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The Value of Adolescent Friendships

by

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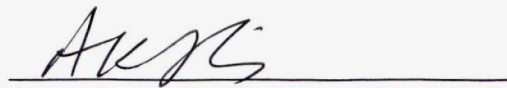
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Value of Adolescent Friendships" submitted by Charlotte B. C. Arbuckle in partial fulfillment of the requirements for the degree of Master of Science.



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ABSTRACT

The present exploratory study examined the relationships between adolescent friendships and self-worth and adolescent friendships and academic achievement. The exploration of junior high school friendships included qualitative aspects of adolescent friendships such as depth of friendship, longlasting as opposed to temporary friendships, loneliness and self worth. Instruments employed were the Louvain Loneliness Scale for Children and Adolescents (LLCA; Marcoen, Goossens & Caes, 1987), the Relational Provision Loneliness Questionnaire (RPLQ; Hayden, 1989) and Harter's Self-Perception Profile for Adolescents (SPPA; Harter, 1988).

The experimental group were adolescents identified by their teachers as lacking in friendships. A subgroup of adolescents who were not nominated, but perceived themselves as lacking in friends was also explored. Analysis of the results indicate there is a relationship between adolescents lacking in friendships and self-esteem. Qualitative analyses further defined the perceptions about adolescent friendships as being unidirectional; a good friend is perceived as 'someone who can help you out'.

The relationships between the Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen, Goossens & Caes, 1987) and the Relational Provision Loneliness Questionnaire (RPLQ, Hayden, 1989) were also examined. Results revealed considerable overlap of the peer subscales of the LLCA, RPLQ and the SPPA.

Issues in the field of adolescent friendships and withdrawn adolescents, limitations of the present study, and directions for educators and future research were discussed.

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DEDICATION

Dedicated to my daughters,
Alyssa and Natasha

Their concern for the happiness of other children not only inspired me but reinforced the necessity of identifying and intervening with adolescents who lack friendships.

Please Hear What I'm Not Saying

Don't be fooled by me.
Don't be fooled by the face I wear
For I wear a mask, I wear a thousand masks.
masks that I'm afraid to take off
and none of them are me.

Pretending is an art that's second nature with me.
But don't be fooled, for God's sake don't be fooled.
I give you the impression that I'm secure
That all is sunny and unruffled with me
within as well as without,
that confidence is my name
and coolness my game,
that the water's calm
and I'm in command,
and that I need no one.
But don't believe me. Please!

My surface may be smooth but my surface is my mask.
My ever-varying and ever-concealing mask.
Beneath lies no smugness, no complacence.
Beneath dwells the real me in confusion, in fear, in aloneness.
But I hide this.

I don't want anybody to know it.
I panic at the thought of my weaknesses and fear exposing them.
That's why I frantically create my masks to hide behind.
They're nonchalant, sophisticated facades to help me pretend.
To shield me from the glance that knows.
But such a glance is precisely my salvation,
my only salvation,
and I know it.

That is, if it's followed by acceptance, if it's followed by love.
It's the only thing that can liberate me from myself
from my own self-built prison walls
from the barriers that I so painstakingly erect.
That glance is the only thing that assures me
of what I can't assure myself,
that I'm really worth something.

But I don't tell you this.
I don't dare
I'm afraid to.

I'm afraid you'll think less of me, that you'll laugh
and your laugh would kill me.
I'm afraid that deep-down I'm nothing, that I'm just no good
and you will see this
and reject me.

So I play my game, my desperate, pretending game
With a facade of assurance without
and a trembling child within,
So begins the parade of masks
The glittering but empty parade of masks,
And my life becomes a front.

I idly chatter to you in suave tones of surface talk.
I tell you everything that's nothing.
And nothing of what's everything, of what's crying within me.
So when I'm going through my routine
Do not be fooled by what I'm saying.
Please listen carefully and try to hear
what I'm not saying.
Hear what I'd like to say
but what I can not say.

I dislike hiding.
Honestly.
I dislike the superficial game I'm playing
the superficial phony game.
I'd really like to be genuine
and spontaneous
and me.

But I need your help, your hand to hold
Even though my masks would tell you otherwise.

It will not be easy for you.
Long felt inadequacies make my defenses strong.
The nearer you approach me
The blinder I may strike back.
Despite what books say of men, I am irrational;
I fight against the very thing that I cry out for.

You wonder who I am?
You shouldn't
For I am everyman
And everywoman
Who wears a mask.
Don't be fooled by me.
At least not by the face I wear.

Anonymous

Table of Contents

Approval Page.....	ii
Abstract.....	iii
Acknowledgements.....	iv
Dedication.....	v
Table of Contents.....	viii
List of Tables.....	x
 CHAPTER ONE: INTRODUCTION.....	 1
 CHAPTER TWO: REVIEW OF THE LITERATURE.....	 6
Relational Changes Throughout Adolescence.....	6
Adolescent Peer Relationships (Friendships).....	9
Socially Isolated Adolescents.....	13
Adolescent Loneliness.....	18
Self-Esteem.....	22
Academic Achievement and Peer Relationships.....	25
Theoretical Background for Loneliness Measures.....	27
Theoretical Background for Harter's Self-Esteem Measure...	30
Summary.....	32
Aims of the Present Study.....	33
Definition of Terms.....	35
 CHAPTER THREE: METHOD.....	 36
Participants.....	39
Measures.....	40
Relational Provision Loneliness Questionnaire.....	40
Louvain Loneliness Scale for Children and	
Adolescents.....	41
Harter's Self-Perception Profile for Adolescents.....	42
Procedure.....	44
Statistical Analyses.....	46
 CHAPTER FOUR: RESULTS.....	 49
Characteristics of Peer Relationships.....	49
Academic Achievement.....	55
Friendship and Self-Esteem Measures.....	62
Relationship Among LLCA, RPLQ and SPPA.....	62
Students Identified as Lacking in Peer Relationships..	64
Students Who Perceive Themselves as Lacking in	
Peer Relationships.....	70
Friendship Interview.....	76
Summary.....	78

CHAPTER FIVE: DISCUSSION.....	80
Characteristics of Peer Relationships.....	80
Relationship between LLCA, RPLQ, and SPPA.....	84
Academic Achievement.....	84
Interviews.....	85
Limitations of the Present Research.....	86
Implications for Educators.....	87
Implications for Future Research.....	89
Summary.....	91
CHAPTER SIX: SUMMARY AND CONCLUSIONS.....	92
REFERENCES.....	94
APPENDIX A.....	102
APPENDIX B.....	104
APPENDIX C.....	106
APPENDIX D.....	109
APPENDIX E.....	111
APPENDIX F.....	114
APPENDIX G.....	117
APPENDIX H.....	120
APPENDIX I.....	124
APPENDIX J.....	126

LIST OF TABLES

TABLE	PAGE
1 Demographic Information.....	37
2 Gender Differences on Demographic Information.....	38
3 Grade Differences on Demographic Information.....	39
4 Teacher Identified Characteristics of Peer Relationships (Chi-Square).....	50
5 Gender Differences for Teacher Identified Characteristics (Chi-Square).....	51
6 Grade Differences for Teacher Identified Characteristics (Chi-Square).....	52
7 Student Identified Characteristics of Peer Relationships (Chi-Square).....	53
8. Gender Differences of Student Identified Characteristics of Peer Relationships (Chi-Square).....	54
9. Grade Differences of Student Identified Characteristics of Peer Relationships (Chi-Square).....	55
10. Teacher's Perceptions of Academic Achievement (Chi-Square).....	56
11. Gender Differences of Teachers' Perceptions of Academic Achievement (Chi-Square).....	57
12. Grade Differences of Teachers' Perceptions of Academic Achievement (Chi-Square).....	57
13. Students' Perceptions of Academic Achievement (Chi-Square).....	58
14. Gender Differences of Students' Perceptions of Academic Achievement (Chi-Square).....	59

15. Grade Differences of Students' Perceptions of Academic Achievement (Chi-Square).....	59
16. Comparison of Academic Averages.....	60
17. Comparison of Categorized Academic Averages (Chi-Square).....	62
18. Correlation Matrix for Three Friendship Scales (Two-Tailed Significance).....	63
19. Comparison of Rating Scales (Mann-Whitney U).....	64
20. Gender Differences: t - test on Rating Scales.....	66
21. Means and Standard Deviations for Rating Scales of Grades 7, 8 and 9.....	68
22. Analysis of Variance Summaries for Grades.....	69
23. Comparison of Rating Scales Within the Control Group (Mann-Whitney U).....	71
24. Comparison of Rating Scales of all Self-Identified Students Lacking in Peer Relationships (t - tests) (two-tailed significance).....	73
25. Comparison of Rating Scales Between the two Groups of Identified Students (Mann-Whitney U).....	75
26. Friendship Interview Data.....	77
27. Friendship Characteristics.....	78

CHAPTER ONE

INTRODUCTION

"If you could have a dream come true, what would you wish for....."

"I could be perfectly happy if only I had friends"

10 years, Grade 4

Children and adolescents place great value on friendships. Adolescents report that they enjoy the time they spend with friends more than any other part of their day (Csikszentmihalyi & Larson, 1984). They regard friends as being supportive, loyal companions, confidants, and mutual participants in leisure activities. However, some children and adolescents appear to have few or even no friends (Asher & Coie, 1990). This present study explores the significance of the quantity and the quality of friendships throughout adolescence.

Adolescence is a challenging time of physical, social, intellectual and emotional change (Gerler, 1986). Adolescents strive to establish their own identity and become independent, yet they want to be accepted by their peers to the extent of becoming totally absorbed by the group's identity (Fetro & Vitello, 1988). As adolescents begin to develop a sense of their own identity, they may withdraw from parents and look toward peers and other adults as a source of support (Erikson, 1963; Youniss & Smollar, 1985).

Socially isolated or withdrawn adolescents fail to establish and maintain communications with those around them. They have an absence of social relationships and spend their day in relative isolation (Peretti & McNair, 1987). Asher and Coie (1990) identified characteristics of social

isolation in children and adolescents as: withdrawn social behavior, poor peer acceptance, few or no friendships and causal attribution for social rebuke such as negative comments and threats from other children. Bronfenbrenner (1986) suggested that adolescents in junior high school are particularly vulnerable to feelings of alienation. Minimal research exists on adolescents and alienation (Coie, Dodge & Kupersmidt, 1990). Most of the existing research focuses on children, although social withdrawal appears to become more pervasive and is a higher risk factor in adolescence.

Children who lack friends in school are at risk for a variety of adjustment problems in later life (Asher & Coie, 1990; DeBaryshe, Patterson & Capaldi, 1993; DeRosier, Kupersmidt & Patterson, 1994; Hartup, 1993; Hymel, Rubin, Rowden & Lemare, 1990; Kazdin & Johnson, 1994; Mesch, Lew, Johnson & Johnson, 1986; Parker & Asher, 1987). Children who are well accepted by their peer groups tend to have higher rates of positive social interaction, more mature social cognitive skills and greater self-esteem (Asher & Coie, 1990), whereas, children who are not well accepted by peer groups in middle childhood and beyond may develop internalizing disorders such as anxiety, loneliness and depression (Asher, Hymel & Renshaw, 1984; Hymel et al., 1990; Rubin & Mills, 1988).

Self-esteem, an affective aspect of self-concept, is largely derived from the positive or negative feedback individuals receive from significant others about the value or effectiveness of their actions (Harter, 1990). Wintre & Crowley (1993) cited research which suggested that the adolescent's self-concept is partly shaped by the increased salience of their peer relationships, whether the peers were classmates or close friends. There is conflicting research on which has more impact on an adolescent's positive self-concept;

having a close friendship such as a best friend or being a member of a social peer group (Harter, 1988a; Shulman, 1993).

Conversely, poor self esteem could lead to socially isolated behavior (Juvonen, 1992). Coie et al. (1990) indicated social withdrawal is a consequence of rejection, not an antecedent for solitary behavior. The negative social reputation a child receives which is associated with social withdrawal may then lead children to develop negative self perceptions which would further exacerbate their withdrawal (Renshaw & Brown, 1993).

Socially isolated adolescents do not have the advantage of positive peer relationships, either in their peer group, in close friendships or in the classroom. Children who are unable to establish a close friendship, even in a classroom situation, report greater levels of loneliness than children who are able to establish close friends in the classroom or in their peer groups (Renshaw & Brown, 1993). Asher, Parkhurst, Hymel and Williams (1990) and others have devoted considerable attention to rejected children. Asher et al. (1990) reported that rejected or unpopular children portray significantly greater loneliness than popular adolescents. However, their research also suggested that not all unpopular children experience loneliness, and conversely, some popular children may also experience loneliness. Renshaw and Brown (1993) hypothesized that close friendships might decrease the likelihood of children experiencing loneliness primarily by enhancing their general sense of well-being.

Children who have a best friend seldom report feeling lonely (Asher et al., 1990). Asher et al. (1990) suggested the role of friendship may be important in understanding why some poorly accepted children or adolescents are not lonely despite their general rejection within the classroom

peer group. Information is inadequate regarding the quality of friendship with poorly accepted adolescents. Do rejected adolescents not only have fewer friendships but also have less satisfactory or seemingly more shallow friendships than their more popular peers (Berndt, 1989)?

Children who experience difficulties with peer relationships have also been found to experience difficulties with academic achievement and school failure (Bronfenbrenner, 1986; DeBaryshe et al., 1993; Wentzel, 1993). Parker and Asher (1987) suggested that if academic pursuit takes place in a social context, it seems logical that children with poor social skills and difficulties with peer relationships may also have difficulties with academic progress. An important distinguishing characteristic of antisocial children appears to be a low level of academic engagement, which ultimately leads to a low level of academic achievement (DeBaryshe et al., 1993). Mijuskovic (1986) hypothesizes that apathy and aimlessness are not only the result of loneliness, but consequently lead to increasing isolation as the adolescent stops striving for acceptance. Disinterest in school activities then, as well as hypothetically low educational and occupational aspirations produce a vicious cycle of repeated failure and further withdrawal.

There is increasing evidence that positive self-concept and academic achievement are closely interwoven (Andrews & Conte, 1993). Children who feel good about themselves usually achieve academically and conversely, children who do not feel good about themselves, often do not achieve academically (Berndt & Keefe, 1993). Unfortunately, some children hold paradoxical beliefs about their academic competencies and it is these beliefs, not reality, that most powerfully appear to predict achievement, motivation, and academic behavior (Philips, 1987).

The potential immediate and longterm consequences that isolation and loneliness pose for junior high students have practical implications for teachers (Page, Scanlan & Derringer, 1994). Without intervention, the pattern of behavioral withdrawal, negative peer reputation and negative self perceptions may result in children feeling lonely most of the time (Renshaw & Brown, 1993). This loneliness would precipitate not only unhappiness and possible internalizing difficulties, but also, subsequently, withdrawal from participation in academic pursuits.

Literature is limited on the quantity and quality of adolescent friendships. Without friendships, adolescence can be an extremely lonely time for an adolescent who is simultaneously attempting to establish his/her own identity. Both close friendships and membership in a social group provide opportunities for an adolescent to enjoy companionship and support from peers, as well as opportunities to explore their own feelings and knowledge of 'self'. Without confidence in themselves, or positive feelings of self-worth, adolescents may ultimately encounter difficulties with peer relationships and academic achievement. It seems apparent that an adolescent who lacks adequate peer relationships is an 'at risk' individual. The purpose of the present exploratory study was to examine the relationship between the quality and the quantity of adolescent friendships with academic achievement and self-esteem.

CHAPTER TWO

REVIEW OF THE LITERATURE

How children and adolescents get along with their peers is the best early predictor of adult social functioning (Parker and Asher, 1987). Considerable evidence in the research indicates that peer relations contribute to both social and cognitive development in adolescents, and to the capacity to function as adults (Hartup, 1993). Youniss and Smollar (1985) hypothesized a close adolescent friendship denoted by the high level of emotional involvement and importance has great potential for contributing to an individual's social development. The value and significance of adolescent friendships will be revealed through a review of literature focusing on specific adolescent concerns including peer relationships, social loneliness, academic achievement and self-esteem.

Relational Changes Throughout Adolescence

Erikson (1963) described adolescence as a period of conflict between self-identity versus role confusion; and intimacy versus isolation. It is widely accepted in the research that as children develop and grow towards adolescence, they appear to feel an increasing need for peer group acceptance. Marcoen and Brumagne (1985) hypothesize that young adolescents simply feel the need to be less dependent on their parents, but still remain unsure about their own values and identities. They suggest that adolescents then turn to their peers for dependence and support for decision making and judgements. However, there appears to be a complex set of developmental changes occurring with or within the adolescent which may intensify this

social need for peer acceptance (Mijuskovic, 1986). Mijuskovic (1986) and others have identified some of these adolescent relational changes.

1. During adolescence, relationships between parents and children undergo changes (Buhrmeister & Furman, 1987; Marcoen & Goossens, 1993; Youniss, 1980; Youniss & Smollar, 1985; 1989). The sense of separation and alienation from parents as the primary attachment figures (Bowlby, 1973) disrupts important interpersonal relationships (Mijuskovic, 1986). The salience of peers and close friends increases (Shulman, 1993) and the need for intimacy intensifies (Sullivan, 1953; Youniss & Smollar, 1985). Changing family structures from the previously extended family to a nuclear, sometimes single-parent household may also contribute to feelings of alienation or insecurity which could also affect the parent/adolescent relationship (Misjuskovic, 1986). Marcoen and Goossens (1993) hypothesize that parents continue to be important to the adolescents in matters such as career counselling, even though the adolescents are progressing towards the establishment of their own individuality and the development of more intensive, critical peer relationships.

2. Cognitive developments introduce new factors in adolescents' conception of their world, which leads to a greater awareness of self (Erikson, 1963; Misjuskovic, 1986). Brennan (1982) emphasizes that the new emerging cognitive awareness combined with a compelling need for individuality may be instrumental in this greater awareness of self. Self-identity difficulties may arise as the differences between self and others become more crucial to the adolescent (Harter & Jackson, 1993; Harter & Marold, 1994). Adolescents appear to need a validation from their peers of their self-worth as they exchange confidences with their peers more (Parker & Gottman, 1989). The

adolescent's body is also changing physiologically (Misjuskovic, 1986), which is another crucial change to the adolescent. The adolescent social environment then begins to emphasize social comparison amongst peers which may be disconcerting to some adolescents.

