.	17.44444	4.06036	.54803	4.296	.0001
(Constant)	22.22222	1.81585		12.238	.0000

**Step two - Masculine**

Variable	Multiple R	R <sup>2</sup>	<u>SE</u>	<u>t</u> value	Prob.
Masculine	.65200	.42510	9.99285	15.5284	.0000

**Variables in equation**

Variable	B	SE B	Beta	T	Sig T
Undiff.	21.00000	3.90589	.65973	5.376	.0000
Masculine	10.66667	3.53301	.37047	3.019	.0043
(Constant)	18.66667	2.03978		9.151	.0000

Note. The regression analysis produced an F ratio and level of significance equivalent to that produced by the oneway analysis of variance.

### Additional Results

As well as the analysis between the two central concepts of stress and gender roles, other variables were also analyzed in terms of their relationship with stress and androgyny. These involved responses to questions about demographics, the amount of social pressure a person might feel to stay on top of things, resources to cope with interpersonal and personal problems, relationship issues, ability to cope with financial stress, the amount of financial stress and financial change, household roles (androgynous behavior and attitudes), ranked predictors of stress, relaxation/recreation, impact of religion, level of education, and satisfaction with farming. In Figure 3, the variables are arranged from most to least significant, in terms of their relationship to stress, according to the results of the  $t$  tests and oneway analysis of variance. Only variables which were statistically significant in their score differences are presented.

**Figure 3.**

Variables arranged from most to least significant, in relation to stress, according to the results of t tests and oneway analysis of variance.

Association of Farmers' Stress to Gender Roles ...	$p < .0001$
Felt Social Pressure .....	$p < .002$
Resources to Cope with Interpersonal Problems ....	$p < .002$
Sense of Spousal Support .....	$p < .004$
Perception of Changed Financial Pressure .....	$p < .025$
Ability to Come to Agreement with Spouse .....	$p < .029$
Business Resources to Cope with Financial Stress .	$p < .036$
Personal Ability to Cope with Financial Stress ...	$p < .048$
Resources to Cope with Personal Problems .....	$p < .050$

---

**Demographics**

The variables of age, marital status, perceived health, physical exercise, years farmed, amount of irrigated land, or the type of farm were not found to be associated with stress.

### Social Pressure

T tests were done for different groups of farmers as they related to stress, producing a two-tailed probability of .002 (see Table 3). Those who felt social pressure to usually or always stay on top of things experienced higher levels of stress (mean ICS score of 31) than those who did not feel social pressure to be on top of things (mean ICS score of 19). A difference of 12 points was observed between these two groups.

**Table 3**

T Test showing Relationship between Stress and Social Pressure to Stay on Top of Things

Category	Number of cases	ICS mean	Standard deviation	Standard error
No social pressure	20	19.2500	10.770	2.408
Felt social pressure	25	30.8800	12.228	2.446
<u>df</u> 42.6 <u>t</u> Value -3.39      2-tailed probability < .002				

### Resources to Cope with Interpersonal Problems

A t test for different groups showed significant differences (two-tailed probability < .002) between those who felt they always had the ability to cope with interpersonal problems, and those who felt they never or

almost never had the ability to cope (see Table 4). The mean ICS scores for the two groups were 17 and 31 respectively, showing a 14 point difference between the scores.

**Table 4**

T Test showing Relationship between Stress and Ability to Cope with Interpersonal Difficulties

Category	Number of cases	ICS mean	Standard deviation	Standard error
Little ability	16	31.250	12.036	3.009
Ability to cope	12	17.333	8.978	2.592
<hr/>				
df 26	t value 3.50	2-tailed probability < .002		

#### Sense of Spousal Support

The amount that individuals felt emotional support from their spouse was associated with levels of stress (see Table 5). A t test showed a significant difference (with a two-tailed probability < .004) between two groups. Those who felt very satisfied with the amount of emotional support they received had a mean ICS score of 22, while those who felt only partially satisfied had a mean ICS score of 33. This shows a difference of 11 points on the ICS.

**Table 5****T Test showing Relationship between Stress and Level of Spousal Support**

Category	Number of cases	ICS mean	Standard deviation	Standard error
Very satisfied	26	21.8077	12.719	2.494
Partly satisfied	17	32.7647	10.686	2.592
<hr/>				
df	38.32	t value	-3.05	2-tailed probability < .004

**Ability to Come to Agreement with Spouse**

The degree to which a farmer was able to agree with his wife about family responsibilities was also analyzed (see Table 6). No respondents said that they were never able to agree with their wives about family responsibilities. Only one individual indicated that he was seldom able to agree with his wife about family responsibilities. A  $t$  test was done on the two remaining groups, comparing the ICS scores of the two groups. A two-tailed probability < .029 was obtained, showing significant differences between the two groups. The respondents who indicated that they were only "usually" able to come to an agreement with their wives about family responsibilities had a mean score of 28 on the ICS, indicating a level of stress which is considered close to the suggested cutting score, while the group of farmers

who indicated that they were "always" able to come to an agreement with their wives concerning family responsibilities showed a mean ICS score of 19, a difference of nine points.