3. The adolescent discovers an increasing sense of freedom, which may be viewed simultaneously as challenging and frightening, and consequently, confusing (Misjuskovic, 1986). Shulman (1993) who studied close relationships during adolescence and their contribution to individual coping, found gender differences in this area. For adolescent males, the establishment of independence and responsibility is paramount, whereas adolescent females seek to establish their independence within the closeness and integrity of an intimate, same gender peer relationship.

4. Adolescents appear to exist in a world of chaos, somewhere between the world of a child and the world of an adult. Adolescents enjoy neither the rights, privileges and psychological supports of the child or the adult (Misjuskovic, 1986). They often appear to struggle for a meaningful goal in their lives which may lead to a sense of psychological isolation (Misjuskovic, 1986).

5. Competitiveness appears to dominate in the school and the community, whether it is in the pursuit of academic, athletic, social competence, or physical attractiveness which may lead to a feeling of failure or rejection (Misjuskovic, 1986) for the adolescent.

Youniss and Smollar (1985) explored adolescents' interpersonal relationships through eight studies conducted over a four year period (1980 - 1983). Their goal was to describe the characteristics of adolescent relational structures which they defined as the 'degree that interactions within a given

relationship manifest consistency in form' (p. 15). Their sample consisted of 1049 adolescents, ranging in age from 12 to 19 years. They found parents retained their position of unilateral authority as adolescents continued to seek advice from their parents in practical areas such as future career plans or academic plans. The bond to parents is not severed, only transformed, as parents grant more freedom to adolescents to have their own private lives separate from the family. Youniss and Smollar (1985) also indicated that adolescents' close friendships, marked by a high level of emotional involvement and importance, have the greatest potential for contributing to social development. Close relationships for the adolescent are, therefore, highly significant at this stage of development.

Adolescent Peer Relationships (Friendships)

Peer group relationships (social peer groups or networks) and close friendships (a dyadic peer relationship, characterized by an intense mutual bond or best friends) have been described as important components of adolescent socialization (Hartup, 1989; 1993; Windle, 1994), as well as aiding adolescents in making the transition from childhood to adolescence (Windle, 1994). At this stage of emotional development, friendships become more intimate (Buhrmeister, 1990; Hartup, 1989; 1993; Sullivan, 1953). Peers are willing to help each other out (Wright, 1984) and offer information and advice (Hartup, 1993). Youniss and Smollar (1985) found the features of close friendships to be shared mutual activities, intimacy, understanding, acceptance, and also, respect for differences of opinion. Close peer relationships may serve various functions such as material assistance and support; cognitive stimulation, information and social comparison; and

emotional support, intimacy, acceptance, belongingness and self-esteem (Shulman, 1993; Shulman & Samet, 1990). An adolescent who does not have the opportunity to engage in an intimate relationship may have heightened feelings of loneliness, alienation and depression (Sullivan, 1953). Therefore, having a close peer relationship may serve to act as a security base for adolescents from which they can explore and interact with their environment.

Important developmental changes exist in the significance and the quality of friendships portrayed throughout adolescence (Berndt, 1982; 1989; Sullivan, 1953). Buhrmeister (1990) compared the quality of pre-adolescent friendships (ages ten to thirteen, grades five and six) with adolescent friendships (ages thirteen to sixteen, grades eight and nine), with an emphasis on intimacy as a component of relationships. Youniss and Smollar (1985) hypothesized that adolescents need to develop more specific advanced social skills such as conflict resolution and maintaining confidentiality with peers in order to develop close, intimate relationships. Without the development of more mature social skills, the adolescent friendships will remain superficial.

In Buhrmeister's (1990) study, self and friends' ratings of friendship intimacy were gathered on reciprocated friendships. This was followed by self and friend ratings of social competence in developing close relationships. Various questionnaires were also employed to gather data on self-esteem, socioemotional adjustment and interpersonal competence. The findings provide consistent evidence that the degree of intimacy of friendship is integrally related to adjustment and interpersonal competence during adolescence, but less consistently related during preadolescence. Adolescents

whose friendships are rated as companionate, disclosing and satisfying reported that they are more competent, more sociable, less hostile, less anxious/depressed, and have higher self-esteem when compared to peers who are involved in less intimate friendships. However, a reciprocal scenario was also suggested by Buhrmeister (1990) in which adolescents who lack interpersonal competence, may have greater difficulty establishing and maintaining intimate friendships.

Selman (1980) presents a developmental model of adolescent friendship where initially friendship is characterized by mutual support and understanding, but then advances to a state of intimacy, closeness to each other, and respect for the other's individuality. Using this model, Shulman and Samet (1990) explored the quality of adolescent friendships and social networks with grade ten students. A friendship interview was administered as well as a problem-solving task. Shulman and Samet (1990) suggest from their findings that there are three types of friendships; interdependent, enmeshed and disengaged. These friendship types develop as adolescents exhibit different reasons for pursuing friendships. Members of a disengaged type of friendship prefer separateness and are motivated to pursue a close intimate friendship only to prevent loneliness. They are not interested in being of mutual help to each other. In the interdependent type of friendship, friends are close to one another, and they also respect each other's personal views and preferences. In the enmeshed type of friendship, friends are very close to one another. They act in consensus, and suppress individual preferences for a greater sense of closeness and unity. Of most interest to the present study is the disengaged type of friendship, where friends maintain their own individuality, but engage in friendship or companionship only as a

means of alleviating loneliness. Although the members are involved in a close friendship group, the quality of the friendship is shallow and less satisfying which later could lead to adjustment difficulties (Buhrmeister, 1990).

Hartup (1993) hypothesizes that although more adolescents claim they are involved in close friendships than actually are, the existing adolescent friendships are relatively stable. This statement is disputed somewhat by Cairns, Leung, Buchanan and Cairns (1995) who found less stability with peer bonds in adolescence. Their study, executed over a three week period, revealed that although peer relationships may endure, the relationships with close friends changed in importance and strength. Cairns et al. (1995) attributed this finding partly to adolescents adapting and growing with their changing environment and dynamic social networks.

Asher et al. (1990) suggest the role of friendship may be important in understanding why many seemingly withdrawn children are not lonely. The quality rather than the quantity of social interactions may be more predictive of social adjustment in adolescents (Larson, 1990). Conceptually, it is possible for an adolescent to have friendships and family bonds, and yet, still feel lonely because the relationships are less satisfying than desired. Conversely, adolescents who have an absence of peer relationships may not feel lonely because they do not want more in the way of relationships, and feel fulfilled in other ways such as academic achievement.

Through a review of literature on friendships, Hartup (1993) hypothesized that having both close friendships and having a support network of friends resulted in two scenarios: a) feeling good about oneself, feeling socially connected and being positive and b) being successful in

subsequent relationships, especially romantic relationships. These outcomes which indicate that the individual feels more positive about him/herself would ultimately result in a higher level of self-esteem (Harter, 1989b; Hartup, 1993).

Socially Isolated Adolescents

Social withdrawal in children, characterized by extreme social nonassertiveness and low social interaction (Hinde, Tamplin & Barrett, 1993; Rubin, Lemare & Lollis, 1990), becomes more problematic as children become older, and become more aware of their own negative position among peers (Coie et al., 1990). Fetro and Vitello (1988) suggest that it is a general belief among psychologists that feelings of isolation and being disconnected are more intense during youth than in any other period of growth. However, social isolation appears to be a rather complex phenomenon.

Peretti and McNair (1987) conducted a study with grade six students to develop a profile of a socially isolated student. Socially isolated students were identified by their fellow students through questionnaires, and then each identified student was interviewed by the researchers. Seventeen percent of the students were identified as socially isolated by their fellow classmates. Data obtained during the interviews indicated the six most frequently selected psychological self-perceptions of the socially isolated students were, in rank order: self-depreciation, low self-assertiveness, emotional blandness, shyness, suspiciousness, and depression. Social self-perceptions were rank ordered as: social withdrawal, social evasiveness, social insensitivity, interpersonal passivity, superficial interaction, and social phobia. Therefore, identified socially isolated students in this study also had poor self-concept and felt

alienated.

Asher and his colleagues (1985, 1990, 1992) have done considerable work with unpopular children. Asher (1990) divides unpopular children into two distinct classifications; rejected children and neglected children. Rejected children lack friends in their class and are overtly disliked by their peers whereas neglected children are reasonably well liked by their peers yet lack friends in their class. The two groups show distinctly different behavioral profiles with accumulating evidence that rejected children may be more at risk than neglected children for grade retention, dropping out of school and delinquency (Coie, et al., 1990). Asher and Wheeler (1985) also compared these two groups in terms of feelings of loneliness and social dissatisfaction and found similar results. Rejected children appear more likely to report loneliness than neglected children. This would imply that distinguishing between neglected and rejected status with socially isolated adolescents is critical. Being disliked and being without friends are entirely different attributes with their own associated difficulties.

A study by DeRosier, et al. (1994) examined whether peer rejection predicted later adjustment difficulties academically and behaviorally. A four year study was conducted with second to fourth graders. Several interesting findings came out of this study. Withdrawn children remained withdrawn throughout the four years. Shy, anxious behavior appeared to accelerate over the four years, as more severe internalizing behavior occurred. However, the study did not find any correlation between academic achievement and peer rejection, although greater absenteeism from school was associated with peer rejection.

In one of the few studies conducted with adolescents, Parkhurst and

Asher (1992) investigated patterns of behavior and emotional response associated with social status, (specifically peer rejection) in seventh and eighth graders. The authors' hypotheses suggested that withdrawn students (referred to in the study as submissive-rejected students) as compared with average status students would report elevated levels of loneliness and internalizing behavior such as social anxiety. Methodology involved using a peer behavioral assessment and a sociometric assessment, followed by a loneliness, social dissatisfaction questionnaire and a demographic measure rating interpersonal concerns. Findings indicated submissive rejected students were significantly situationally lonelier than popular students, reported greater loneliness overall than popular students, and reported greater loneliness overall when compared to elementary school students. These withdrawn children also showed higher social anxiety about being humiliated or rejected. The results from comparing elementary and junior high students would indicate that loneliness accelerates during adolescence. The previous studies employed Asher and Wheeler's (1985) revision of the Illinois Loneliness Questionnaire (Asher, Hymel & Renshaw, 1984) designed to measure loneliness in children.

Should social withdrawal be considered a risk factor for later difficulties in life? Parker and Asher (1987) in a review and analysis of the literature found general support for their hypothesis that children with poor peer relationships are at risk for difficulties later in life. The difficulties that seemed most prevalent were criminal behavior and school dropout. However, the research did not indicate any real link between shyness/withdrawal, and later, maladjustment. Parker and Asher (1987) interpreted this lack of significance in their findings to incomplete research in

the area of socially withdrawn children.

A study by Vargo (1995) investigated the role of social withdrawal as a risk factor with grade seven students. The study revealed that withdrawn students did not differ significantly from socially adjusted students on the externalizing measures of mental health such as hyperactivity. However, there was a significant difference with internalizing behaviors. The results of the study indicated that withdrawn students are less happy, achieve less scholastically, and display more internalizing behaviors such as depression, anxiety, resentment and suspicion. Low self-esteem was associated with an increase in mental health problems of an internalizing nature for peer-identified withdrawn students. It is interesting to note that, paradoxically, this study also reported that peer identified aggressive students viewed themselves as being well adjusted. Possibly aggressive students' external locus of control allows them to shift the blame for their behavior externally, which allows their inner self to remain unscathed.

The Waterloo Longitudinal Project was an investigation which began in 1980 to examine the stability and predictive outcomes associated with social withdrawal during childhood (Hymel et al., 1990; Rubin & Mills, 1988). Several studies which utilized this data are pertinent to the present study.

Rubin and Mills (1988) suggested that children probably portray social withdrawal in various ways, and that these different forms of withdrawal reflect and predict varying forms of psychological difficulty. Using data from the Waterloo Longitudinal Project with second grade children who were later followed up in the fifth grade, Rubin and Mills (1988) differentiated between two subtypes of social isolation: passive withdrawal (the child chooses to withdraw from peers) and active withdrawal (the child is rejected by peers).

Data collection involved peer nominations and peer ratings of popularity. The authors (1988) found passive withdrawal is a reflection or behavioral symptom of internalizing difficulties in childhood, and the passive isolated child appears to become more rejected by peers with increasing age. The findings seem to reiterate Hymel and Rubin's (1985) work which found withdrawn children have negative self-perceptions of competence which leads to an often accurate belief of being rejected by their peers.

Hymel et al. (1990) also used data from the Waterloo Longitudinal Project to elaborate on Rubin and Mill's (1988) study report. They suggested Rubin and Mill's (1988) work was limited in terms of sample size which made it difficult to safely predict a link between early social withdrawal and internalizing outcomes. However, Hymel et al.'s (1990) study portrayed similar findings to Rubin & Mills (1988) demonstrating a connection between negative self-perceptions and social withdrawal. Early social withdrawal also appeared as a strong risk factor for internalizing disorders. Data collection involved peer nominations and peer ratings of popularity, which makes it difficult to discern, especially at the second grade level, whether children were classified accurately as socially withdrawn or socially rejected. Results again suggest that social isolation early in childhood leads to problems with peer acceptance during middle childhood. However, the research still remains incomplete on whether social withdrawal is a reflection of a negative self-perception, or whether a negative self-perception leads to socially withdrawn behavior.

Socially isolated adolescents appear to have a lack of peer relationships. However, peer acceptance (getting along well in a peer group) and having friends (forming close emotional ties to one or a few peers) are clearly two

distinct relationships (Parker & Asher, 1987). It is possible to have no friends and yet, be generally well accepted by the peer group and conversely, to maintain friendships, but have low social status within a peer group. Is membership or lack of membership in either of these two social situations more predictive of loneliness associated with social isolation?

Adolescent Loneliness

Loneliness is a multifaceted phenomenon; a complex construct consisting of many supporting variables (Terrell-Deutsch, 1991). Loneliness is not synonymous with being alone (Peplau & Perlman, 1982), rather it is a subjective experience. The onset and origin of loneliness can be traced to some form of social relationship deficit (Peplau & Perlman, 1982) that exists as a result of having fewer or less satisfying personal relationships than an adolescent desires (Ponzetti, 1990) within his or her social network. Loneliness is also considered as an adverse psychological state (Peplau & Perlman, 1982) in which feelings of desertion, abandonment or isolation may be prevalent. It is usually evident in interpersonal behavior (Peplau & Perlman, 1982).

Loneliness is reviewed in this study as one of the outcomes of peer isolation. In the child, adolescent and college student literature, a relationship has been established between loneliness and social withdrawal (Cassidy & Asher, 1989; Hymel et al, 1990; Ponzetti, 1990; Rubin & Mills, 1988; Terrell-Deutsch, 1991). Children who are rejected by peers may eventually realize that they are shunned or disliked by their peers. This realization may lead to feelings of loneliness.

Loneliness exists within every age group (Mijuskovic, 1986), although

researchers indicate adolescents and young adults appear to be particularly vulnerable (Brennan, 1982; Woodward & Frank, 1988). However, little research exists with respect to adolescents and loneliness. Brage et al. (1993) investigated the extent to which loneliness was experienced by adolescents. Using a cross-sample of adolescents at various junior and senior high schools in the midwestern United States, Brage et al. (1993) reported that adolescents rated themselves generally as lonely. Brage et al. (1993) discovered loneliness was inversely related to self-esteem. This finding, indicating a relationship between self-esteem and loneliness, supports the work of Asher et al. (1990).

Several contributors to the child research on loneliness are indicated. Cassidy and Asher (1989) found loneliness was associated with teacher ratings of shy withdrawn behavior in the classroom. Asher et al. (1990) hypothesized a pattern with socially withdrawn children consisting of timid and submissive behavior, extreme and chronic low social status and extreme loneliness. Rubin and Mill's (1988) study found a strong predictive relationship in socially withdrawn children between negative social self-perceptions and later feelings of loneliness. According to Asher et al. (1984), more than ten percent of children in grades three through six reported feelings of loneliness simultaneously with not having anyone to play with. Poor academic achievement was also reported with these lonely, socially isolated students.

Hymel & Renshaw (1984)'s study supports the established relationships between social isolation and loneliness. Their methodology included a loneliness questionnaire. The authors (1984) argued in their study that children experiencing difficulties in their peer relations have typically been identified using external sources of information such as teacher referrals or

ratings, sociometric measures, and/or behavioral observations. Their findings support the need to supplement these assessment procedures with self-report measures that assess the degree to which the children themselves feel satisfaction with their peer relationships as exhibited through loneliness.

In a year-long study, Renshaw and Brown (1993) explored school-related loneliness and the social characteristics of children in grades three through six. Loneliness was assessed through questionnaires. The results of the study indicated loneliness was found to be predicted by a combination of social characteristics; withdrawn social behavior, poor peer acceptance, few or no friendships, and an internal-stable attributional style. More specifically, children with no friends reported more loneliness than children with one or more friends. From their findings, Renshaw and Brown (1993) hypothesized children who are inhibited and exhibit mostly nonsocial activity may find it difficult to interact with others. This could lead to negative feelings of social competence, which, in turn, may cause the child to withdraw even more from a social network. The findings also indicated that children who are unable to establish close friendships in the classroom report greater levels of loneliness. This hypothesis is further supported by Berndt (1989) who reiterates the significance of close friendships in promoting social and emotional adjustment.

In one of the few studies available on loneliness in adolescence, Marcoen and Brumagne (1985) investigated differences in loneliness with fifth, seventh and ninth grade students. Loneliness was assessed by a loneliness scale accompanied by a sociometric measure of perceived social sensitivity. Although, the authors hypothesized that loneliness increased from childhood to adolescence, the differences in loneliness between grade

levels was marginally significant. Marcoen and Brumagne (1985) attributed these results to a narrow age range used in the study. No gender differences were found with respect to peer-related loneliness. Marcoen and Brumagne's results (1985) further indicated that students perceived as socially sensitive or socially aware by their classmates, and assumed to belong to the peer social group or network, less frequently mentioned feelings of loneliness.

Terrell-Deutsch (1991) argued it is more useful to examine children's subjective views of their social situations, as assessed by questionnaires, than to assess objective features of children's social situations or personal characteristics. Terrell-Deutsch (1991) examined whether the dynamics of loneliness operated in similar ways for grades five and six students who have been rated previously by their teachers and peers as being of either high, average or low popularity. Loneliness measures used in this study included the Illinois Loneliness Questionnaire for Children (Asher et al., 1984), the Louvain Loneliness Scale for Children and Adolescents (Marcoen, Goossens & Caes, 1987) and the Relational Provision Loneliness Questionnaire, (Hayden, 1989). Results from the measures indicated children who identified themselves as lonely reported more negative social self-perceptions, an affinity for being alone, more negative self-concepts, and less satisfaction with peer relationships than their less lonely peers. Children who identified themselves as lonely, and who were ranked as unpopular had smaller social networks and reported greater dissatisfaction with their peer support systems. However, no significant relationship was apparent between loneliness and popularity. This finding is in opposition to Asher et al.'s (1984) study which reported a strong correlation between loneliness and degree of popularity. One question that arises from these conflicting results is: Are there children

who appear popular and happy in a social group but perceive themselves as lacking in close, intimate friendships, and subsequently feel lonely?

Terrell-Deutsch's (1990) study revealed general self-concept appeared as an important predictor of loneliness for all popularity groups, but was especially important in predicting loneliness in more popular children. Having close friendships may make a child feel good about him/herself and therefore may increase a child's feeling of self-worth.

Self-Esteem

The process of identity formation depends on the interplay of what adolescents at the end of childhood have come to mean to themselves and what they now appear to mean to those who become significant to them (Erikson, 1977). The adolescent is faced with many decisions, possibilities and uncertainties (Erikson, 1963; 1977). Consequently, the adolescent's attitude towards the self, the value the adolescent puts on his/her self (self-esteem, self-worth) and the adolescent's perception of personal competencies (self-concept) becomes particularly critical (Anderson, 1989; Harter & Marold, 1990; Klein, 1995). A positive self-image is central to the adaptive functioning and everyday happiness of the adolescent (Harter, 1988a). Social support networks are vital to the development of an adolescent's positive self-concept (Harter, 1988a; Youniss & Smollar, 1985). Harter (1988a) hypothesizes that the peer group or classmate support have more impact on an adolescent's self-concept than the support of close friends.

Wintre and Crowley (1993) conducted a study based on Harter's (1988b) hypothesis that self-worth (how one values him/herself as a person) is an integral part of self-concept. The consultant preferences (who adolescents

turn to for advice or support) of 247 adolescents were examined in relation to self-worth and locus of control. These adolescents, ranging in age from 13 to 18 years, completed Harter's Self-Perception Profile for Adolescents (1988b). Wintre and Crowley's (1993) study analyzed only the subscale for self-worth (SPPA; Harter, 1988b). These adolescents also rated their preference for four generic consultant categories (a familiar adult, an adult expert, a familiar peer, or a peer expert) in three hypothetical problem situations; an impersonal problem, an interpersonal problem with a peer, and an interpersonal problem with a parent. Results indicated a preference by the adolescents, especially with the younger adolescents, for peer consultants in all three problem situations. Significant differences were also found in a four-way analysis of variance among self-worth, locus of control, situation, and consultant preference. The results of this study suggests that adolescents prefer to consult with peers when encountering any type of difficulty. Individuals with a negative self-worth generally preferred to consult with peers. However, these individuals appeared to prefer adults more when encountering an impersonal difficulty than did individuals with a positive self-worth. Wintre and Crowley (1993) hypothesize that socially withdrawn adolescents do not have the available peer support networks to consult with and also do not have enough confidence in themselves or positive feelings of self-worth to consult with other adults when involved in personal difficulties.

Adolescent friendships appear to influence the adolescent's self-esteem. Having intimate and supportive friendships may increase adolescents' concept of how they value themselves (Berndt & Keefe, 1993). Most of the present research in this area includes correlational studies, which although

inconclusive by their nature, indicate that the quality of adolescent friendships is related to the adolescent's self-esteem. This gap in the research was filled in part with studies by Berndt and Keefe (1993; 1995).

Berndt and Keefe (1993) assessed whether changes in adolescents' self-esteem during a school year was related to the quality of friendships early in the year, and also, whether changes in levels of self-esteem were dependent upon friends' levels of self-esteem. The authors (1993) based the second objective on the hypothesis that an adolescent whose friends exhibit high self-esteem may begin to feel more positive about themselves. Conversely, an adolescent whose friends exhibit low self-esteem, may begin to feel more negative about themselves. Berndt and Keefe (1993) conducted their year-long study with 297 seventh and eighth grade students. The students completed Harter's Self Perception Profile for Children and a questionnaire concerning the quality of their friendships in the fall, and again in the following spring. Findings indicated adolescents who had more intimate and supportive friendships also tended to have higher global self-worth (or general self-esteem). Adolescents perceive their competence as varying in different domains or areas such as athletic ability or academic competence, and the quality of friendships have distinctive effects or overlaps on these various domains in regards to an adolescent's self-perception. However, in contradiction to the authors' original hypothesis, the changes during the year in students' global self-worth were unrelated to their reports about the positive qualities of their friendships in the fall. Also, a friend's level of self-esteem had little impact on the adolescent's self-esteem. If adolescents exhibiting poor self-esteem were friends with adolescents exhibiting high self-esteem, there did not seem to be any fluctuations in either adolescent's

level of self esteem throughout the year.

Hagborg (1993), using Harter's Self-Perception Profile for Adolescents (1988b) tested 30 students in each of five grade levels ranging from grades eight to twelve. He examined gender and grade level differences in the nine self-concept domains measured by the SPPA, the relative contributions of the eight self-concept domains to global self-worth and across domain comparisons for each gender. The analysis revealed that for both boys and girls, the domains scholastic competence and physical appearance were important contributors to global self-worth. A third important contributor for girls was the domain social acceptance. Another interesting finding was that both boys and girls expressed most confidence in the domains of peer relations (social acceptance), close emotional bonds with friends (close friendships) and job competence.

Therefore, two causal constructs, competence in domains of importance and social support appear to impact one's level of self-esteem (Harter, 1990; Harter & Marold, 1994).

Academic Achievement and Peer Relationships

Children who experience difficulties with peer relationships have also been found to experience difficulties with academic achievement (DeBaryshe et al., 1993; Wentzel, 1993). Students who are popular and have high self-esteem have higher academic achievement than students with poorer friendships and lower self-esteem (Berndt & Keefe, 1993). Terrell-Deutsch (1991) found academic learning problems and poor work habits, as rated by the teachers to be indicative of loneliness in average and highly popular girls. However, in contradiction, girls of low popularity who exhibited few

academic problems indicated less loneliness.

Berndt and Keefe (1995) in a year long study, looked at two perspectives of friends' influence on adolescents' adjustment to school: whether intimacy in friendships enhances adolescents' self-esteem and social understanding and whether the friends' behaviors, negative or positive, influence the nature of adolescent behaviors. Academic achievement was measured by report card marks and teacher reports. Findings suggested the characteristics of adolescents' friends and the quality of their friendships both affect adolescents' self esteem and subsequently, adolescents' school adjustment. Adolescents who described their friendships as having more positive features such as relational support and intimacy became increasingly more involved in school. However, the adolescents appeared to react more or be affected more strongly by the negative factors (such as conflict and rivalry) than by the positive features of a close relationship. Qualitative features of peer relationships then, whether negative or positive, could be said to predict school adjustment.

Liu, Kaplan and Risser (1992), used cross-sectional data to examine the reciprocal relationships between academic achievement and general self-esteem within two different age groups; grades seven to nine and grades ten to twelve. They hypothesized general self-esteem both influences and is influenced by academic achievement. Liu and colleagues (1992) based their hypothesis on the assumption that adolescents' perception of teachers' responses and academic self-concept are two mediating variables in this reciprocal relationship between academic achievement and self-esteem. Students tend to perceive their own successes or failures from the various approvals or disapprovals of teachers (a significant other) as reflected in

grades, comments or report cards. The findings supported the hypothesis that general self-esteem both influences and is influenced by academic achievement.

Findings from Wentzel's (1993) study with sixth and seventh graders supported the hypothesis that social competence is a powerful predictor of academic achievement. Of special interest in this study is that social behavior was a much stronger predictor of students' grades than were standardized test scores. Wentzel (1993) based her study on the premise that social conduct might be related to academic achievement because it is also related to other behaviors that contribute directly to learning and performance e.g. interaction in classroom discussions.

From the literature presented, academic achievement appears to be influenced by a student's social competencies and quality of peer relationships. Disinterest in school activities, as well as possible low educational and occupational aspirations produce a vicious cycle of repeated failure and further social withdrawal (Mijuskovic, 1986). A relationship, then, is indicated between self-esteem and academic achievement.

Theoretical Background for Loneliness Measures

Questionnaires designed to assess loneliness are primarily based on two major theories (Sullivan, 1953; Weiss, 1973;), the Social Needs theory (Weiss, 1973) and the Cognitive Processes approach (Peplau & Perlman, 1982). The Social Needs theory (Weiss, 1973) suggests that loneliness is a response to a relational deficit which gives rise to a yearning for a more intimate relationship. If one's interpersonal relationships do not satisfy an inherent set of social needs, loneliness will result. Weiss (1974) hypothesized that

different types of relationships meet different types of social needs or 'social provisions'. Friends offer affection, intimacy, and enhancement of worth whereas group acceptance provides a sense of inclusion.

As an advocate of the Social Needs approach, Weiss (1973) distinguishes between social loneliness (loneliness due to social isolation) and emotional loneliness. Social loneliness is seen as a perceived deficit in social integration or a social network which is failing to feel part of a group of friends who share common interests and activities. An example of social loneliness would be an adolescent who feels abandoned in the summer when all his/her friends go away on holidays. The adolescent feels excluded, bored and restless. Social loneliness will continue to exist that summer unless the adolescent develops another social, supportive network to which the adolescent feels he/she belongs. Emotional loneliness is the perceived lack of a truly intimate bond, the absence of a close emotional attachment in which one feels accepted, secure, cared for and understood. An example of emotional loneliness would be an adolescent who loses his/her best friend. The adolescent feels anxious, empty and utterly alone. Emotional loneliness can only be dissolved by the development of another emotional attachment or the reinstatement of the emotional bond that was lost (Weiss, 1973).

The Cognitive Processes approach (Peplau & Perlman, 1982) suggests that loneliness results from dissatisfaction with social relationships. A discrepancy exists between desired and achieved social relationships. Loneliness results from two broadly defined categories of events: first, changes in an actual social relationship (i.e. a best friend moves away), and second, changes in a person's desired or expected social relationships (i.e. an adolescent joins the football team to become part of the 'in' crowd).

Proponents of the Cognitive Processes approach believe loneliness is an individual response to a situation in which other people may react quite differently based on the individual's history of social relationships. The Cognitive Processes theory focuses on the lack of social ties, but emphasizes that this lack occurs with reference to individual perceptions and evaluations of desired or needed levels of social contact.

A review of the literature indicated only two loneliness questionnaires that were appropriate for adolescents. These two loneliness questionnaires: the Louvain Loneliness Scale for Children and Adolescents (LLCA: Marcoen et al., 1987) and the Relational Provision Loneliness Questionnaire (RPLQ: Hayden, 1989) have developed from the Social Needs Theory, (Weiss, 1973), although the LLCA also has some leanings towards the Cognitive Processes approach.

Marcoen et al. (1987, Appendix H) developed a multidimensional loneliness scale, The Louvain Loneliness Scale for Children and Adolescents (LLCA). The LLCA attempts to identify variations in the types and manifestations of loneliness by measuring the perceived dissatisfaction of adolescents' current parent and peer relationships, as well as attitude to aloneness and solitude. The LLCA differentiates loneliness on the basis of the specific interpersonal deficits experienced in different relationships: namely the 'loneliness of emotional isolation' and the 'loneliness of social isolation'. Individual items such as "I think there is no single friend to whom I can tell everything" tap the emotional form of loneliness and "I feel excluded by my classmates" tap the social form of loneliness. However, these items are scored together within the peer subscale as one loneliness score instead of scored separately as the two forms of loneliness (emotional and social).

In contrast, The Relational Provision Loneliness Questionnaire (RPLQ), developed by Hayden (1989, Appendix G), also a multidimensional scale, attempts to assess children or adolescent loneliness by examining the adolescent's satisfaction with both peer and family relationships, and within each of these domains attempts to look at social and emotional forms of loneliness separately. "I feel part of a group of friends that does things together" is part of the subscale Peer Group Integration which looks at the social form of loneliness whereas "I have a friend I can tell everything to", is part of the subscale Peer Personal Intimacy which looks at the emotional form of loneliness. Further examination of the items would reveal that although the author, (Hayden, 1989) has attempted to base the development of the questionnaire on the Social Needs theory (Weiss, 1973), it is evident that the adolescent's satisfaction with relational support rather than feelings of loneliness is being explored (Terrell-Deutsch, 1991).

As indicated then, these loneliness scales, LLCA and RPLQ, were designed to assess the precise nature of the social deficits experienced by the lonely person (Marcoen & Goossens, 1993). The social deficits examined in this present study are a lack of an intimate peer relationship and/or a lack of a peer social support or social network.

Theoretical Background for Harter's Self-Esteem Measure

Harter (1988b) developed a Self-Perception Profile for Adolescents (SPPA: Harter, 1988b) to explore an adolescent's self-concept. The SPPA yields a profile of self-concept scores across the specific domains as well as a separate index of the adolescent's sense of global self-esteem or self-worth (Harter & Marold, 1994; Harter, 1990) which taps directly how much the

individual likes himself or herself (Wichstrom, 1995). This assessment tool was developed on the basis of the theories of James (1892) and Cooley (1902), each of whom had distinct thoughts on an individual's global sense of self-esteem.

James (1892) theorized that global self-esteem was measurable by the ratio of an individual's successes to an individual's pretensions to the cognitive evaluation of his/her competency based on his/her aspirations. If an adolescent is successful or competent in an area that is deemed important to the adolescent, high self-esteem will exist. Conversely, if the adolescent is unsuccessful in an area which is considered important to the adolescent, low self-esteem will prevail. However, if the area is of no importance to the adolescent, self-esteem will not be affected.

Cooley (1902) postulated that the origins of self-esteem are primarily 'social' in nature with the point of reference being the opinions of the social group, or the peer group. Self-esteem is based on the collective opinions of the significant others in an adolescent's life; if the peer group holds the adolescent in high regard, the adolescent will have high self-esteem. Conversely, if the peer group holds little regard for an individual, the individual will have low self-esteem. Two causal constructs then, competence in domains of importance (James, 1892) and social support (Cooley, 1902) appear to impact one's level of self-esteem (Harter, 1990; Harter & Marold, 1994).

The Harter's Self-Perception Profile for Adolescents (SPPA; Harter, 1988b) was devised based on the two causal constructs of self-esteem; competence in domains of importance and social support. The SPPA taps domain-specific judgements of competence or adequacy in eight separate

domains, as well as the global perception of a person's self-worth. The eight separate domains are scholastic competence, athletic competence, physical appearance, social acceptance, behavioral conduct, job competence, close friendship and romantic appeal. Questions such as 'some teenagers do very well at all kinds of sports but other teenagers don't feel they are very good when it comes to sports' would address the competency construct whereas questions such as 'some teenagers feel they are socially accepted, but other teenagers wished that more people their age accepted them' tap the social support construct.

Summary

Adolescence involves a complete reorganization of the social world of the adolescent. Some adolescents have not yet acquired sufficient experience in their social world, nor the social skills to maintain relationships adequately (Marcoen & Goossens, 1993). An internal struggle exists as they attempt to identify with their self, while still seeking the support of their peers (Erikson, 1963). Their self-concept becomes dependent upon the acknowledgement they receive from their peers (Harter, 1988a). Friendships become more intimate and salient throughout adolescence (Harter, 1988b).

Different dimensions of friendships affect the adolescent's development: having friends, and also the quality of the friendships (Hartup, 1993). Peer relationships can be identified as either having a close, intimate relationship with a friend (best friend) or as being part of a social group or network. Conflicting evidence in the research cannot distinguish which type of relationship is more valuable to an adolescent's sense of self-worth.

A review of the literature suggests that some adolescents lack peer

relationships; either an absence of a peer emotional attachment or an absence of a social network or both. These adolescents are at risk for internalizing difficulties, either simultaneously or in adulthood. Social withdrawal in adolescents is predictive of loneliness, and a negative self-perception. Withdrawn adolescents also, possibly, do poorly academically. Ultimately, it is hypothesized, how adolescents feel about themselves affects their behavior and academic achievement.

Aims of the Present Study

The purpose of the study was to explore the quantity and quality of adolescent friendships, and to examine the relationships among the lack of adolescent friendships, academic achievement and self-esteem. Two groups of adolescents; one identified by their teacher as lacking in peer relationships, and the other identified by their teachers as not lacking in peer relationships participated in this study. These groups were further explored to identify students who perceived themselves as lacking in peer relationships, even though they were not identified as such by their teachers.

The study employed three multidimensional scales, the Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen et al., 1987), the Relational Provision Loneliness Questionnaire, (RPLQ, Hayden, 1989) and the Harter's Self-Perception Profile for Adolescents (SPPA, Harter, 1988b). The LLCA, RPLQ, and the social acceptance and close friendship subscales of the SPPA were used as indicators of type and satisfaction of peer relationships. The self-worth subscale of the SPPA was used as an indicator of how the adolescent felt about him/herself. A followup interview was used to explore perceptions and the quality of adolescent friendships in more detail.

The present research is unique in that few studies have investigated the population of adolescents who lack friendships. In this study, the quality of friendships is explored using loneliness scales and interviews.