**Table 6**

T Test showing Relationship between Stress and Ability to Come to an Agreement with Wife on Family Responsibilities

Category	Number of cases	ICS mean	Standard deviation	Standard error
Usually able	32	27.8438	13.591	2.403
Always able	10	19.4000	8.605	2.721
<hr/>				
<u>df</u> 24.23	<u>t</u> value	2.33	2-tailed probability < .029	

A chi-square procedure was done to determine whether the ability to come to agreement with their wives and gender role characteristics were associated (see Table 7). A statistically significant association ( $p < .012$  and correlation of 0.48) was found. One hundred percent of those who were undifferentiated indicated that they were only sometimes able to come to an agreement with their wives on household responsibilities. Sixty percent of those who were feminine were always able to come to an agreement on

family responsibilities, and of those who were always able to come to an agreement about family responsibilities, 50% were feminine.

**Table 7**

Crosstabulation of Gender Roles by Ability to Come to Agreement

		Ability to Come to Agreement		
Gender Roles		Count Expected value Row Percent	Sometime /usually 1	Always 2 Row Total
	1			
	Undifferentiated	13 9.8 100.0%	0 3.3 .0%	13 27.1%
	2			
	Androgynous	10 9.8 76.9%	3 3.3 23.1%	13 27.1%
	3			
	Masculine	9 9.0 75.0%	3 3.0 25.0%	12 25.0%
	4			
	Feminine	4 7.5 40.0%	6 2.5 60.0%	10 20.8%
	Column Total	36 75.0%	12 25.0%	48 100.0%

Chi-Square D.F. Sig. Min E.F. Cells with E.F. < 5  
 10.89231 3 .0123 2.500 4 OF 8 ( 50.0%)

Cramer's V Statistic .47636



### Perception of Financial Pressure

When asked separately about their present level of stress as related to financial difficulty (as opposed to prioritizing the indicators of stress), the results of a oneway analysis of variance were not significantly different for those who felt that financial issues were not a major concern and those who felt that their present stress was financially related.

In terms of the farmers' perceptions of change in their financial stress in the last 5 years,  $t$  tests were done for two different groups (see Table 8). The differences between the two groups were statistically significant (two-tailed probability  $< .025$ ). Those who felt their financial pressure had increased lots had a mean ICS score of 31. Those who felt that their financial stress had increased only somewhat, stayed the same, or even decreased, showed a mean ICS score of 22, which is within the normal range.

**Table 8**

#### T Test showing Relationship between Stress and Change in Financial Pressure

Category	Number of cases	ICS mean	Standard deviation	Standard error
Increased lots	19	30.7368	12.587	2.888
Increased some or little	26	22.0385	12.022	2.358
<hr/>				
<u>df</u> 37.88	<u>t</u> value	2.33	2-tailed probability $< .025$	

### Business Resources to Cope with Financial Stress

The ability to cope in terms of business resources was related to the ICS (see Table 9). A oneway analysis of variance showed statistically significant differences ( $F$  Probability < .036) between the group which stated that they always felt they had the business resources to cope with continued financial stress (ICS mean score was 16) and those who said they usually had the ability to cope (ICS mean score was 30). The difference in mean scores between the two groups was 14 points.

**Table 9**

#### Oneway Analysis for the ICS by the Business Resources to Cope with Continued Financial Stress

Category	Number of cases	ICS mean	Standard deviation	Standard error
Never	22	26.18	12.08	2.57
Usually	15	30.20	13.42	3.46
Always	8	16.00	9.61	3.39

df 2      F Ratio 3.5762      Probability < .036

#### Contrast Analysis - Tukey-B Procedure

Pairs of groups significantly different at the .050 level were:

Always able to cope - Usually able to cope

**Personal Ability to Cope with Financial Stress**

The perceived personal ability to cope with continued financial stress was found to be related to the ICS scores (see Table 10). A oneway analysis of variance showed significant differences ( $F$  Probability  $< .048$ ) between those who always feel they have the personal resources to cope and those who feel they sometimes or usually have the personal resources to cope with financial stress. Those who felt they always have the resources to cope produced a mean ICS score of only 15. This score is only about half of the mean scores of the other two groups, who felt they usually or only sometimes could cope, their scores being 28 and 27 respectively.