Relationships are also examined among adolescents with a lack of peer relationships, and self esteem and academic achievement. This study is also unique in that relationships are explored with adolescents who initially are identified by their teachers as having sufficient peer relationships, but actually perceive themselves as having insufficient peer relationships.

This study is the first to compare, within a single sample, the relationships among the subscales which deal with peers and friendships within these three multi-dimensional scales: the Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen et al., 1987), the Relational Provision Loneliness Questionnaire (RPLQ, Hayden, 1989), and Harter's Self-Perception Profile for Adolescents (SPPA, Harter, 1988).

Two hypotheses were investigated in the present study.

1. A lack of peer relationships in junior high school students is related to poor academic progress.

It is predicted that a relationship exists between social isolation in adolescents and poor academic achievement. Academic achievement appears to be influenced by a student's social competencies and peer relationships.

2. Junior high school students' self-worth is related to the quantity and quality of their peer relationships.

An adolescent who has close friendships or a supportive network of friends feels good about him/herself. Conversely, self-perceptions of a lack of peer relationships in junior high students is related to negative self-worth.

Adolescents not rated as alienated by their teachers but who perceive

themselves as socially isolated or lonely will not feel positively about themselves. Withdrawn students are expected to experience loneliness, but paradoxically, more well accepted and even popular students also feel alienated and suffer from feelings of loneliness (Asher, 1990).

In addition to the stated hypotheses, a number of questions will be explored such as:

1. What are characteristics of adolescent friendships?
2. When do adolescents feel lonely? (consistently or situationally)
3. What is the quality of adolescent friendships?
4. What gender differences are apparent in adolescent friendships?
5. What grade differences are apparent in adolescent friendships?
6. Do withdrawn adolescents report that they enjoy spending time alone?

Definition of Terms

To ensure clarity and to facilitate communication, some of the constructs are defined or described:

Loneliness: Loneliness will not be considered to be synonymous with being alone, but as a subjective experience. Loneliness exists as a result of having few or less satisfying personal relationships than an adolescent desires (Ponzetti, 1990) within his or her social network.

Friendship: Friendship refers to a dyadic peer relationship characterized by an intense mutual bond.

Socially isolated, socially withdrawn, lacking in peer relationships: These terms will be used synonymously to indicate an absence of peer relationships, either in friendship or within a social peer group or network.

CHAPTER THREE

METHOD

Participants

Eighty-eight students in seven seventh, eighth and ninth grade classrooms in a junior high school in an urban centre participated in the present study. The sample was composed of 21 Grade 7 students, 37 Grade 8 students, and 30 Grade 9 students. The makeup of the school is multi-cultural, and lower to middle class socioeconomically. Signed consent from both parent and student were required for inclusion in the study (See Appendices B, C and D for a copy of the consent form and information regarding the study which the schools, students and parents received). The students were informed that participation was voluntary and that withdrawal at any time was optional. Two special needs classes (Prep and ESL) were not included in the study because of the low reading levels exhibited by the students.

The sample consisted of 43 male students and 45 female students. Sixteen of the 88 students in the study were identified by their teachers as lacking in peer relationships. This group contained 9 males and 7 females. The remaining 72 students became the control group. The control group consisted of 34 males and 38 females. Frequencies on the demographic information collected on the two groups were analyzed by a chi square test (See Table 1).

Table 1: Demographic Information

	identified		control	
	<i>n</i>	%	<i>n</i>	%
1. <u>Gender</u>				
male	9	56.3	34	47.2
female	7	43.8	38	52.8
2. <u>Grade</u>				
7	9	56.3	12	16.7
8	4	25.0	33	45.8
9	3	18.8	27	37.5
3. <u>Parental Marital Status</u>				
living together	5	31.3	47	65.3
not living together	11	68.8	25	34.7
4. <u>Number of schools attended</u>				
2	4	26.7	26	38.2
3	6	40.0	22	32.4
4	1	6.7	8	11.8
More than 4	4	26.7	12	17.6

In order to ensure a strong statistical significance when cell sizes of less than 5 are recorded, significant differences are not reported. Trends were noted in the data. Studies have indicated though, that this recommendation is too stringent and can be relaxed (Everitt, 1977). However, the researcher has decided to choose a more conservative approach because of the small sample size and the large number of comparisons made in the analyses.

Trends that are observed are more students identified as lacking in peer relationships live with only one of their biological parents. Differences are also noted in regards to grade, with fewer grade seven students participating

in this study. It is interesting to note however, that a higher percentage of the grade seven students as compared to the other grades were identified by their teachers as lacking in peer relationships. No gender differences were noted. No differences were also observed with the number of previous schools students in each group had attended.

Tables 2 and 3 present gender and grade differences between the teacher-identified students lacking in peer relationships and the control group. In both instances, no trends were noted.

Table 2 : Gender Differences on Demographic Information

	male		female	
	<i>n</i>	%	<i>n</i>	%
1. <u>Grade</u>				
7	10	23.3	11	24.4
8	20	46.5	17	37.8
9	13	30.2	17	37.8
2. <u>Parental Marital Status</u>				
living together	21	48.8	31	68.9
not living together	22	51.2	14	31.1
3. <u>Number of schools attended</u>				
2	13	31.7	17	40.5
3	14	34.1	14	33.3
4	5	12.2	4	9.5
More than 4	9	22.0	7	16.7

Table 3: Grade Differences on Demographic Information

	7 <i>n</i>	%	8 <i>n</i>	%	9 <i>n</i>	%
<hr/>						
1. <u>Parental Marital Status</u>						
living together	14	66.7	20	54.1	18	60.0
not together	7	33.3	17	45.9	12	40.0
2. <u>Number of schools attended</u>						
2	10	52.6	11	31.4	9	31.0
3	5	26.3	12	34.3	11	37.9
4	1	5.3	5	14.3	3	10.3
More than 4	3	15.8	7	20.0	6	20.7

Measures

Three pencil and paper self-report instruments were used: the Relational Provision Loneliness Questionnaire (RPLQ, Hayden, 1989), the Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen, et al., 1987), and Harter's Self-Perception Profile for Adolescents (SPPA, Harter, 1988b).

Two personal information sheets, one for the student (Appendix F) and one for the teacher (Appendix E), both designed by the researcher, were used to collect demographic and academic information.

Relational Provision Loneliness Questionnaire

The Relational Provision Loneliness Questionnaire (RPLQ, Hayden, 1989) is a 28 - item multidimensional scale which attempts to assess loneliness by examining children or adolescents' satisfaction with both peer

and family relationships, and within each of these domains, attempts to look at social and emotional forms of loneliness separately (See Appendix G). The RPLQ consists of four subscales: Peer Group-Integration (How much does the child feel a part of and accepted by their peer group? Do they fit in with their peers?); Peer Personal-Intimacy (Does the child have a friend they can share their personal thoughts and feelings with, a friend they can count on and trust?); Family Group-Integration (How much does the child feel a part of and integrated with their family?) and Family Personal-Intimacy (Is there a family member they can share personal thoughts and feelings with, a family member they can count on and trust?). Each of the subscales is composed of 7 items which are answered on a 5-point scale: "always true", "true most of the time", "sometimes true", "hardly ever true", and "not at all true". These response items are scored 1, 2, 3, 4, and 5 respectively. Scores on each of the four subscales range between 7 and 35. A lower score on the scale would indicate satisfaction with peer or family relationships, whereas a higher score on the scale would indicate dissatisfaction with peer or family relationships.

The psychometric properties of the RPLQ (Hayden, 1989) are documented in one study only. Considerable support for its construct validity and high internal and test-retest reliability is shown, although these alpha levels were not indicated in the original study, and therefore are not available (Terrell-Deutsch, 1991).

The instrument was given in its entirety. The four subscales were analyzed for this study. The two subscales of the RPLQ which dealt with peers were analyzed in the present study to assess peer emotional and social support. It should be noted also, that the individual items in the scale indicate adolescent's satisfaction with available forms of relational support

rather than feelings of loneliness. The two family subscales were used to explore adolescent perceptions of family relationships and family support systems.

Louvain Loneliness Scale for Children and Adolescents

The Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen et al., 1987) is a 48-item multidimensional questionnaire, designed to differentiate among types or manifestations of loneliness. (See Appendix H). The LLCA consists of four subscales: Loneliness-Parent, measuring loneliness in the relationships with parents (I feel left out by my parents); Loneliness-Peer, measuring loneliness in the relationship with peers (I think I have fewer friends than others); Alone-Positive, measuring an affinity for being alone (I want to be alone); and Alone-Negative, measuring an aversion to being alone (When I am alone, I feel bad). Each of the four subscales are composed of 12 items which are answered on a 4-point scale: "often", "sometimes", "seldom", and "never". For most items, these response alternatives are scored 1,2,3 and 4 respectively. Some of the items on the parent-related loneliness subscale are scored in reverse direction. Scores for each of the four subscales range between 12 and 48. Lower scores on the peer-related subscale are indicative of greater loneliness, whereas lower scores on the parent-related subscale reflect positive evaluations of parental relationships. Higher scores on the affective subscales are indicative of more positive or more negative views on being alone.

The LLCA subscales (L-Part, L-Peer, A-Neg and A-Pos) have high internal consistency (alpha = .88; alpha = .87, alpha = .81 and alpha = .80 respectively) and exhibit a reasonable level of construct validity (Marcoen &

Goossens, 1992).

Again, the instrument was given in its entirety. The four subscales were analyzed for this study. The Loneliness-Peer subscale of the LLCA was analyzed in the present study to assess peer emotional and social support. The authors (Marcoen & Goossens, 1993) reported that the peer-related loneliness scale measures important dimensions of adolescents' relationships with friends. The Loneliness-Parent subscale was used to explore adolescent perceptions of family relationships and family support systems. The Alone-positive and the Alone-negative subscales were used to explore adolescents' attitudes to aloneness. It should be noted that an affinity for and an aversion to aloneness are not considered in this study as opposites, but are considered as probing independent aspects of the subjects' evaluation of being alone.

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Harter's Self-Perception Profile for Adolescents

The Harter's Self-Perception Profile for Adolescents (SPPA, Harter, 1988b) is a 45 item multidimensional questionnaire devised to tap domain-specific judgements of competency or adequacy in eight separate domains, as well as a global perception of one's worth as a person. The domains explored are Scholastic Competence, Athletic Competence, Physical Appearance, Social Acceptance, Behavioral Conduct, Job Competence, Close Friendship, Romantic Appeal, as well as Global Self-Worth. Each of the nine subscales contains five items.

Scale items are written in a structured alternative format (i.e. "some teenagers have a lot of friends but other teenagers don't have very many friends") in which respondents are asked to decide which kind of teenager

they are like and having made that decision, to indicate whether that description is sort of or really true for them. Each scale item is scored from 1 to 4, with a score of 4 reflecting high perceived competence or self-worth depending upon the subscale. Scores on all four subscales range between 5 and 20.

Details concerning the scale's development, reliability, and validity data, are presented by Harter (1988b). Harter (1988b) reported alpha coefficients ranging between .74 and .92 for the nine subscales. Factor analysis established the presence of eight distinct subscales, with the Global Self-Worth subscale differing from the eight domains but overlapping with each. The literature on the Self-Perception Profile for Children (SPPC, Harter, 1985), from which the SPPA (1988b) was developed is abundant. However the literature concerning SPPA is much more scarce, and statistical data from the SPPC cannot automatically be extrapolated to support the SPPA.

The instrument was given in its entirety. The Scholastic Competence, Athletic Competence, Physical Appearance and Behavioral Conduct subscales were analyzed to explore adolescents' perceptions of their competence or adequacy in these domains. However, the Romantic Appeal and Job Competence subscales were not explored because of the researcher's concern for their validity with this age-group.

The Close Friendship and Social Acceptance subscales were combined and analyzed in this study to assess peer emotional and social support. Harter (1988b) reported that beginning in early adolescence, the ability to make and keep close friends becomes salient. The content of the Social Acceptance domain taps the degree to which the adolescent is accepted by peers, feels popular, has a lot of friends, and feels that he/she is easy to like (Harter, 1988).

This domain would fit into the social isolation area of the Social Needs theory (Weiss, 1973). The content of the Close Friendship domain taps one's ability to make close friends they can share personal thoughts and secrets with. This domain would fit into the emotional isolation area of the Social Needs theory (Weiss, 1973). The combined score from the two subscales range between 10 and 40.

Trent, Russell, and Cooney (1994) conducted a study in Australia to investigate the conceptual issues, theoretical rationale, construct validity, psychometric properties, and empirical analysis of the Self-Perception Profile for Adolescents (Harter, 1988b). Using a factor analysis, the Social Acceptance and Close Friendships subscales seemed to merge into one factor, which the authors hypothesized could be explained by the different socialization practices in Australia and the United States. However, this finding was duplicated by Wichstrom (1995) in a more recent study conducted in Norway which also investigated psychometric properties of the Self-Perception Profile for Adolescents (Harter, 1988b). These results support the decision of the researcher to create a 'friendship score' in the present study from Harter's (1988b) Self-Perception Profile for Adolescents.

The global self-worth domain was assessed as a measure of the extent to which children like themselves, are happy with the way their life is organized and are generally happy. This score became the self-esteem score.

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Procedure

Data-gathering was conducted in the classroom during class time and took approximately 50 minutes. Students who did not agree to participate in

the study were engaged in other academic pursuits e.g. in the library. At the beginning of the session, the students who had consented to participate were thanked for agreeing to take part in the study. Interest and motivation was aroused by a discussion of how their participation would contribute to further insights into adolescent learning. Confidentiality was assured again, verbally, by the researcher. It was also made clear that this was not a test or examination, and that there were no right or wrong answers. The students were encouraged to respond in a way that reflected how they really felt inside, not in a way that they felt their friends might respond about them.

All measures were in rating scale or questionnaire format requiring individual paper and pencil responses. Administration instructions given by the authors of the different measures were followed. Student questions were dealt with before the administration of the scales within the classroom group. However, when questions arose from the students during the administration of the measures, they were dealt with individually. The students were asked to complete the student information sheet first, the RPLQ, the LLCA, and finally the SPPA. Simultaneously, while the students were responding to these assessment measures, the classroom teacher of all of the participating classroom students completed a questionnaire which explored the teacher's perceptions of each of the student's friendships and academic achievement (See Appendix E). This questionnaire also asked the teacher to indicate whether the adolescents appeared to be lacking in friends or appeared to have an adequate number of friends. A set of criteria was given to the teachers to aid in this decision (see Appendix A).

Following the administration of the pencil and paper tests, ten students were selected to participate in a friendship interview. This fifteen minute

interview was led by the researcher who was guided in the interview by preset questions (See Appendix I). Participants were randomly chosen from the students who had previously completed the questionnaires. Students indicated on their written assessment measures if they consented to participate in a friendship interview. When selected students were unavailable due to absence, another student was randomly selected.

Academic achievement was measured by obtaining the previous term's report card marks of the four academic subjects; Mathematics, Science, Social Studies and Language Arts. An academic average of the students achievement was derived from these marks. Students' grades reflect assessment more closely tied to the social context of the classroom (Wentzel, 1993). Academic achievement also included a self assessment of how the individual student felt he or she was achieving in each individual academic class, and a teacher assessment of how the teacher felt the student was achieving in his/her class. This information was obtained from the teacher and student personal information sheet (Appendix E). Present work habits of the students, as perceived by the teachers, were also obtained from the teacher's information sheet (Appendix F).

Statistical Analyses

In consideration of the number of internal correlations carried out in the statistical analyses and the small sample size, a conservative alpha level of .01 was set for the entire data analyses. The Statistical Package for Social Sciences (SPSS) was employed for all statistical analyses.

The Pearson Product Correlation Coefficient was used to compare performances on three scales: the peer subscale in the Louvain Loneliness

Scale for Children and Adolescents (Marcoen et al., 1987), the peer subscale in the Relational Provision Loneliness Questionnaire (Hayden, 1989) and the Social Acceptance and Close Friendships subscales of the Harter's Self-Perception Profile for Adolescents (Harter, 1988b). For the purpose of this present study, the scores for the Social Acceptance domain and the Close Friendship domain as found in the Harter's Self-Perception Profile for Adolescents (Harter, 1988b) were collapsed to form a 'peer friendship' score.

The next section of the study explored the relationship between the group identified by their teachers as lacking in peer relationships and the group identified as having adequate peer relationships (control group). The sample size was reduced in the calculation of certain measures as some items in the data collected were unanswered. A two-tailed chi-square test on the frequency data was used to make inferences on the relationships between the nominated students and the control group. Because of the small size of the experimental group, a non-parametric test, the Mann Whitney U, was used to compare the scores on the rating scales. Gender and grade differences on the rating scales were analyzed with a two-tailed *t* - test, and a Mann-Whitney U respectively. These decisions were made dependent upon sample sizes.

The control group was then further analyzed to create a group of students who perceived themselves as lacking in peer relationships. To qualify to be a member of this group, the students had to score in the 'lack of friendships' area on two of the three friendship scales. The cutoff points on these scales were set arbitrarily by the researcher to select adolescents who would score least favourably on these scales. They are as follows: ≥ 40 on the RPLQ; ≤ 31 on the LLCA; and ≤ 28 on the combined friendship score on the SPPA. The perceived group was then compared to the control group. A non-

parametric test, the Mann Whitney U, was chosen to analyze the data. This decision was due to the small sample sizes (Norusis, 1995).

To perform further analyses on this data, the entire sample of 88 students were divided into two groups; the group who perceived themselves as lonely and the group who did not perceive themselves as lonely. Using the above mentioned criteria, all of the teacher identified isolated students qualified for the perceived isolated group. The scores of the friendship and self-esteem measures of these two groups were compared with a *t* -test. Because all of the identified students qualified for the perceived isolated group, the scores of the identified isolated students were compared to the scores of the perceived isolated group originally found within the control group. Analysis was performed with these two groups with a Mann Whitney U because of the small sample sizes (Neave & Worthington, 1988).

The final stage of the analyses involved qualitative analyses of the friendship interviews. These interviews (Appendix I) were categorized and coded with a code sheet designed by the interviewer prior to the interviews (Appendix J). The data were coded by two other raters to ensure interrater reliability, and also to ensure the viability and distinctiveness of this coding system. Interrater reliability was established with Chronbach's alpha (Norusis,1995). Themes were drawn out of these interviews to support the statistically analyzed quantitative data.

CHAPTER FOUR

RESULTS

The present study investigated students who were identified by their teachers as lacking in peer relationships, students who perceived themselves as lacking in peer relationships, and students who self-identified having adequate friendships in concordance with the identification by their teachers.

Eighty-eight students participated in the study, Sixteen of these students were identified by their teachers as lacking in friendships. Eight more students in the control group rated themselves as socially isolated. The results of this study indicated 24 of the 88 (27%) adolescents who participated in this study feel alienated.

Characteristics of Peer Relationships

Teachers provided demographic information on the quality of students' friendships. Differences between the control group and the group of students who teachers identified as socially isolated were analyzed by a chi-square test. The analyses of this data are presented in Tables 4, 5 and 6. In all chi-square analyses, when cell sizes of less than 5 are recorded, statistical significances were not indicated. Trends were noted in the data.

Table 4: Teacher Identified Characteristics of Peer Relationships (Chi-Square)

	identified		control		χ^2	df	p
	n	%	n	%			
1. <u>Quality of friendships</u>							
shallow	10	90.0	7	10.1			
good	1	9.1	62	89.9	37.0	1	.00 ***
2. <u>Best friends</u>							
0	4	25.0	5	7.0			
1 or more	7	43.8	64	90.1			
Not sure	5	31.3	2	2.8	20.63	2	.00 ***
3. <u>Interaction with friends</u>							
above average	-	-	16	22.2			
average	9	56.3	53	73.6			
below average	7	43.8	3	4.2	22.17	2	.00 ***

$p \leq .001$ ***

Trends were found between the identified and control groups on quality of friendships, number of best friends and interactions with friends. In all cases the teachers rated the isolated students as having poorer quality of friendships and fewer friendships. The teacher-nominated isolated students then, appear, according to their teachers to exhibit poor social skills, shallow friendships, few if any best friends, and inadequate interaction skills with other students.

Table 5 and Table 6 present gender and grade differences on this data respectively.

Table 5: Gender Differences for Teacher Identified Characteristics:
(Chi- Square)

	male		female		χ^2	df	p
	n	%	n	%			
1. <u>Quality of friendships</u>							
shallow	29	74.4	34	82.9			
good	10	25.6	7	17.1	.88	1	.35
2. <u>Number of best friends</u>							
0	6	14.3	3	6.7			
1 or more	32	76.2	39	86.7			
Not sure	4	9.5	3	6.7	1.73	2	.42
3. <u>Interaction with friends</u>							
above average	3	7.0	13	28.9			
average	36	83.7	26	57.8			
below average	4	9.3	6	13.3	8.22	2	.02 *

$p \leq .05$ *

As noted in Table 5, no significant gender differences are indicated on quality of friendships, number of best friends and interactions with friends.

Table 6: Grade Differences for Teacher Identified Characteristics
(Chi-Square)

	7 <i>n</i>	%	8 <i>n</i>	%	9 <i>n</i>	%	χ^2	<i>df</i>	<i>p</i>
1. <u>Quality of friendships</u>									
shallow	12	60.0	28	87.5	23	82.1			
good	8	40.0	4	12.5	5	17.9	5.86	2	.35
2. <u>Number of best friends</u>									
0	2	9.5	3	8.3	4	13.3			
1 or more	19	90.5	30	83.3	22	73.3			
Not sure	-	-	3	8.3	4	13.3	3.62	4	.46
3. <u>Interaction with friends</u>									
above average	2	9.5	6	16.2	8	26.7			
average	12	57.1	30	81.1	20	66.7			
below average	7	33.3	1	2.7	2	6.7	15.26	4	.00 **

$p \leq .01$ **

No differences by grade level are indicated with the quality of the friendships or the number of best friends. One trend is noteworthy between grades and interactions with friends. More grade nine students were perceived by their teachers as having more advanced social interaction skills with their friends.

Students supplied information on the activities they were involved in at school and in their leisure time. This information was analyzed using a chi-square test, and is presented in Tables 7, 8 and 9.

Table 7: Student Identified Characteristics of Peer Relationships (Chi-Square)

	identified		control		χ^2	df	p
	n	%	n	%			
1. <u>Activities involved in at school</u>							
0	10	62.5	35	50.7			
1 or more	6	37.5	34	49.3	.73	1	.40
2. <u>Activities involved in after school</u>							
0	9	56.3	26	37.7			
1 or more	7	43.8	43	62.3	1.85	1	.17
3. <u>Leisure time</u>							
group activities	5	31.3	46	66.7			
individual activities	11	68.8	22	31.9			
does not specify		-	1	1.4	7.49	2	.02 *

$p \leq .05$ *

Table 7 presents student supplied information which compares the students who teachers have identified as lacking in friendships with the control group. No trends are observed in the number of activities the students were involved in at school or after school, or in the manner in which the students spend their leisure time.

Table 8 and Table 9 present gender and grade differences respectively with student identified characteristics of peer relationships.

Table 8: Gender Differences of Student-Identified Peer Relationships
(Chi-Square)

	male		female		χ^2	df	p
	n	%	n	%			
1. <u>Activities involved in at school</u>							
0	25	59.5	20	46.5			
1 or more	17	40.5	23	53.5	1.44	1	.23
2. <u>Activities involved in after school</u>							
0	18	42.9	17	39.5			
1 or more	24	57.1	26	60.5	.10	1	.76
3. <u>Leisure time</u>							
group activities	19	45.2	32	74.4			
individual activities	23	54.8	10	23.3			
does not specify	-	-	1	2.3	4.12	5	.01 **

$p \leq .01$ **

As observed in Table 8, one trend is apparent. Females appear to prefer to spend more of their leisure time in group activities, instead of in individual activities. No trends were noted in the number of activities either gender were involved in at school or after school.

Table 9: Grade differences of Student-Identified Peer Relationships
(Chi-square)

	7 <i>n</i>	%	8 <i>n</i>	%	9 <i>n</i>	%	χ^2	<i>df</i>	<i>p</i>
1. <u>Activities involved in at school</u>									
0	12	60.0	20	57.1	13	43.3			
1 or more	8	40.0	15	42.9	17	56.7	1.76	2	.41
2. <u>Activities involved in after school</u>									
0	11	55.0	15	42.9	9	30.0			
1 or more	9	45.0	20	57.1	20	70.0	3.17	2	.21
3. <u>Leisure time</u>									
group activities	9	45.0	23	65.7	19	63.3			
indiv activities	10	50.0	12	34.3	11	36.7			
does not specify	1	5.0	-	-	-		5.11	4	.28

Abbreviations in column titles: indiv - individual;

No differences among grades were noted. Students in all grades studied appear to spend their extracurricular and leisure time in similar fashion.

Academic Achievement

Hypothesis One in this study indicated a possible relationship between socially isolated students and academic achievement. However, results in this study generally did not support this hypothesis. Tables 10 - 12 present teachers' perceptions of students' academic achievement.

Table 10: Teachers' Perceptions of Academic Achievement (Chi-Square)

	identified		control		χ^2	df	p
	n	%	n	%			
<u>1. Academic Achievement</u>							
above average	5	31.3	24	33.3			
average	6	37.5	22	30.6			
below average	5	31.3	25	34.7			
indifferent	-	-	1	1.4	.48	3	.92
<u>2. Work Habits</u>							
above average	4	25.0	17	23.6			
average	6	37.5	31	43.1			
below average	6	37.5	22	30.6			
indifferent	-	-	2	2.8	.75	3	.86

The teachers indicated no differences between the work habits and the academic achievement of the two compared groups; the socially isolated group and the control group.

Table 11 and Table 12 presents the gender and grade differences respectively on teachers' perceptions of academic achievement. Again, no differences were noted with this data.

Table 11: Gender Differences of Teachers' Perceptions of Academic Achievement (Chi-Square)

	male		female		χ^2	df	p
	n	%	n	%			
1. <u>Academic Achievement</u>							
above average	12	27.9	17	37.8	.99	2	.61
average	15	34.9	13	28.9			
below average	16	37.2	15	33.3			
2. <u>Work Habits</u>							
above average	8	18.6	13	28.9	3.17	3	.37
average	19	44.2	18	40.0			
below average	14	32.6	14	31.1			
indifferent	2	4.7	-	-			

Table 12: Grade Differences of Teachers' Perceptions of Academic Achievement (Chi-Square)

	7		8		9		² X	df	p
	n	%	n	%	n	%			
1. <u>Academic Achievement</u>									
above average	7	33.3	11	29.7	11	36.7			
average	9	42.9	16	43.2	3	10.0			
below average	5	23.8	10	27.0	16	53.3	11.33	4	.02 *
2. <u>Work Habits</u>									
above average	5	23.8	8	21.6	8	26.7			
average	10	47.6	20	54.1	7	26.7			
below average	5	23.8	8	21.6	15	50.0			
indifferent	1	4.8	1	2.7	-	-	10.13	6	.12

$p \leq .05$ *

Tables 13 to 15 present students' perceptions of academic achievement.

Table 13: Students' Perceptions of Academic Achievement (Chi-Square)

	identified		control		χ^2	df	p
	n	%	n	%			
1. <u>Perception of difficulties at school</u>							
no	7	43.8	32	45.1			
yes	9	56.3	39	54.9	.01	1	.92
2. <u>Received extra remedial help</u>							
no	9	56.3	57	79.2			
yes	7	43.8	15	20.8	3.67	1	.06

The results as presented on Table 13 indicate the students who were identified as lacking in peer relationships do not perceive themselves as having more difficulties than the control students, or do not appear to have received more support or help within the school setting.

Table 14 and Table 15 presents the gender and grade differences on this data, respectively. Males and females perceive their academic difficulties and remedial support received similarly, as do students in grades 7, 8, and 9.

Table 14: Gender Differences of Students' Perceptions of Academic Achievement (Chi-Square)

	male		female		χ^2	df	p
	n	%	n	%			
<u>12. Perception of difficulties at school</u>							
no	19	45.2	20	44.4	.01	1	.94
yes	23	54.8	25	55.6			
<u>13. Received extra remedial help</u>							
no	33	76.7	33	73.3	.14	1	.71
yes	10	23.3	12	26.7			

Table 15: Grade Differences of Students' Perceptions of Academic Achievement (Chi-Square)

	7		8		9		² X	df	p
	n	%	n	%	n	%			
<u>11. Perception of difficulties at school</u>									
no	11	52.4	16	44.4	12	40.0			
yes	10	47.6	20	55.6	18	60.0	.77	2	.68
<u>12. Received extra remedial help</u>									
no	18	85.7	28	75.7	20	66.7			
yes	3	14.3	9	24.3	10	33.3	2.41	2	.30

To further explore academic achievement, students' last term academic averages were calculated using the four academic subjects; Social Studies, Mathematics, Language Arts and Science. Table 16 presents comparisons of the academic averages.

Table 16: Comparison of Academic Averages

	identified <i>n</i>	isolated Mean Rank	<i>n</i>	control Mean Rank	<i>U</i>	<i>p</i>	
Academic Average (Mann Whitney U)	16	38.16	72	45.91	610.5	.27	
	perceived <i>n</i>	isolated Mean Rank	<i>n</i>	control Mean Rank	<i>U</i>	<i>p</i>	
Academic Average (Mann Whitney U)	8	34.69	64	36.73	241.5	.79	
	identified <i>n</i>	isolated Mean Rank	perceived <i>n</i>	isolated Mean Rank	<i>U</i>	<i>p</i>	
Academic Average (Mann Whitney U)	16	11.94	8	13.63	55.0	.61	
	identified/ isolated <i>n</i>	perceived <i>M</i>	control <i>n</i>	<i>M</i>	<i>t</i>	<i>df</i>	<i>p</i>
Academic Average (<i>t</i> - test)	24	61.83	64	66.27	-1.23	86	.22

Data presented in Table 16 compares between academic averages of the students identified by their teachers as lacking in friendships with the control group; ($U = 610.5$; $p \geq .01$); the students who were identified by their teachers as lacking in friendships with the students from the control group who identified themselves as lacking in friendships; ($U = 241.5$; $p \geq .01$); the academic averages of the students identified by their teachers as lacking friendships with the students from the control group who identified themselves as lacking in friendships; ($U = 55.0$; $p \geq .01$); and the entire group of students from the whole sample who identify themselves as lacking in friendships with the remaining control group; $t(86) = -1.23$; $p \geq .01$ and Different statistical analyses were used in this table because of the varying sample sizes. No significant differences were noted. Again, no support was shown for Hypothesis One which indicated a relationship between academic achievement and students lacking in peer relationships. No significant differences were also noted with respect to gender; $t(86) = -1.47$; $p \geq .01$ and grade; $F(2,85) = 1.43$, $p \geq .01$ when comparing between academic averages of students identified by their teachers as lacking in friendships and the control group.

The academic averages of the students who were identified by their teachers as lacking in peer relationships and the students in the control group were categorized and then analyzed by a chi-square test. The results are presented in Table 17.

Table 17: Comparison of Categorized Academic Averages (Chi-Square)

	identified		control		χ^2	df	p
	n	%	n	%			
less than 50%	7	43.8	7	9.7			
50 - 59 %	-	-	17	23.6			
60 - 69%	3	18.8	18	25.0			
70 - 79%	3	18.8	14	19.4			
80 - 99%	3	18.8	16	22.2	13.6	4	.01 **

$p \leq .01$ **

Due to the small cell sizes presented in Table 17, only trends can be noted. One noteworthy trend is a much higher percentage of the students identified as lacking in peer relationships have failing grades as compared to the control group.

Friendship and Self-Esteem Measures

Performance on three rating scales were measured: the Louvain Loneliness Scale for Children and Adolescents (Marcoen et al., 1987), the Relational Provision Loneliness Questionnaire (Hayden, 1989) and the Harter's Self-Perception Profile for Adolescents (Harter, 1988b).

Relationship among LLCA, RPLQ and SPPA

Pearson Product Moment Correlations (two-tailed significance) were computed to verify the psychometric strength of each of three friendship

scales: the peer subscale of the Louvain Loneliness Scale for Children and Adolescents (LLCA; Marcoen, Goossens and Caes, 1987), the peer subscale of the Relational Provision Loneliness Questionnaire for Adolescents (RPLQ; Hayden, 1989), and the combined friendship subscales of the Harter's Self-Perception Profile for Adolescents (SPPA; Harter, 1988b).

Table 18 presents the correlations for the three scales. Significant negative correlations were found between the RPLQ (peer) and LLCA (peer), ($r = -.48, p \leq .01$), and the RPLQ (peer) and SPPA (friendship), ($r = -.55, p \leq .01$). A significant positive correlation was found between the LLCA (peer) and SPPA (friendship), ($r = .60, p \leq .01$).

A negative correlation is observed with the RPLQ scores as a higher score on the RPLQ indicate more loneliness, whereas lower scores on the LLCA and the SPPA indicate more loneliness.

Table 18: Correlation Matrix for Three Friendship Scales (Two-Tailed Significance)

	RPLQ (Peer) <i>n</i> = 87		LLCA (Peer) <i>n</i> = 84		SPPA (friendship) <i>n</i> = 79	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
RPLQ (peer) <i>n</i> = 87	1.0	-	-.48	.00 ***	-.55	.00 ***
LLCA (Peer) <i>n</i> = 84	-.48	.00 ***	1.0	-	.60	.00 ***
SPPA (friendship) <i>n</i> = 79	-.55	.000 ***	.60	.00 ***	1.0	-

$p \leq .001$ ***

Students Identified as Lacking in Peer Relationships

Scores on the three rating scales were compared between the students identified as socially isolated and the control group, using a non-parametric test, the Mann Whitney U. The results are presented in Table 19.

Table 19: Comparison of Rating Scales (Mann Whitney U)

	isolated		control		U	p
	n	Mean Rank	n	Mean Rank		
RPLQ peer score	16	59.41	71	40.53	321.5	.01 **
RPLQ peer gp integration	16	58.19	71	40.80	341.0	.01 **
RPLQ peer pers intimacy	16	56.34	71	41.22	370.5	.03 *
RPLQ family score	16	49.22	69	41.56	452.5	.26
RPLQ family gp integration	16	52.28	69	40.85	403.5	.10
RPLQ family pers intimacy	16	44.34	69	42.69	530.5	.81
LLCA peer	15	34.47	69	44.25	397.0	.16
LLCA parent	15	45.73	69	41.80	469.0	.57
LLCA alone-negative	15	57.27	69	39.29	296.0	.01 **
LLCA alone-positive	15	40.23	69	42.99	483.5	.69
Harter's scholastic	14	36.75	64	40.10	409.5	.61
Harter's athletic	14	37.64	64	39.91	422.0	.73
Harter's physical appearance	14	33.0	65	41.51	357.0	.20
Harter's social acceptance	14	28.46	65	42.48	293.5	.04 *
Harter's close friendships	14	26.18	65	42.98	261.5	.01 **
Harter's self-worth	14	28.71	64	41.86	297.0	.05 *
Harter's behavioral conduct	14	44.07	65	39.12	398.0	.46
Harter's social acceptance and close friendships	14	25.07	65	43.22	246.0	.01 **

$p \leq .05$ *

$p \leq .01$ **

Abbreviations in column titles: gp - group; pers - personal;

Overall, rating scales' scores of the students who were identified by their teachers as lacking in friendships concurred with their teacher identifications. Significant differences were found on the RPLQ peer score; ($U = 321.5; p \leq .01$) and the RPLQ peer group integration score; ($U = 341.0; p \leq .01$). Significant differences were also found on the LLCA alone-negative score; ($U = 296.0; p \leq .01$); Harter's close friendship score; ($U = 261.5; p \leq .01$); and Harter's social acceptance and close friendships score; ($U = 246.0; p \leq .01$). No significant differences were noted with the family subscales, and the Harter competency subscales, other than the friendship subscales. Hypothesis Two which predicted a relationship between lack of friendships and self-worth showed no significance; ($U = 297.0; p \geq .01$).

Gender differences were explored on the rating scales, as presented in Table 20.