**Table 10**

Oneway Analysis for the ICS by Personal Ability to  
Cope with Continued Financial Stress

Category	Number of cases	ICS mean	Standard deviation	Standard error
Never able to cope	18	27.44	10.31	2.43
Usually able to cope	20	27.95	14.57	3.25
Always able to cope	7	14.85	8.87	3.35

df 2      F Ratio 3.2549      Probability < .048

Contrast Analysis - Tukey-B Procedure

Pairs of groups significantly different at  
the .050 level were:

Always able to cope - Never able to cope

Always able to cope - Usually able to cope

Personal and Business Resources to Cope with Financial  
Stress

A chi-square procedure was done in order to determine if there was a significant association between business and personal resources to cope with continued financial pressure (see Table 11). The findings were shown to be statistically significant ( $p < .0002$ ). The substantial difference between the expected and observed frequencies indicates an association and is confirmed by the Phi statistic of .51,

showing a moderate to strong correlation.

Seventy-two percent of the farmers who felt they were able to cope personally with financial stress also indicated that they had the business resources to cope. Conversely, 80% of those who felt they did not have the personal ability to cope did not feel they had the business resources to cope either.

**Table 11**

Crosstabulation of Personal Resources to Cope by Business Resources to Cope with Continued Financial Stress

				Business Resources		
P e r s o n a l	R e s o u r c e s	Count	Expected Value	Never/ seldom 1	Usually/ always 2	Row Total
		Row Percent				
		1				
		Usually or often unable to cope				
		16	9.4	80.0%	4	20
		37.7%			10.6	37.7%
		20.0%			24	33
		62.3%			17.4	62.3%
		72.7%				
		Column Total		25	28	53
				47.2%	52.8%	100.0%

Chi-Square	D.F.	Sig.	Phi Statistic
13.89288	1	.0002	.51199

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### Resources to Cope with Personal Problems

A  $t$  test for independent groups shows a significant difference, at a significant level of .050, between the mean scores of those individuals who never or only sometimes feel they have the resources to cope with personal problems, and those who usually or often feel they have the resources to cope. Their scores were 31 and 23 respectively (see Table 12).

**Table 12**

T Test showing Relationship between Stress and Ability to Cope with Personal Difficulties

Category	Number of cases	ICS mean	Standard deviation	Standard error
Never or seldom	16	30.6250	11.465	2.866
Usually or often	29	23.0000	12.989	2.412
<hr/>				
<u>df</u> 34.50	<u>t</u> value 2.04	2-tailed probability < .050		

### Impact of Relationship with Spouse

Whether or not an individual felt stress within the marital relationship was not shown to be associated with the ICS at a statistically significant level.

For this same variable of relationship stress, a crosstabulation was done with the categorization of gender roles (see Table 13). The results showed statistical significance of .02. The Cramer's V showed a moderate to strong association value of .45 between the categories of the BSRI and relationship stress.

The crosstabulation table gives a visual picture of the relationships within this crosstabulation. One hundred percent of those who have feminine characteristics also identified as having no relationship stress (twice the expected frequency). For the remaining categories of androgynous, masculine, and undifferentiated, the differences between the expected and observed frequencies were not great (the greatest difference being 1.7). This suggests that the most important difference was that the lowest levels of relationship stress were associated with those who identified most strongly with feminine characteristics.

**Table 13**

Crosstabulation of Categories of Gender Role by the  
Stress Felt in the Marital Relationship

		Relationship Stress			
Gender Roles		Count Expected Value Row Percent	No stress 1	Some stress 2	Row Total
	1				
	Undifferentiated	6 7.3 46.2%	7 5.7 53.8%	13 27.1%	
	2				
	Androgynous	6 7.3 46.2%	7 5.7 53.8%	13 27.1%	
	3				
Masculine	5 6.8 41.7%	7 5.3 58.3%	12 25.0%		
4					
Feminine	10 5.6 100.0%	0 4.4 .0%	10 20.8%		
	Column Total	27 56.3%	21 43.8%	48 100.0%	

Chi-Square   D.F.   Sig.   Min E.F.   Cells with E.F. < 5  
 9.89174   3   .0195   4.375   1 OF 8 ( 12.5%)

Cramer's V   statistic = .45396

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**Coping with Personal and Interpersonal Problems**

The chi-square statistic was used to determine whether there was an association between the resources to cope with interpersonal problems and the resources to cope with personal problems (see Table 14). A statistically significant level of  $p < .0000$  was reached, showing a relationship. The phi procedure showed a strong association of .69. The crosstabulation table shows that 89% of the farmers who felt they had the resources to cope with personal problems also felt they had the resources to cope with interpersonal problems. Eighty-one percent of the farmers who never or almost never felt they had the resources to cope with personal problems also never or almost never felt they had the resources to cope with interpersonal problems.