Table 20: Gender Differences: *t* - test on Rating Scales

	male		female		<i>t</i>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>			
RPLQ peer score	42	31.33	45	26.64	1.98	85	.05 *
RPLQ peer gp integration	42	16.33	45	15.71	.51	85	.61
RPLQ peer pers intimacy	42	15.00	45	12.29	.34	85	.18
RPLQ family score	41	35.20	44	32.48	.78	73.35	.44
RPLQ family gp integration	41	17.78	44	16.80	.56	74.20	.58
RPLQ family pers intimacy	41	17.61	44	15.68	1.05	83	.30
LLCA peer	40	35.90	44	38.39	-1.53	82	.13
LLCA parent	40	24.45	44	23.64	.43	75.78	.67
LLCA alone-negative	40	30.83	44	30.59	.19	82	.85
LLCA alone-positive	40	31.23	44	28.68	1.88	82	.06
Harter's scholastic	36	13.78	42	14.10	-.40	76	.69
Harter's athletic	36	15.08	42	12.95	.56	76	.01 **
Harter's phys appearance	36	14.36	43	11.58	.82	66.89	.00 ***
Harter's social acceptance	36	14.31	43	15.07	-1.03	77	.31
Harter's close friendships	36	15.14	43	16.84	-2.20	64.17	.03 *
Harter's self-worth	36	15.67	42	14.86	.40	76	.16
Harter's behavioral conduct	36	13.19	43	13.28	-.16	62.65	.88
Harter's social acceptance and close friendships	36	14.72	43	15.95	-1.91	77	.06

$p \leq .05$ *

$p \leq .01$ **

$p \leq .001$ ***

Abbreviations in column titles: gp - group; pers - personal;

An inspection of the data presented in Table 20 indicates few gender differences. Significant differences were noted with Harter's physical appearance; $t(66.89) = 3.82; p \leq .01$. A significantly higher mean score is indicated for males ($M = 14.36$) as compared to females ($M = 11.58$). Another significant difference was noted with Harter's athletic score; $t(76) = 2.56; p \leq .01$. Again, males had a significantly higher mean score ($M = 15.08$) when compared to females ($M = 12.95$).

Grade differences were also explored with all subjects on the rating scales. These results are presented in Table 21 and Table 22. Table 21 presents means and standard deviations for the rating scale scores. Table 22 presents one way analysis of variance summaries. A one way analysis of variance was performed on the dependent variable, the rating scales' scores. The independent variable was grades, with three grade levels indicated; 7, 8 and 9.

Table 21: Means and Standard Deviations for Rating Scales of Grades 7, 8 and 9

Source	Grade 7			Grade 8			Grade 9		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
RPLQ peer score	21	32.1	13.38	36	26.0	9.45	30	30.1	11.06
RPLQ peer gp integration	21	17.95	6.63	36	14.58	4.87	30	16.37	5.41
RPLQ peer pers intimacy	21	14.19	7.83	36	13.06	11.76	30	13.83	7.36
RPLQ family score	19	35.05	15.36	36	29.61	13.34	30	38.0	18.04
RPLQ fam gp integration	19	18.11	7.74	36	15.22	7.03	30	19.2	8.81
RPLQ fam pers intimacy	19	16.95	8.36	36	14.58	7.10	30	18.83	9.67
LLCA peer	19	36.21	6.95	36	38.83	6.69	29	35.83	8.54
LLCA parent	19	24.89	8.95	36	21.81	7.71	29	26.21	9.06
LLCA alone-negative	19	32.11	6.39	36	31.00	5.89	29	29.41	4.56
LLCA alone-positive	19	28.74	6.03	36	30.36	5.77	29	30.07	7.14
Harter's scholastic	18	12.39	3.43	36	14.72	3.27	24	13.96	3.46
Harter's athletic	18	13.89	2.56	36	14.50	4.35	24	13.13	3.66
Harter's phys appearance	18	11.72	2.61	36	14.20	3.55	25	11.72	3.18
Harter's social acceptance	18	13.78	3.12	36	15.36	3.61	25	14.48	2.80
Harter's close friendships	18	14.67	3.48	36	16.83	2.73	25	15.96	4.01
Harter's self-worth	18	14.56	2.79	36	15.78	2.55	24	14.92	2.28
Harter's behav conduct	18	13.44	1.82	36	13.5	2.52	25	12.72	2.23
Harter's social acceptance and close friendships	18	14.22	2.79	36	16.10	2.74	25	15.22	3.01

Abbreviations in column titles: gp - group; pers - personal; fam - family; behav - behavioral

Table 22: Analysis of Variance Summaries for Grades

Source	<i>F</i>	<i>df</i>	<i>p</i>
RPLQ peer score	2.32	2,84	.11
RPLQ peer group integration	2.57	2,84	.08
RPLQ peer personal intimacy	.11	2,84	.90
RPLQ family score	2.45	2,82	.09
RPLQ family group integration	2.24	2,82	.11
RPLQ family personal intimacy	2.13	2,82	.13
LLCA peer	1.53	2,81	.22
LLCA parent	2.30	2,81	.11
LLCA alone-negative	1.42	2,81	.25
LLCA alone-positive	.43	2,81	.65
Harter's scholastic	2.89	2,75	.06
Harter's athletic	.95	2,75	.39
Harter's physical appearance	5.69	2,76	.01 **
Harter's social acceptance	1.51	2,76	.23
Harter's close friendships	2.53	2,76	.09
Harter's self-worth	1.67	2,75	.20
Harter's behavioral conduct	.9485	2,76	.39
Harter's social acceptance and close friendships	2.69	2,76	.07

$p \leq .01$ **

Of the dependent variables only Harter's physical appearance $F(2,76) = 5.69, p \leq .01$ was affected by grades. A significantly higher Harter's physical appearance score for grade 8's is shown as indicated by the means;

Sheffe's post hoc test indicates a significant difference between Grade 7 and Grade 8 as well as for Grade 8 and Grade 9.

Students who Perceive Themselves as Lacking in Peer Relationships

Eight students within the control group identified themselves as lacking in peer relationships. As previously described, in order to qualify for this group, the students had to score in the 'lack of friendships' area on at least two of the three friendship scales. The cutoff scores on these scales were set conservatively as follows: ≥ 40 on the peer subscale of the RPLQ, ≤ 31 on the peer subscale of the LLCA, and ≤ 28 on the friendship combined subscales of the SPPA. This self-identified group of students was compared to the remaining members of the control group using the Mann-Whitney U. The results are presented on Table 23.

Table 23: Comparison of Rating Scales Within the Control Group
(Mann-Whitney U)

	perceived		control		<i>U</i>	<i>p</i>	
	<i>n</i>	Mean Rank	<i>n</i>	Mean Rank			
RPLQ peer score	8	63.31	63	32.53	33.5	.00	***
RPLQ peer grp integration	8	61.44	63	32.77	48.5	.00	***
RPLQ peer pers intimacy	8	61.00	63	32.83	52.0	.00	***
RPLQ family score	8	35.88	61	34.89	237.0	.90	
RPLQ fam gp integration	8	34.69	61	35.04	241.5	.96	
RPLQ fam pers intimacy	8	39.81	61	34.37	205.5	.47	
LLCA peer	8	5.50	61	38.87	8.0	.00	***
LLCA parent	8	37.75	61	34.64	222.0	.68	
LLCA alone-negative	8	32.56	61	35.32	224.5	.71	
LLCA alone-positive	8	29.50	61	35.72	200.0	.41	
Harter's scholastic	8	27.31	56	33.24	182.5	.40	
Harter's athletic	8	21.06	56	34.13	132.5	.06	
Harter's phys appearance	8	28.63	57	33.61	193.0	.48	
Harter's social acceptance	8	8.50	57	36.44	32.0	.00	***
Harter's close friendships	8	6.38	57	36.74	15.0	.00	***
Harter's self-worth	8	23.19	56	33.83	149.5	.13	
Harter's behav conduct	8	27.25	57	33.81	182.5	.35	
Harter's social acceptance and close friendships	8	5.56	57	36.85	8.5	.00	***

$p \leq .001$ ***

Abbreviations in column titles: gp - group; pers - personal; phys - physical; behav - behavioral; fam - family;

An examination of the data indicates the students who perceived themselves as lacking in friendships scored poorly on the friendship measures. Significant differences were noted with all of the friendship scores: RPLQ peer score; ($U = 33.5$; $p \leq .01$); RPLQ peer group integration score, ($U = 48.5$; $p \leq .01$); RPLQ personal intimacy score ($U = 52.0$; $p \leq .01$); LLCA peer score; ($U = 8.0$; $p \leq .01$); Harter's social acceptance score ($U = 32.0$; $p \leq .01$); Harter's close friendship score ($U = 15.0$; $p \leq .01$); and Harter's social acceptance and close friendships score ($U = 8.5$; $p \leq .01$). No other significant differences were noted. No support was shown for Hypothesis Two that predicted a relationship between students lacking in peer relationships and self-esteem ($U = 149.5$; $p \geq .01$).

The entire sample of students, the students who were identified by their teachers as lacking in peer relationships and the control group were analyzed to investigate self-perceptions of social isolation. It is interesting to note that all of the teacher identified students also perceived themselves as isolated, which gave a sample size (n) of 24 students who perceived themselves as lacking in peer relationships.

Table 24: Comparison of Rating Scales of all Self- Identified Students Lacking in Peer Relationships (*t* -tests) (two-tailed significance)

	total perceived		control		<i>t</i>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>			
RPLQ peer score	24	38.83	63	25.13	5.02	30.64	.00 ***
RPLQ peer gp integration	24	20.25	63	14.40	4.89	85	.00 ***
RPLQ peer pers intimacy	24	18.63	63	11.68	3.23	85	.00 ***
RPLQ family score	24	36.29	61	32.80	.91	83	.36
RPLQ fam gp integration	24	18.92	61	16.62	1.20	83	.23
RPLQ fam pers intimacy	24	17.67	61	16.20	.72	83	.48
LLCA peer	23	30.96	61	39.56	-4.44	28.67	.00 ***
LLCA parent	23	25.39	61	23.51	.89	82	.37
LLCA alone-negative	23	32.30	61	30.10	1.62	82	.11
LLCA alone-positive	23	29.04	61	30.21	-.69	33.30	.45
Harter's scholastic	22	13.14	56	14.27	-1.31	76	.19
Harter's athletic	22	12.73	56	14.41	-1.79	76	.08
Harter's phys appearance	22	11.73	57	13.28	-1.83	77	.07
Harter's social acceptance	22	12.09	57	15.74	-5.07	77	.00 ***
Harter's close friendships	22	12.86	57	17.30	-5.66	31.14	.00 ***
Harter's self-worth	22	14.05	56	15.70	-2.67	76	.01 **
Harter's behav conduct	22	13.27	57	13.23	.08	77	.94
Harter's social acceptance and close friendships	22	12.48	57	16.52	-7.11	77	.00 ***

$p \leq .01$ **

$p \leq .001$ ***

Abbreviations in column titles: fam - family; gp - group; pers - personal; phys - physical; behav - behavioral

An examination of the scores from the rating scales indicates support for the hypotheses of the present study that students who lack peer relationships also exhibit a low level of self-esteem. Significant differences were noted with all of the friendship scores:

RPLQ peer score; $t(30.64) = 5.02; p \leq .01$;

RPLQ peer group integration score; $t(85) = 4.89; p \leq .01$;

RPLQ peer personal intimacy score; $t(85) = 3.23; p \leq .01$;

LLCA peer score; $t(28.67) = -4.44; p \leq .01$;

Harter's social acceptance score; $t(77) = -5.07; p \leq .01$;

Harter's close friendships score; $t(31.14) = -5.66; p \leq .01$; and the combined

Harter's social acceptance and close friendships score; $t(77) = .08; p \leq .01$.

Harter's self worth score also indicates a significant difference;

$t(76) = -2.67; p \leq .01$. This finding supports Hypothesis Two of this present study which predicted a relationship between students lacking in peer relationships and self-worth.

To investigate whether there were any significant differences between the perceived socially isolated students and the identified socially isolated students, a Mann Whitney U was conducted on the assessment scores.

Table 25: Comparison of Rating Scales Between the two Groups of Self-Identified Students (Mann Whitney U)

	identified		perceived			
	<i>n</i>	Mean Rank	<i>n</i>	Mean Rank	<i>U</i>	<i>p</i>
RPLQ peer score	16	10.78	8	15.94	36.5	.09
RPLQ peer gp integration	16	11.25	8	15.00	44.0	.23
RPLQ peer pers intimacy	16	10.81	8	15.88	37.0	.11
RPLQ family score	16	13.09	8	11.31	54.5	.57
RPLQ fam gp integration	16	13.72	8	10.06	44.5	.24
RPLQ fam pers intimacy	16	12.13	8	13.25	58.0	.74
LLCA peer	15	15.33	8	5.75	10.0	.00 ***
LLCA parent	15	11.97	8	12.06	59.5	.97
LLCA alone-negative	15	13.87	8	8.50	32.0	.08
LLCA alone-positive	15	11.97	8	12.06	50.5	.97
Harter's scholastic	14	12.11	8	10.44	47.5	.57
Harter's athletic	14	13.00	8	8.88	35.0	.17
Harter's phys appearance	14	11.36	8	11.75	54.0	.92
Harter's social acceptance	14	13.21	8	8.50	32.0	.11
Harter's close friendships	14	14.25	8	6.69	17.5	.01 **
Harter's self-worth	14	11.61	8	11.31	54.5	.92
Harter's behav conduct	14	12.82	8	9.19	37.5	.21
Harter's social acceptance and close friendships	14	14.96	8	5.44	7.5	.00 **

$p \leq .01$ **

$p \leq .001$ ***

Abbreviations in column titles: gp - group; pers - personal; phys - physical; behav - behavioral

An inspection of the data on Table 25 indicates fairly similar characteristics of the two groups. However, noteworthy significant differences include LLCA peer score; ($U = 10.0$; $p \leq .01$); Harter's close friendship score ($U = 17.5$; $p \leq .01$); and Harter's social acceptance and close friendships score ($U = 7.5$; $p \leq .01$). The students from the control group who perceived themselves as lacking in friendships indicate a higher perception of alienation than the students who were identified by their teachers as lacking in peer relationships.

Friendship Interviews

Friendship interviews were conducted with ten students (see Appendix I for interview questions). Four of the students were female, whereas six students were male. Four students were in grade seven, four students were in grade eight, and two students were in grade nine. Seven of these ten students felt they had adequate friendships. Two students were not identified by their teachers as lacking in friendships, but indicated they perceived themselves as lacking in friendships. One student was identified as lacking in friendships by the teacher.

Nine of the ten students felt it was important to have friends, with the tenth student stating "it doesn't matter to me". This ambivalent response was from the student who had been identified as lacking in friendships.

The questions and coding of these interviews were designed to collect multiple data on the same themes (See Appendices I and J). These responses have been coded as frequency data, and are presented in Tables 26 and 27.

Generally, most of the students' responses indicated that friends are important primarily because they are 'there to help you out' (see Table 26).

Interrater agreement for these responses was .96.

Loneliness data is also presented in Table 26. Themes that emerged on loneliness were adolescents feel more lonely in the absence of a close friend. Interrater agreement on this response was .99. A comment that typified this theme is "you don't have anybody to talk to .. You feel like you're totally alone in the world". This lonely feeling appeared in the interviews to be more situational than pervasive. Interrater agreement was .93.

Table 26: Friendship Interview Data

Situation	Frequency
1. Friends help you out	14
2. You help friends out	1
1. Loneliness is a close friend	10
2. Loneliness is part of a group	3
1. Loneliness is situational	7
2. Loneliness is ongoing	0

Characteristics of adolescent friendships which were explored during the interviews (See Appendix I) are presented on Table 27. The characteristics of friendship that emerged which appeared important in strong adolescent friendships were support and loyalty ("someone who will be your best friend for your whole life and not let you down"), trust ("keeping secrets") and a good listener ("someone who will listen to me"). Being respectful, sharing and having a sense of humour were rated very infrequently as important characteristics of adolescent friendship. Interrater agreement for the

frequencies of the characteristics was .96.

Table 27: Friendship Characteristics

Characteristics	Frequencies
1. Trust	10
2. Honesty	3
3. Good Listener	15
4. Loyal, Supportive	17
5. Sense of Humour	1
6. Likes to do different activities	7
7. Sharing	1
8. Respectful	1

Summary

The major objective of this research was to explore adolescent friendships. As this was an exploratory study, the results have to be interpreted with caution. The present study investigated the relationship among adolescent friendships, academic achievement and self-esteem. The results indicated that many junior high students in this study (27%) feel lonely and alienated. However, these students do not enjoy spending time alone. Some support is shown for the hypothesis that students lacking in peer relationships have poor self-esteem. There was no support for the hypothesis that students lacking in peer relationships have poor academic achievement.

An exploration of adolescent friendships revealed adolescents in this

study felt it was important to have friends. Trustworthiness, loyalty, and being a good listener were considered important characteristics of a close friend. Some gender and grade differences were observed. Grade nine students were considered by their teachers as interacting with their peers more proficiently than students in grade seven or eight. Females appear to enjoy more group activities with their friends than males do. Males feel more competent in athletic ability and physical appearance than females do.

The results from this study suggest that the quality and quantity of peer relationships are important in developing a sense of self and perceived efficacy. Even among populations of average or high-achieving students, and popular students, there are many adolescents who lack friends.

CHAPTER FIVE

DISCUSSION

"What does loneliness mean to you....."

"You don't feel like there's anybody to talk to... You feel like you're totally alone in the world.... You try to pretend that you're someone you're not....You have to put on an act."

14 years, Grade 9

This response was from a girl in the present study who was deemed popular by her teachers, but who perceived she had no significant friendships. Bronfenbrenner (1986) suggested adolescents in junior high school are especially vulnerable to feelings of alienation. Misjuscovic (1985) hypothesized most adolescents feel lonely. Twenty-seven percent of the participants in this study indicated they lacked peer relationships.

Characteristics of Peer Relationships

Results of the present study reveal that all of the students identified by their teachers as lacking in peer relationships also perceived themselves the same way. The teachers described this alienated group of students as exhibiting below average social skills within their friendship groups. The students verified this observation by indicating that they spend most of their leisure time alone. Although most of the research reviewed employed peer nominations to identify isolated students (Cassidy & Asher, 1989), teacher nominations were used in the present study. This was to ensure confidentiality and, also, to ensure that any fragile levels of self-esteem were kept intact. Coie et al. (1990) advised against using teacher nominations as

the authors predicted the classroom may not be the ideal location for studying group dynamics among adolescents. They reasoned that if a classroom is highly structured and task-oriented, much of the action in the peer group occurs elsewhere. Teachers' perspectives may then be biased by their role in maintaining order. More emphasis may subsequently be directed on a child's interactions with the teachers rather than with the child's interactions with peers. However, as indicated by the results in this study, the teacher nominations were highly accurate.

Teachers identified sixteen of the eighty-eight students who participated in this study as lacking in peer relationships. Using stringent guidelines for self-identification of social isolation based on scores from the three friendship measures, eight more students perceived themselves as lacking in friendships, although they were not identified by their teachers. Asher and his colleagues (1990) hypothesized that although unpopular children portray significantly greater loneliness than popular children, some popular children may in fact, also feel lonely. It may be assumed these eight students fit into this popular category, as they were identified by their teachers as having adequate friendships. However, in this study, these students exhibited more feelings of alienation than the students identified by their teachers as lacking in peer relationships.

Harter (Harter & Marold, 1994), while gathering information for diagnoses and treatment of adolescents have found adolescents' self-perceptions to be extremely valuable. However, difficulties often arise with self-perceptions in an assessment, for it is the adolescent's own interpretation and perception of reality. Hartup (1993) has indicated adolescents often exaggerate the number of close friends they have. Youniss

and Smollar (1985) further hypothesized the adolescents' perception of what takes place in their relationships may differ from the interactions that actually do occur. Misjuskovic (1986) hypothesizes adolescents are unwilling to confess freely to loneliness as this disclosure emphasizes their differences and separateness. Adolescents are striving to belong to a peer group and are more prone to peer conformity and peer evaluations. A speculation based on these hypotheses could predict that there are possibly even more adolescents in the study who felt lonely and alienated, but were unwilling to admit to these feelings. The results of the study indicated that the teacher-identified groups of students who lacked peer relationships felt less lonely and alienated than the non-identified group who perceived themselves as lacking in peer relationships. Another speculation based on the above hypotheses could be the identified students were somewhat unwilling to admit their differences, and consequently were hesitant to disclose freely.

Of additional interest to this study is the finding of a significant relationship between the identified isolated students and their aversion to being alone. Congruence with these results are found in Terrell-Deutsch's (1990) study, which also reported unpopular students did not enjoy spending time alone. This would indicate that socially withdrawn adolescents do not prefer to be socially isolated, or possibly, they are introverted by situation, not by choice.

Results from the present research suggest that adolescents lacking in peer relationships have low self-esteem. These findings would suggest these alienated adolescents generally are not happy with themselves, and lack a sense of security and knowledge of self (Buhrmeister, 1990). The hypothesis that adolescents with satisfying peer relationships reflect positive self-esteem

is supported in the research (Berndt & Keefe, 1993; Buhrmeister, 1990; Harter, 1989b; Hartup, 1993). Supportive interactions with friends probably supply adolescents with the feedback and reinforcement needed for generating self-esteem. Social interaction is fundamental to the formation of the self-concept because only through social interaction can an adolescent learn about him/herself (Bukowski & Hoza, 1989).

Grade level and gender differences were explored within the two groups. Congruent with Shulman's (1993) findings, results in this present revealed that females indicated they prefer to spend their leisure time in group activities. However, an unexpected finding was observed with regard to gender and quality of friendships. It was expected that females would engage in close, intimate friendships more than males, as indicated in the research (Bukowski & Kramer, 1986; Youniss & Smollar, 1985). No support was shown for this finding in the present study. One explanation is the friendships that were explored did not differentiate between same sex, opposite-sex and romantic friendships. Youniss and Smollar (1985) indicate females in early adolescence are beginning to develop more intimate friendships with males. Possibly, the females assumed the friendship assessments included only same gender relationships. Another explanation with these lack of gender differences indicated may be a limitation of the study, as the students' own interpretation of the depth of their interactions in their friendships was explored only through a limited number of interviews. Another very real possibility is males may be becoming more cognizant of the value of friendships which is resulting in developing stronger friendships at an earlier age.

Although a narrow age range was explored in this study, the results

indicated the level of intimacy appeared to deepen with the older adolescents in the present study. These results are also supported in the research (Berndt, 1982; Furman & Buhrmeister, 1992). Developmental changes in intimacy may be considered then, as a product of chronological age.

Relationship between LLCA, RPLQ and SPPO

Initial analyses were conducted to examine how the three friendship scales, the LLCA (Marcoen et al., 1987), RPLQ (Hayden, 1989) and the SPPO (Harter, 1988b) interrelate. The relationships among the peer friendship related subscales were found to be moderately correlated. For example, friendship strength as measured on the Peer-related loneliness scale on the LLCA, the Peer Group-Integration and Peer Personal-Intimacy as measured by the RPLQ, and the Close Friendships and the Social Acceptance subscales of the SPPO were strongly related. Interestingly, the highest correlations were observed with the SPPO (Harter, 1988b). These results suggests all of the friendship domains address both the intimacy and peer group integration items.

Two loneliness measures were used in the present study as the RPLQ has very little validity data on it. The researcher found only one prior study which had used this assessment measure (Terrell-Deutsch, 1991). The present study lends some support to the validity of the RPLQ.

Academic Achievement

The hypothesis for this study that indicated a relationship between the adolescents lacking in peer relationships and academic achievement is not supported in this study. One possible explanation is that students who lack

friendships, or do not focus on or prioritize peer socialization at school may prioritize academic achievement instead. Conversely, students who prioritize peer socialization, may be ambivalent towards academic achievement.

However, it was interesting to note that a higher percentage of the isolated students in this present study had failing grades. These students may feel lonely and alone, and are possibly emotionally incapable of finding or pursuing success in their lives.

Interviews

The friendship interviews explored adolescents' expectations of friends and what they think about their friendships. The findings are congruent with Youniss & Smollar's (1985) hypothesis that friendships are considered extremely valuable to adolescents. Adolescents also have high expectations for their friends. Their belief that trust, loyalty and being a good listener are important characteristics of friendship are congruent to Youniss and Smollar's (1985) findings. Youniss and Smollar (1985) studied adolescents' descriptions of their friendship interactions. Goodnow and Burns (1988) also reported adolescents almost always mention loyalty and commitment as important conditions of friendships. Consequently, disloyalty appears as a major reason for terminating a friendship.

However, the results of the present study revealed adolescents defined their perceptions of adolescent friendships as being unidirectional; a good friend is perceived as 'someone who can help you out'. An assumption could be made that adolescents perceive close friends as meeting each others' emotional needs (Youniss & Smollar, 1985).

Researchers (Berndt, 1982; Hartup, 1989; 1993; Youniss, 1980; Youniss & Smollar, 1985) hypothesize as children develop into adolescence, friendships are based primarily on cooperation and reciprocity. It may be the adolescents in the present study were young (Grades 7, 8, & 9) and consequently engage in friendship more egocentrically (Selman, 1980). Possibly the adolescents in this present study view friendship as a relationship of convenience to avoid loneliness (Youniss & Smollar, 1985). In the absence of a good friend, the responses in the interviews indicated the adolescent feels extremely alone and lonely. For the adolescents who perceive themselves as lacking in friendships, this situation is very aversive.

Limitations of the Present Research

It should be emphasized that the results of this study cannot be generalized to the adolescent population. The results are limited by sample size and location, as the participants were drawn from only one junior high school in a large urban centre. The adolescents who chose to participate in the study may not be representative of the general adolescent population. Only ten students were interviewed. This small sample size suggested some themes but does not permit generalizations. If all of the students in the sample ($N = 88$) had been interviewed, more in-depth observations and inferences could have been developed on adolescent friendships. A longitudinal study using narratives, diaries, or journal writing focusing on adolescents' personal interactions with peers could also present more useful information to infer.

It must be emphasized this present study was exploratory. Given the number of tests that were analyzed, as well as the small sample sizes, the

results should be viewed with caution. The generalizability of these findings may be limited.

A difficulty arose from the methodology. Only one class period was available to assess the students. The measures required extensive writing, and as a result some of the students were not able or were unwilling to complete all of the rating scales. Unfortunately, this difficulty limited the sample size for some of the rating scales' scores.

In assessing academic achievement, another limitation emerged. The product of academic achievement (academic averages) was used as a measure of academic success. However, it would have been enlightening to explore the effect of friendships on academic achievement. Possibly if an adolescent prioritizes and is influenced by social interactions and friendship groups, less emphasis is being placed on academic achievement. Conversely, if an adolescent does not prioritize social interactions and friendship groups, that particular student will focus more on academic achievement. The methodology in the present study explored whether friendships were important to the adolescents, but did not explore whether academic achievement was equally as important to the students as friendships, or possibly even more important.

Demographic information was collected from the students and the teachers by researcher-designed questionnaires. These measures have not been normed on a peer group, hence the reliability and the validity of these measures is unknown.

Implications for Educators

Teachers, in the present study, demonstrated expertise at identifying

students lacking in peer relationships. This accuracy in perception of students' social status can be invaluable to educators. The acquisition of social skills necessary to develop peer relationships can begin in the classroom. Social skill activities and esteem-building activities can be integrated with academic curriculum. A significant number of students were also not identified in this study who perceived themselves as lacking in peer relationships. Social skill activities built into the classroom curricula would address these students' needs.

Peers play unique roles in adolescents' socialization by providing learning opportunities and experiences that cannot be duplicated by other socializing agents such as teachers, siblings and parents (Berndt & Ladd, 1989). Educators could increase social interaction within classrooms by using teaching methods to encourage student interaction and cooperation (Damon & Phelps, 1989; Fetro & Vitello, 1988; Mesch, Lew, Johnson & Johnson, 1986; Nevin, Johnson & Johnson, 1982). Three main tools of peer learning are peer tutoring, cooperative learning, and peer collaboration. Increased peer interaction would aid adolescents in acquiring the necessary social skills needed in order to initiate and maintain positive relationships with peers outside of the classroom setting.

The results of this study indicated that some students who lack peer relationships have average academic achievement or even above average academic achievement. Emphasizing a student's success with academic achievement, could possibly raise a student's self-esteem, which could consequently or inadvertently affect the student's social behavior. A bidirectional correlation has been suggested in the research that social isolation may decrease self-worth, but reciprocally poor self-worth may lead to

social isolation.

There is indication in the literature review of this study that withdrawn adolescents are at risk for mental health problems either concurrently or later in life. However, teachers have previously appeared hesitant to recommend withdrawn adolescents for social support as they present few discipline problems in the classroom. Teachers must be educated to realize the risk these students are to themselves. When students are recommended for support, the battery of assessments used to identify at risk students must include internalizing measures. Mediation can then be provided between early identified social difficulties and subsequent maladjustment.

To be alone for an adolescent has significant negative impact on an adolescent's sense of self-worth (Jackson & Rodriguez-Tome, 1993). However, isolated adolescents are sometimes a product of society (Bronfenbrenner, 1986), which places more onus on the educators. Not only must schools take responsibility for the identification of these alienated students, but they must provide a nurturing environment for these at risk students. Brendto, Brokenleg and Van Bockern (1990)'s philosophy of 'reclaiming youth' suggests the school offers the student a sense of belonging in a supportive environment, yet promotes youth to take an active, positive role in their own education. The adolescent, consequently, develops a higher level of self-esteem.

Implications for Future Research

Adolescents vary in the number of their friendships. Having a best friend does not have the same connotations as membership in a peer group.

The friendship interviews alluded to a best friend as being more important to an adolescent than membership in a peer group. However, the results were inconclusive in that regard. More in-depth research in the significance and distinction between dyadic and group-oriented activities is warranted.

Research in the field of peer relationships in adolescence primarily explores the quality of friendships. However, more quantitative and qualitative data needs to be gleaned from students with well-developed peer relationships; what factors have led to these adolescents developing these successful friendships and what factors are crucial in maintaining these relationships.

More exploratory research needs to be undertaken with adolescent friendships. Cultural diversity and family support and interactions were not explored in this study. However, both of these factors likely have some impact on the development and attributes of friendship. More in-depth studies focussing specifically on those areas may reveal interesting, enlightening data. Another virtually unexplored area in adolescent friendships is opposite sex friendships, which begin to appear more regularly throughout adolescence.

The number of standardized friendship measures available is limited. Reciprocated friendship nomination measures are still widely used as a major assessment of peer friendships (Bukowski & Hoza, 1989). More validation is needed of the friendship measures available, and more complete friendship measures need to be developed that emphasize more positive qualitative aspects of friendships rather than a measurement of loneliness. Only when more information is available on friendships, will it be possible to design effective interventions for adolescents who lack friendships.

A major limitation in the exploration of this field, not withstanding the limited amount of adolescent literature available, is the lack of consistency in the classification of withdrawn children. Classification terms such as unpopular, rejected and passive withdrawn have been used to refer to students lacking in peer relationships. With this lack of consistency in terms, assumptions must be made, by reviewing the methodology in each independent study, that similar groups of students are being studied. Future research should use standardized terms, to ensure the adolescents and children observed and compared have the same social status.

Summary

Many students in junior high schools feel lonely and alienated. These adolescents indicated they feel the absence of a close, intimate friendship more strongly than being alienated by their peer group. Many students lacking in peer relationships also indicated a negative feeling of self-worth. Adolescents obviously place great value on friendship. Educators should be aware of the emphasis adolescents place on friendships, and also, the social adjustment difficulties or internalizing difficulties that could arise concurrently or in the future for these adolescents. Instruction in the classrooms should be modified to promote social interaction.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

Adolescent friendships contribute greatly to an adolescent's social and emotional development (Bukowski & Hoza, 1989; Parker & Gottman, 1989). One of the main objectives of this study was to increase knowledge and sensitivity in the area of adolescent friendships. Adolescents who lack friendships are at risk for social adjustment difficulties (Bukowski & Hoza, 1989), concurrently and in adulthood.

The present study explored the relationship between adolescent friendships, self esteem, and academic achievement with grade seven, eight and nine students. The exploration of adolescent friendships included interviews and demographic questionnaires which addressed the qualitative aspects of adolescent friendships such as depth of friendship, loneliness, peer interaction skills and characteristics of adolescent friendships. The Louvain Loneliness Scale for Children and Adolescents (Marcoen et al., 1987) and the Relational Provision Loneliness Questionnaire (Hayden, 1989) were administered to rate the quantity and quality of friendships. Harter's Self-Perception Profile for Adolescents (Harter, 1988) was administered as a measure of self-esteem.

A group of adolescents were identified by their teachers as lacking in peer relationships. A sub-group of adolescents who were not nominated by their teachers, but perceived themselves as lacking in friendships were also explored. Analyses of the results indicated a significant number of adolescents feel they have an inadequate number of friendships. There is a significant relationship between adolescents lacking in peer relationships and

self-esteem, however no relationship was found between adolescents lacking in peer relationships and academic achievement. Qualitative analyses further defined the perceptions about adolescent friendships as being unidirectional; a good friend is perceived as 'someone who can help you out'. Characteristics apparent in adolescent friendships included loyalty, support, trust, and good listening skills.

The relationships between the Louvain Loneliness Scale for Children and Adolescents (LLCA, Marcoen, Goossens & Caes, 1987) and the Relational Provision Loneliness Questionnaire (RPLQ, Hayden, 1989) were also examined. Results revealed considerable overlap of the peer subscales of the LLCA, RPLQ and the SPPA.

Adolescents place great significance on friendships. A need was established for educators and researchers to recognize the prevalence of adolescents who lack adequate peer relationships. Teachers should modify their instruction to encourage peer interactions in their classrooms. Friendship and social skills should be addressed directly or inadvertently in an integrated curriculum.

References

- Anderson, K. M. (1989). The usefulness of importance ratings in predicting the relationship between self-esteem and self-concept scores. Presented at the Biennial Meeting of the Society for Research in Child Development. (ERIC Document Reproduction Service No. ED 307 042).
- Andrews, J. & Conte R. (1993). Teaching social skills in school. Exceptionality Education in Canada, 3, 1-8.
- Asher, S.R. (1990). Recent advances in the study of peer rejection. In S. R. Asher & J. D. Coie (Eds.), Peer Rejection in Childhood (pp. 3-14). New York: Cambridge University Press.
- Asher, S.R. & Coie, J. D. (Eds.). (1990). Peer Rejection in Childhood. New York: Cambridge University Press.
- Asher, S.R., Hymel, S. & Renshaw, P.D. (1984). Loneliness in children. Child Development, 55, 1456-1464.
- Asher, S.R., Parkhurst, J.T., Hymel, S. & Williams, G. A. (1990). Peer rejection and loneliness in childhood. In S. R. Asher & J. D. Coie (Eds.), Peer Rejection in Childhood (pp. 253-273). New York: Cambridge University Press.
- Asher, S. R., Hymel, S. & Renshaw, P. D. (1984). Loneliness in children. Child Development, 55, 1456-1464.
- Asher, S. R. & Wheeler, V. A., (1985). Children's loneliness: A comparison of rejected and neglected peer status. Journal of Consulting and Clinical Psychology, 53 (4), 500-505.
- Berndt, T. J. (1989). Friendships in Childhood and Adolescence. In W. Damon (Ed.). Child Development Today and Tomorrow. San Francisco: Jossey-Bass Publishers.
- Berndt, T. J. (1982). The features and effects of friendship in early adolescence. Child Development, 53, 1447 - 1460.
- Berndt, T.J. & Ladd, G.W. (1989). Peer Relationships in Child Development. Toronto: John Wiley & Sons.
- Berndt, T.J. & Keefe, K. (1995). Friends' Influence on Adolescents' Adjustment to School. Child Development, 66, 1312-1329.