Table 14

Crosstabulation of Resources to Cope with Interpersonal  
Problems by Resources to Cope with Personal Problems

		Resources to Cope with Personal Problems				
I n t e r p e r s o n a l	P r o b l e m s	Count Expected Value Column Percent	Almost /Never 1	Sometime /Usually 2	Row Total	
		Never or almost never able to cope	1	13 5.1 81.3%	4 11.9 10.8%	17 32.1%
		Usually or always able to cope	2	3 10.9 18.8%	33 25.1 89.2%	36 67.9%
		Column Total		16 30.2%	37 69.8%	53 100.0%

Chi-Square	D.F.	Sig.	Min E.F.
25.43753	1	.0000	5.132

Phi Statistic = .69279

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### Ranked Predictors of Stress

Farmers were asked to rank order a specific list of events or circumstances, according to how much these factors contributed to their perceived levels of stress (from 1, being the highest predictor, to 7, being the lowest predictor). From the responses of the 31 individuals who answered this question appropriately, the mean scores of each of the stress indicators were computed, according to the number of individuals responding to each item. The mean scores of the items, from highest to lowest predictor, were:

1. 2.45 - Financial pressure (highest cause of stress)
2. 3.23 - Weather
3. 3.55 - Farm work (tasks)
4. 3.63 - Roles (too many functions or unwanted responsibilities)
5. 4.32 - Personal problems (i.e. incompetence, low self-esteem)
6. 5.23 - Lack of emotional support
7. 5.66 - Relationship problems with spouse/partner (lowest cause of stress)

### Variables not Associated with Stress

There were a number of variables that were expected to be related to stress which were not. These included variables such as: impact of religion, education, recreation, number of hours the wife worked off the farm, and enjoyment and satisfaction with farming.

## CHAPTER 5

### Discussion

The purpose of this study was to determine if there was an association between levels of perceived stress and gender role characteristics. In addition, other factors were analyzed to determine their association with stress.

The results of the analysis suggest that there is a difference in levels of perceived stress between those farmers who identify with masculine characteristics and those who identify with androgynous characteristics, in that those who are androgynous experience lower levels of stress (see Table 1 and Figure 2). This supports the position that men who are more flexible in their gender roles will experience less stress and feel more comfortable with themselves (Chusmir, 1990; Messner, 1987; & Norman, 1980). These results would be congruent with the findings which show that for farm women, during times of difficulty and during times of role change, androgyny is a characteristic which is associated with lower levels of stress, and which also serves as a coping mechanism (Felton et al., 1980; Lueptow et al., 1989).

In addition to the hypothesis being supported, it is notable that the individuals who are undifferentiated (identify less strongly with both masculine and feminine characteristics) have the highest levels of stress of all four categories. The reasons for these results may be many.

These farmers may have a poor sense of self worth, thereby not identifying strongly with either the feminine or the masculine categories. With the downturn in the economy, some of these farmers may have developed a sense of helplessness, disassociating from even the masculine characteristics to which they previously adhered. As was suggested by Keating (1987), the greatest factor in determining stress for men was the lack of a sense of mastery. Whether such high stress is a result of the poor farming economic environment over the past number of years, or is due to a delay in personal developmental issues is not clear. It may be the loss of roles, the addition of new roles, or role confinement which is contributing to the stress of these farmers. Pearlin (1983) states that these factors all have the potential of contributing to stress.

One must take into account that the frequency of undifferentiated farmers is lower than the normative sample by 12% (26% as compared to 38%). The frequency for the masculine group was also lower than the frequency of the normative group by 4% (24% to 28% respectively) (see Figure 1). It would seem that farmers are less undifferentiated and less masculine than men from which the normative scores were drawn, or that the circumstances in their lives have been significant enough to elicit change in their personal characteristics. In other words, those farmers who are neither masculine nor undifferentiated may

be learning to cope with the difficulties they face in more adaptive ways, using internal and social resources, rather than simply seeking access to external rewards, which has been a large part of sustaining men's self-fulfilment (Keating, 1987; Pearlin, 1983).

The frequencies of farmers who are androgynous and feminine are higher than the normative group (28% to 19%, and 22% to 14% respectively) (see Figure 1), which disputes the suggestion that the rural population is more traditional than society as a whole (Scanzoni & Arnett, 1987). However, the fact that the BSRI normative scores were attained in 1978 cannot be overlooked (Bem, 1981). Sex role characteristics may have changed over the past decade. According to Braverman (1991), men have a tendency to give lip service to values, but often fail to live out the values to which they give assent, which could also account for some of these disparities.

An alternative suggestion for the higher numbers of feminine and androgynous men might be that these farmers have adapted differently. Those who are androgynous may have maintained their masculine characteristics while also developing flexibility in adopting feminine characteristics. This would give some of them an androgynous repertoire of characteristics to access in terms of problem-solving and relationship-building skills. Such a combination of masculine and feminine characteristics would be represented

in a farmer who has leadership abilities, is willing to take a stand, is independent and competitive, while also being empathic, sensitive, affectionate, and nurturing.

There may be those farmers who have given up certain masculine characteristics and adopted more feminine characteristics (identifying as feminine). These farmers were not shown to have significantly higher levels of stress than those farmers who were androgynous. It would stand to reason that those farmers who are categorized as feminine may have lower levels of stress, since they may be more likely to be in touch with their emotional state, more willing to express their feelings, and more empathic and nurturing, thereby setting up an environment conducive to reciprocity with others. Reciprocity and emotional support are factors related to reducing stress (Keating, 1987; Pearlin, 1983; Weigel & Weigel, 1987). A crosstabulation showed that farmers who are more feminine are more likely to be able to come to agreement with their spouse on matters related to family responsibilities, and more likely to experience less relationship stress with their wife, perhaps experiencing some sense of mastery at the affective and interpersonal levels. Those skills used in terms of relationship-building may be useful in helping a person gain the emotional support he needs.

For the farming community, enough emphasis has been placed on financial concerns, while not enough energy has

been given to personal and social resources (Keating, 1987). Keating states that even though farmers do not identify spousal support as a key factor in reducing stress, mutual support is seen as a buffer against stress, and it is important to help farmers begin to redefine success.

As shown in the results, farmers who are androgynous and feminine experience lower levels of stress. The affective skills would give them an edge in terms of dealing with their personal and interpersonal difficulties. Those who identify as feminine may experience the same difficulties as those who have strong instrumental skills in terms of farming, but they may have the personal resources to deal with their experienced stress, even though their instrumental skills may be less dominant. Those who identify as androgynous will likely have the ability to deal affectively and/or instrumentally with diverse situations.

Families in difficult situations or during unusually stressful times may deteriorate and become more vulnerable to disorganization, or they may seize the situation as an opportunity to attempt to reduce stress by seeking out resources and challenging old beliefs (McChubbin & Patterson, 1982). As posited by Bem (1974) and Norman (1980), traditional gender roles may have outlived their usefulness. Some farmers in this study have perhaps realized this and opted for change in their own lives, adjusting to new roles and adopting new characteristics.



The summation of these results would be that those farmers who have a limited repertoire of skills and abilities in terms of personal affective characteristics, being either masculine or undifferentiated, do by and large experience higher degrees of stress. Individuals who are masculine may not experience as much stress as those who are undifferentiated because those who are undifferentiated may be lacking in even the instrumental skills necessary to exercise control over business affairs. The difference between these two groups may suggest that those who are masculine perceive that they have some sense of control. Their instrumental skills in terms of coping with financial and business difficulties may be useful primarily at a business level, as suggested by the analysis of questions related to resources and ability to cope with continued financial difficulties. As posited by Keating (1987), the degree of personal mastery is an important predictor of stress. However, the sense of mastery may be more related to the mastery of, or the access to, affective resources than it is to the mastery of, or access to, external rewards in terms of predicting low levels of stress.

As Sheinberg & Penn (1991) state, if individuals adhere strongly to rigid role sets, they are likely to experience gender failure. They go on to say that we require a balance of both role sets (masculine and feminine) to become mature individuals. Pittman (1991) reinforces this view, stating

that those men who identify as strongly masculine may have developed to only half of their individual potential.

As suggested by the correlation coefficient, about 42% of the variance of stress can be explained by the variable of gender role identification. The remaining 58% of the variance in stress scores is a result of other variables.

The analyses indicated that there were a number of other significant factors related to stress. These were ordered from most to least significant as follows: social pressure, ability to cope with interpersonal problems, sense of spousal support, and the ability to come to agreement with one's wife on household responsibilities (see Figure 3). These factors seem to coincide with the characteristics of androgyny in terms of the ability to deal effectively with affective and interpersonal issues. Farmers who feel less social pressure to stay on top of things, have a greater degree of confidence in dealing with interpersonal problems, feel they have enough emotional support from their spouse, and can readily come to agreement with their spouse experience lower levels of stress than those farmers who feel otherwise. The last factors, of lowest significance, were issues related to financial change, and the personal and business resources to cope with financial difficulties. While a sense of mastery in both the affective and instrumental areas was related to lower levels of stress, according to the results, the ability to deal with affective

issues may be more strongly associated with reduced stress than are the instrumental factors. This supports the analysis of the ICS and the gender role characteristics, in that androgyny is associated with lower levels of stress.

Contrary to these findings, in the one instance where farmers were asked to rank order the predictors of stress, the highest ranked predictor was that of financial difficulties, which supports the study of Jevne (1979). Weather was the second highest predictor of stress, although the farmers in this study by and large have a significant degree of control over the amount of precipitation (94% of the farmers irrigated 80% or more of their land), and the growing season is substantial. Weather is not a common element identified in other studies and may be especially relevant to those who live within the southern regions of Alberta. The influence of the wind may be a factor in weather being a predictor of stress in this area. The stress related to weather was followed by stress related to the actual farm tasks and then by too many responsibilities to fulfil. The three lowest predictors of stress were related to personal and interpersonal factors.

It is interesting to note that when asked to rank order these predictors of stress, farmers identified issues such as finances, weather, tasks, and too many responsibilities as the primary factors contributing to their stress. These seem to be issues reflecting instrumental factors, or the

ability to gain access to external rewards. However, an overview of the analysis of the main variables of stress and gender roles, and the other significant factors, suggest that characteristics related to the ability to deal well with affective issues were more significantly associated with reduced stress than were characteristics associated with the ability to deal mainly with instrumental issues. It may be perceived as important by farmers to gain a sense of mastery in terms of access to external rewards in order to deal with difficulties and experience less stress, as pointed out by Keating (1987); yet the factors which may help many farmers cope with stress may be related primarily to affective issues.

Contrary to the findings of Bultena et al. (1986), age and education were not factors related to stress. The analysis of faith in God, physical fitness, and recreation were not related to stress either, and so did not support the findings of Weigel and Weigel (1987), who suggested that these factors were seen as coping strategies in dealing with stress.

The variables of age, religion, household roles, education, coping abilities, and relationship issues were not found to be associated with the different categories of gender roles.

### Limitations and Recommendations

Following are some limitations of this study, along with related recommendations for future research. To begin with, some of the limitations associated with this study are related to its methodology. It was not possible to select farmers randomly from the population. As well, the sample size was not sufficient to be truly representative of the population. Therefore, future studies would benefit from the use of randomization and a higher representation of the farming population. As far as the knowledge and recommendations for practice are concerned, caution needs to be exercised in generalizing these results to the larger population of farmers. However, even though it is not positively generalizable, the data should reflect the general characteristics of the farming community within the County of Lethbridge, and illustrate how these characteristics are associated with stress.

It was not determined whether farmers have maintained their characteristics for an extended period of time, or whether there have been changes in their personal characteristics as a result of societal pressure or the increasing difficulties they have experienced. Neither was it determined whether farmers are experiencing more stress now than they were 5, 10, or 15 years ago. The use of longitudinal studies would be beneficial in determining the changes in gender characteristics and in levels of stress

(

over time.

A control group of men in the rural or urban population would have been helpful in determining to what extent gender role characteristics and stress levels of farmers are similar to or different from those of other men, and whether or not there is anything that makes farmers unique.

The timing of this study may have influenced the results. The survey was done during a time when the farmers were anticipating a new crop year. They were getting ready for spring work, and the outlook of the farmers seemed to be quite optimistic when the survey was delivered. However, the present low grain prices may have had the opposite effect on their sense of optimism. It is not known what affects the environment would have had on the responses to the questionnaire. During other times of the year, farmers may have been experiencing different levels of stress. Had they responded to the stress instrument after the harvest was completed, their stress levels may have been different from the responses obtained during the pre-season or mid-season work.

As pointed out in chapter three, the ICS is a newly developed instrument, and therefore requires further use to determine its reliability and credibility. No alpha rating was obtained on this instrument, but the farmers in the study did not appear to have difficulty completing the

instrument. The ICS showed validity in that it discriminated between the different categories of the BSRI.

Because of the limited information regarding men in the farming community, it is recommended that more research be undertaken in order to develop a more solid knowledge base to help farmers deal effectively with the continued changes occurring in the farming communities.

One method of determining whether or not the adoption of androgynous roles leads to lower levels of stress would be to evaluate individual casework and programs designed to enable men to become more aware of and experiment with alternate methods of interacting with their environment. For example, would men experience lower levels of stress after they had adopted more androgynous characteristics? Through the use of a more stringent experimental model, it may be ascertained whether or not changes in gender role characteristics do have an impact on stress.

As pointed out earlier, disparity exists between verbal assent to characteristics and the action that must accompany it in order for the characteristics to be substantiated (Braverman, 1991). There may also be differences in terms of how characteristics are played out in the home compared to the work environment. Comparative studies of the husbands' and wives' perceptions of androgynous participation may be beneficial. In this way, it could be determined whether or not there are areas in which men may

be trying to engage in androgynous behavior, and whether or not they are having difficulty in maintaining congruence between thought and behavior in these areas.

As outlined in chapters one and two, a variety of studies have been done with the farm family; however, many of the studies cited focused primarily on the effects of stress as related to farm women. It is recommended that further studies evaluate the impact of the roles of farm men and how they are related to women's changing roles. As stated by Sheinberg and Penn (1991), we need to look at ways to differentiate as individuals, and to negotiate roles within relationships.

#### Implications for Social Work Practice

In a general sense, the role of social work is to enable individuals/families to gain access to personal and social resources to help meet their needs in terms of the stress factors in their lives. Social workers can help individuals assess, develop, and implement skills to begin to gain access to resources, and even help them challenge their beliefs/values about situations. This can free them to utilize the available resources.

Part of what this study has shown is that more androgynous personality characteristics are associated with lower levels of stress. It would appear that there is a need for social workers to help men recognize the value and importance of more lateral/flexible thinking and behaviors.



With the changing environment of the farming community, it would seem imperative that both men and women recognize the benefits of being androgynous, and develop the ability to negotiate roles as the need arises. For women, this seems to have been a focus of research and practice for some time. It would seem that there are benefits for men in maintaining their positive masculine characteristics and in beginning to adopt more feminine traits as well, to enable them to cope more effectively with the affective components of their lives (Braverman, 1991; Pittman, 1991; & Warren, 1982). This is only logical, based on the findings that androgynous characteristics will likely enable men to reciprocate in relationships, and thereby gain the emotional support and encouragement that each requires.

The inherently stressful nature of farming as an occupation must be recognized, in that there are factors which are not easily changed. Weather and commodity prices are areas which are difficult to influence. In situations such as these, farmers must come to understand that there will always be things which they are unable to control.

Personality characteristics endure over time and do not change easily either (Liebert & Spiegler, 1987). Therefore, the process of change in terms of gender role characteristics will likely be a challenging and difficult one. From a systems perspective, it is important for social workers to recognize the impact that change may have on the

other parts of the interacting system; a shift in attitude by farm men may have a profound affect on others. The families and communities may need to be helped and challenged to adjust to such changes. The system may attempt to maintain the existing roles and to resist change, even if it is for the better. Farmers must be made aware that such resistance, even in terms of societal norms and cultural expectations, might be forthcoming if changes begin to occur.

As posited by Braverman (1991), men must recognize the need, plan, and follow through with action, rather than just give lip service to the idea of more flexibility. They need encouragement in this. However, as cautioned by Norman (1980), social workers must be aware that a new consciousness of these issues may drive them to push clients too fast, instead of letting men change at a pace that is comfortable for them, and helping them deal with the anxiety which may be associated with the change process.

The availability of social workers to agencies and organizations is crucial in order to begin to plant the idea of community betterment through the strengthening of men within our communities. Social workers need to encourage and challenge the various components of the environment, including community workers, the educational system, service organizations, and church groups to evaluate services and programs in terms of their stereotyped modelling and

influences on families, children, and the community. Even though the community resources (whether they are individuals or organizations) may choose to maintain traditionalism, they need to be challenged to consider the hazards of maintaining masculinity, especially as it relates to children (Scanzoni & Arnett, 1987).

Farmers must come to realize that their self worth does not need to be based solely on the results of their efforts in the farming or work setting; self worth can be gained from the ability to acquire access to power and a sense of mastery in terms of attaining skills to deal effectively with personal as well as interpersonal issues. Many men have not yet learned to find fulfilment in such areas of their lives (Farrell, 1986; Norman, 1980). They may be inhibited by the belief system which says that personal fulfilment is gained through the work that the farmer does, rather than by who he is as an individual (Gould, 1974). One goal of social workers would be to help farmers experience the value of more egalitarian relationships, comprised of reciprocity and good communication.

It would seem that stress can be a result of different factors for different individuals. The importance for social work practice is that workers need to be aware of the different possible sources and interacting complexity of stress, and intervene at the most appropriate level in each case. For example, for those who identify finances as a

major stress factor, it may be necessary to find the resources to help them with things like financial management and crop diversification. For others, there may be more appropriate means of reducing stress, perhaps by encouraging them to join or be involved in starting a farmers' support group, to help farmers share the experiences and fears they face in the farming industry. This may even lead to helping men get in touch with their affective needs, thereby aiding them in dealing more effectively with both the personal and interpersonal difficulties they encounter (Napier, 1991). For both men and women, flexibility in roles is key to dealing successfully with the role strain difficulties farmers are facing. This would involve mutual understanding, open communication, the expression of feelings, and sensitivity to the feelings of others (Farrell, 1986; Sheinberg & Penn, 1991; Skinner, 1982; Van Hook, 1987).

For the social workers in the rural communities, it is paramount that they first become aware of the differences between the rural and urban communities, in order to begin to break down the barriers between the farmers and the community workers. As pointed out by Van Hook (1987), farmers find it difficult to accept help because of their strong sense of self-reliance. Secondly, practitioners need to be aware of their own biases and values, and how these may conflict with the suggestion that men be challenged to

consider alternatives in their modes of intrapersonal and interpersonal interaction. The ambivalence about gender roles is one of the most difficult factors facing social workers in the process of helping others deal with these issues (Norman, 1980).

It is recommended that workers in the rural communities become aware of and familiar with the issues related to the changing roles of farmers (Marino, 1986). It would seem important for them to assess the needs of farmers, help farmers to normalize their emotions, encourage and challenge them to consider options, and connect them with resources such as men's groups, which are being developed to confront some of the sensitive issues men face. Through this process, men may be empowered to challenge their own belief systems, and to begin to develop skills and attitudes which will give them a broader base from which to view themselves and to interact with their wives, children, and community.

As stated by Doherty (1991), men need not apologize for being men. Men need to be empowered to recognize the dangers of "macho masculinity" (p. 30), embrace the best of the traditional masculine characteristics, and foster new forms of masculinity which adopt useful and positive feminine characteristics. Men can be empowered to become confident in the process of learning to share power, be more nurturing, and become partners with their wives in developing egalitarian relationships.

## CHAPTER 6

### Conclusion

This study investigated the amount of stress experienced by farmers and the extent to which this was moderated by gender characteristics.

With the decreasing prices of agricultural commodities, the rising cost of equipment and repairs, and the low value of farmland, the economic stress for farmers is not likely to decrease. As indicated in this study, many farmers are experiencing levels of stress which could easily prove to be problematic. With the present economic difficulties, and ensuing personal and interpersonal conflicts, there is a continued need for farmers to adjust their roles to the changing expectations and requirements of their social and occupational environment. Women have made notable progress in becoming more aware of ways in which they can begin to help themselves develop a healthier sense of self. However in relation to men, many of these concepts have not yet been adequately addressed. Social norms and expectations change more slowly than individual situations require. Traditional roles may have outlived their usefulness, even though they have served a definite function. Without the awareness, skills, resources, and support to enable men to become more flexible and adaptive in their roles, change may be hampered even further, precipitating further difficulty.

The main focus of this study was to determine if there

was an association between gender roles and the perceived levels of stress experienced by men who are farmers. It was hypothesized that farmers who are more androgynous will experience lower levels of stress than farmers who are more masculine (traditional) in their gender roles.

The hypothesis was clearly supported by the data in that farmers who were categorized as androgynous experienced significantly lower levels of stress than farmers who were more traditional in their gender roles. Moreover, the results showed that those who were undifferentiated had the highest levels of stress, whereas those who were identified as feminine did not appear to have significantly different levels of stress than those who were androgynous.

An analysis of additional variables, which related to the ability to deal effectively with personal and interpersonal issues, and with instrumental issues, indicated that a sense of mastery or control was also related to low levels of stress. The ability to deal with affective issues was more significant in terms of reduced stress than was the ability to deal with instrumental issues. These findings were in contrast to the farmers' perceptions of predictors of stress. In the farmers' view, instrumental issues were the highest predictors of stress, while affective issues had less impact. It may be that farmers often attempt to deal with stress via their instrumental skills, rather than by employing a balance of

affective and instrumental strategies when dealing with difficulties. However, the use of a global self-report measure may not have been as valid and reliable an indicator as a more comprehensive, detailed instrument, designed specifically to measure stress.

Despite the limitations of the methodology of this study, the analysis shows clear evidence which cannot be ignored. In terms of social work practice, it is important that practitioners recognize the potential linkage between gender roles and the degree of stress in men's lives. Farmers, for instance, could be encouraged to develop a broader definition of themselves as men, and helped to recognize the dangers of adhering to a narrow set of masculine traits. There is much to be gained in finding a more balanced view of themselves, so that both the masculine and feminine characteristics might be incorporated in the context of their everyday lives. It is hoped that further research will confirm the nature of the relationship between androgynous gender roles and more effective coping abilities.

Presumably, a range of characteristics are valuable to all of us. We not only need the ability to be courageous, display leadership, and be rational, but we also need the ability to be compassionate, understanding, and nurturing. These qualities cannot be forced on others, although men can learn and develop these qualities over the course of their



lives. Ways must be found to encourage men to develop a wide range of human qualities, such that these can be learned in a self-determined manner.

"Whatever our pedagogical methods, if we succeed in enabling some individuals to develop a wider set of virtues, then we will, to that extent, have expanded their freedom, by increasing the range of situations with which they are equipped to deal" (Warren, 1982, p. 179). To the degree that men shift their gender orientation towards adopting more androgynous roles, it will enable women, children and men themselves to grow with greater freedom.

It is clear that the results of this study have shown that a more balanced and flexible adoption of androgynous characteristics is associated with lower levels of stress. Therefore, by helping farmers move beyond the traditional male role toward a more androgynous gender orientation, they would be empowered to deal more effectively with stress. They may also be enabled to meet their own needs and respond to the needs in their relationships with their wives, families, and community in a more satisfying way.

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