- Berndt, T.J. & Keefe, K. (1993). Effects of friendship on adolescents' self-esteem. Poster presented at the biennial meeting of the Society for Research in Child Development (ERIC Document Reproduction Service No. ED358 915).
- Bowlby, J. (1973). Affectional bonds: Their nature and origin. In Weiss, Loneliness: The experience of emotional and social isolation. (pp. 38-52). Cambridge: MIT Press.
- Brage, D., Meredith, W. & Woodward, J. (1993). Loneliness among midwestern adolescents. Adolescence, 28, 685-694.
- Brendtro, L.K., Brokenleg, M. & Van Bockern, S. (1990). Reclaiming Youth at Risk: Our Hope for the Future. Bloomington: National Education Service.
- Brennan, T. (1982). Loneliness in adolescence. In L. Peplau & D. Perlman (Eds.), Loneliness: A sourcebook of current theory, research and therapy. (pp. 269 - 290). New York: John Wiley.
- Brion-Meisels, S. & Selman, R. L. (1984). Early adolescent development of new interpersonal strategies: Understanding and intervention. School Psychology Review, 13, 278-291.
- Bronfenbrenner, U. (1986). Alienation and the four worlds of childhood. Phi Delta Kappan, 67, 430-436.
- Buhrmeister, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. Child Development, 61, 1101-1111.
- Buhrmeister, D. & Furman, W. (1987). The development of companionship and intimacy. Child Development, 58, 1101-1113.
- Bukowski, W. M. & Hoza, B. (1989). Popularity and Friendship: Issues in Theory, Measurement and Outcome. In Berndt, T.J. & Ladd, G.W. (Eds.), Peer Relationships in Child Development (pp. 15 - 45). Toronto: John Wiley & Sons.
- Bukowski, W. M. & Kramer, L. L. (1986). Judgements of the Features of Friendship Among Early Adolescent Boys and Girls. Journal of Early Adolescence, 331-338.

- Cairns, R.B., Leung, M., Buchanan, L. & Cairns, B. D. (1995). Friendships and social networks in childhood and adolescence: Fluidity, reliability, and interrelations. Child Development, 66, 1330-1345.
- Cassidy, J. & Asher, S. R. (1989). Loneliness and peer relations in young children. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.
- Coie, J., Dodge, K. & Kupersmidt, J. (1990). Peer group behavior and social status. In S. R. Asher and J. D. Coie (Eds.), Peer Rejection in Childhood. New York: Cambridge University Press.
- Cooley, C.H. (1902). Human nature and the social order. NY: Charles Scribner's Sons.
- Csikszentmihalyi, M., and Larson, R. (1984). Being Adolescent. New York: Basic Books.
- Damon, W. & Phelps, E. (1989). Strategic Uses of Peer Learning in Children's Education. In Berndt, T.J. & Ladd, G.W. (Eds.), Peer Relationships in Child Development. Toronto: John Wiley & Sons.
- DeBaryshe, B. D., Patterson, G. P. & Capaldi, D. M. (1993). A performance model for academic achievement in early adolescent boys. Developmental Psychology, 29 (5), 795-804.
- DeRosier, M. E., Kupersmidt, J. B. & Patterson, C. J. (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. Child Development, 65, 1799-1813.
- Erikson, E.H. (1977). Toys and Reasons; Stages in the Ritualization of Experience. New York: W.W. Norton & Co. Inc.
- Erikson, E.H. (1963). Childhood and Society. New York: W. W. Norton.
- Everitt, H. B. S. (1977). The Analysis of Contingency Tables. London: Chapman & Hall.
- Fetro, J. V. & Vitello, E. M. (1988). Measuring feelings of alienation in adolescents. Health Education, 19, 36-41.
- Furman, W. (1993). Theory is not a four-letter word: Needed directions in the study of adolescent friendships. New Directions for Child Development, 60, 89 - 103.

- Furman, W. & Buhrmeister, D. (1992). Age and Sex Differences in Perceptions of Networks of Personal Relationships. Child Development, 63, 103-115.
- Gerler, E. R. (1986). Skills for adolescence: A new program for young teenagers. Phi Delta Kappan, 67, 436-442.
- Goodnow, J.J. & Burns, A. (1988). Home and School: Child Eye's View. Sydney: Allen & Unwin, 1988.
- Hagborg, W. J. (1993). Gender differences on Harter's self-perception profile for adolescents. Journal of Social Behavior and Personality, 8 (1), 141-148.
- Harter, S. (1990). Causes, Correlates, and the Functional Role of Global Self-Worth: A Life-Span Perspective. In J. Kolligan and R. Sternberg (Eds.) Competence Considered. New Haven: Yale University Press.
- Harter, S. (1988a). Issues in the assessment of the self-concept of children and adolescents. In LaGreca, A. (Ed.). Childhood Assessment: Through the Eyes of a Child. Allyn & Bacon, Boston.
- Harter, S. (1988b). Manual for Self-Perception Profile for Adolescents. Denver, CO: University of Denver.
- Harter, S. (1985). The self-perception profile for children: Revision of the perceived competence scale for children. Manual. University of Denver.
- Harter, S. & Jackson, B.K. (1993). Young adolescents' perceptions of the link between low self-worth and depressed affect. Journal of Early Adolescence, 13, 383-407.
- Harter, S. & Marold, D.B. (1994). The bidirectionality of the link between self-esteem and affect: Beyond causal modeling. in D. Cicchetti & S. Toth (Eds.) Rochester Symposium of Developmental Psychopathology: Disorders of dysfunctions of the self. Rochester, NY: University of Rochester Press.
- Hartup, W. W. (1993). Adolescents and their friends. New Directions for Child Development, 60, 3-22.
- Hartup, W. W. (1989). Behavioral Manifestations of Children's Friendships. In Berndt, T.J. & Ladd, G.W. (Eds.), Peer Relationships in Child Development (pp. 46-70). Toronto: John Wiley & Sons.

- Hayden, L. K. (1989). Children's loneliness. Unpublished Ph.D. thesis, University of Waterloo, Waterloo, Ontario.
- Hinde, R. A., Tamplin, A. & Barrett, J. (1993). Social isolation in 4-year-olds. British Journal of Developmental Psychology, 11, 211-236.
- Hymel, S., Rubin, K. H., Rowden, L. & Lemare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems from middle to late childhood. Child Development, 61, 2004 - 2021.
- Jackson, S. & Rodriguez-Tome, H. (1993). Adolescence and its Social Worlds. Hillsdale, NJ: Erlbaum.
- James, W. (1892) Psychology: The briefer course. NY: Henry Holt & Co.
- Juvonen, J. (1992). Negative peer reactions from the perspective of the reactor. Journal of Educational Psychology, 84 (3), 314-321.
- Kazdin, A. E. & Johnson, B. (1994). Advances in psychotherapy for children and adolescents: Interrelations of adjustment, development and interventions. Journal of School Psychology, 32, 217-246.
- Klein, H. A. (1995). Self-perception in late adolescence: An interactive perspective. Adolescence, 579-589.
- Larson, R. W. (1990). The solitary side of life: An examination of the time people spend alone from childhood to old age. Developmental Review, 10, 155-183.
- Liu, X., Kaplan, H.B. & Risser, W. (1992). Decomposing the reciprocal relationships between academic achievement and general self-esteem. Youth and Society, 24 (2), 123-148.
- Marcoen, A. & Brumagne, M. (1985). Loneliness among children and young adolescents. Developmental Psychology, 21, 1025-1033.
- Marcoen, A. & Goossens, L. (1993). Loneliness, attitude towards aloneness, and solitude: Age differences and developmental significance during adolescence, in S. Jackson and H. Rodriguez-Tome (Eds.), Adolescence and its Social Worlds, (pp. 197-227), Hillsdale, NJ: Erlbaum.
- Marcoen, A. , Goossens, L., & Caes, P. (1987). Loneliness in pre-through late adolescence: Exploring the contributions of a multidimensional approach. Journal of Youth and Adolescence, 16 (6), 561-576.

- Mesch, D., Lew, M., Johnson, D. W. & Johnson, R. (1986). Isolated teenagers, cooperative learning, and the training of social skills. Journal of Psychology, 120 (4), 323-334.
- Mijuskovic, B. (1986). Loneliness: Counselling adolescents. Adolescence, 21 (84), 941-950.
- Nevin, A., Johnson, D. W., & Johnson, R. (1982). Effects of group and individual contingencies on academic performance and social relations of special needs students. Journal of Social Psychology, 116, 41-59.
- Neave, H. R. & Worthington, P. L. (1988). Distribution-Free Tests. London: Unwin Hyman.
- Norusis, M. J. (1995). Information from SPSS for Windows, Base System User's Guide. Release 6.0. Chicago: SPSS Inc.
- Page, R.M., Scanlan, A. & Deringer, N. (1994). Childhood loneliness and isolation: implications and strategies for childhood educators. Child Study Journal, 24, 107-118.
- Parker, J.G. & Asher, S.R. (1987). Peer relations and later personal adjustment: Are low accepted children at risk? Psychological Bulletin, 102, 357-389.
- Parker, J. G. & Gottman, J. M. (1989). Social and emotional development in a relational context: Friendship interactions from early childhood to adolescence. In T.J. Berndt & G. Ladd (Eds.) Peer relationships in child development (pp. 95-131). New York: Wiley.
- Parkhurst, J. T. & Asher, S. R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. Developmental Psychology, 28, 231-241.
- Peplau, L.S. & Perlman, D. (1982). Loneliness: A sourcebook of current theory, research and therapy. New York: Wiley.
- Peretti, P. O. & McNair, A. (1987). Psychological and social self-perceptions of the sociometric isolate. Social Behavior and Personality, 15, (1), 53-57.
- Phillips, D. A. (1987). Socialization of perceived academic competence among highly competent children. Child Development, 58, 1308-1320.

- Ponzetti, J. L. (1990). Loneliness among college students. Family Relations, 39, 336 - 340.
- Renshaw, P. D. & Brown, P. J. (1993). Loneliness in middle childhood: Concurrent and longitudinal predictors. Child Development, 64, 1271-1284.
- Rubin, K.H., LeMare, L.J. & Lollis, S. (1990). Social withdrawal in childhood: Developmental pathways to peer rejection. In S. R. Asher & J. D. Coie (Eds.), Peer Rejection in Childhood (pp. 219-249). New York: Cambridge University Press.
- Rubin, K. H. & Mills, R. S. L. (1988). The many faces of social isolation in childhood. Journal of Consulting and Clinical Psychology, 56, (6), 916-924.
- Selman, R. (1980). The growth of interpersonal understanding: clinical and developmental analysis. New York: Academic Press.
- Shulman, S. (1993). Close relationships and coping behavior in adolescence. Journal of Adolescence, 16, 267-283.
- Shulman, S. & Samet, N. (1990). Adolescents' close friendship types and friendship reasoning. Paper presented at the Biennial meeting of the Society for Research on Adolescence. (ERIC Document Reproduction Service No. ED 322 433).
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Terrell-Deutsch, B. (1991). Loneliness in popular, average status and unpopular children. Unpublished Ph. D. thesis, University of Toronto, Toronto, Ontario.
- Trent, L.M., Russell, G. & Cooney, G. (1994). Assessment of self-concept in early adolescence. Australian Journal of Psychology, 46 (1), 21-28.
- Vargo, B. (1995). Are withdrawn children at risk? Canadian Journal of School Psychology, 11 (2), 166-177.
- Weiss, R. S. (1973). Loneliness: The experience of emotional and social isolation. Cambridge, MA: M.I.T. Press.

- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. Journal of Educational Psychology, 85, (2), 357-364.
- Wichstrom, L. (1995). Harter's Self-Perception Profile for adolescents: Reliability, validity, and evaluation of the question format. Journal of Personality Assessment, 65 (1), 100-116.
- Windle, M. (1994). A study of friendship characteristics and problem behaviors among middle adolescents. Child Development, 65 (6), 1764-1777.
- Wintre, M. G. & Crowley, J. M. (1993). The adolescent self-concept: A functional determinant of consultant preference. Journal of Youth and Adolescence, 22, (4), 369-383.
- Woodward, J. & Frank, B. (1988). Rural adolescent loneliness and coping strategies. Adolescence, 23, 559-565.
- Wright, P.H. (1984). Self-referent motivation and the intrinsic quality of friendship. Journal of Social and Personal Relationships, 1, 115-130.
- Youniss, J. (1980). Parents and Peers in Social Development. Chicago, Il: University of Chicago Press.
- Youniss, J. & Smollar, J., (1989). Adolescents' Interpersonal Relationships in Social Context. In Berndt, T.J. & Ladd, G.W. (Eds.), Peer Relationships in Child Development (pp. 46-70). Toronto: John Wiley & Sons.
- Youniss, J. & Smollar, J., (1985). Adolescents' relations with mothers, fathers and friends. Chicago: University of Chicago Press.

APPENDIX A
CRITERIA FOR IDENTIFICATION OF STUDENTS WHO LACK FRIENDS

Criteria for Identification of Students Who Lack Friends

Nominated students should show an obvious lack of peer relationships, or rejection by their peer group.

Examples of behaviors of these students could be:

- a) refusal to participate in group activities
- b) last student chosen continuously by their peers to participate in group activities
- c) students who spend the majority of time by themselves
- d) students who need to be encouraged to participate or join in a peer group
- e) students who have expressed feelings of loneliness, isolation etc.

APPENDIX B
PARENT COVER LETTER

Parent Cover Letter

Dear Parents,

We would like to request consent for your child to participate in a research project entitled Friendships: Academic Implications for Junior High Students. This project has been approved by the Calgary Board of Education and the school staff at Sir John A. MacDonald Junior High School.

This consent means that your child, _____ will participate in a study which involves exploring adolescents' friendships. A relationship between friendships with academic achievement or perception of personal academic achievement will also be explored.

The study will involve your child completing a personal information sheet and two pencil and paper tests which measure perceptions of self-worth and loneliness. Your child may also be asked to participate in the second half of the study which would involve an interview with the researcher. This interview will explore thoughts on the importance of friendship. This study will not normally involve any greater risks than those ordinarily occurring in daily life. If, however, your child becomes upset from discussing friends or reveals information that suggests he/she is concerned, he/she can be seen by the school counsellor.

The following stipulations will be adhered to during and after the study. The responses will be obtained anonymously and kept in strictest confidence. All raw data will be destroyed two years after publication of study results. None of the individual data obtained will be shared with the teachers. The researcher will have access to data found on your child's report cards. Only group data will be reported in any published reports. Your child will be free to withdraw from the experiment at anytime without penalty. Your child will receive detailed written feedback regarding the purpose, hypotheses, and results of the experiment.

If at any time you have any questions, please contact the researcher, Charlotte Arbuckle at 243-9331, her supervisor, Marilyn Samuels at 220-5667, the Office of the Associate Dean (Research & Resources), Faculty of Education, at 220-5626, or the Office of the Vice-President at 220-3381.

Charlotte Arbuckle (Researcher)

APPENDIX C
PARENTAL CONSENT FORM

Parental Consent Form

I/We, the undersigned, hereby give my/our consent for my/our child, _____ to participate in a research project entitled Friendships: Academic Implications for Junior High Students. This project has been approved by the Calgary Board of Education and the school staff at Sir John A. MacDonald Junior High School.

I/We, understand that such consent means that my/our child, _____ will participate in a study which involves exploring adolescents' friendships. A relationship between friendships with academic achievement or perception of personal academic achievement will also be explored.

I/We understand that the study will involve my/our child completing a personal information sheet and two pencil and paper tests which measure perceptions of self-worth and loneliness. Your child may also be asked to participate in the second half of the study which would involve an interview with the researcher. This interview will explore thoughts on the importance of friendship.

I/We understand that this study will not normally involve any greater risks than those ordinarily occurring in daily life. If, however, your child becomes upset from discussing friends or reveals information that suggests he/she is concerned, he/she can be seen by the school counsellor.

I/We understand that the responses will be obtained anonymously and kept in strictest confidence by the researcher. All raw data will be destroyed two years after publication of study results.

I/We understand that the researcher has access to data found on my/our child's report cards.

I/We understand that only group data will be reported in any published reports.

I/We understand that I/we or my/our child is free to withdraw from the study at anytime without penalty.

I/We understand that my/our child will receive a brief written report or information regarding the purpose, hypotheses, and results of the experiment. This information will be available upon request to parents and teachers.

I understand that if at any time I have questions, I can contact the researcher, Charlotte Arbuckle at 243-9331, her supervisor, Marilyn Samuels at 220-5667, the Office of the Associate Dean (Research & Resources), Faculty of Education, at 220-5626, or the Office of the Vice-President at 220-3381.

Signature of Parent/Guardian

Signature of Parent/Guardian

Date

Date

APPENDIX D
STUDENT CONSENT FORM

Student Consent Form

I, _____ give my informed consent to participate in a research project entitled Friendships: Academic Implications for Junior High Students. This project has been approved by the Calgary Board of Education and the school staff at Sir John A. MacDonald Junior High School.

I understand that such consent means that I will participate in a study which involves exploring adolescents' friendships. A relationship between friendships and academic achievement will also be explored.

I understand that the study will involve completing a personal information sheet and two pencil and paper tests which measure perceptions of self-worth and loneliness. I may also be asked to participate in the second half of the study which would involve an interview with the researcher. This interview will explore my feelings on the importance of friendship.

I understand this study will take place at school, during class time, and will involve approximately one and a half hours.

I understand that although a record will be kept of my having participated in the experiment, all experimental data collected from my participation will be kept confidential. Furthermore, I am fully aware of the following:

a) I understand there are no known expected discomforts or risks involved in my participation in this experiment. If, however, I do become upset from discussing my friends, I may contact the school counsellor immediately.

b) I understand that I am free to withdraw from the study at anytime without penalty.

c) I understand there are no hidden procedures in this experiment. I will be aware at all times of the purpose of the procedures.

d) I understand that I will receive a brief written report or information regarding the purpose, hypotheses, and results of the experiment.

I understand that if at any time I have questions, I can contact the researcher, Charlotte Arbuckle at 243-9331, her supervisor, Marilyn Samuels at 220-5667, the Office of the Associate Dean (Research & Resources), Faculty of Education, at 220-5626, or the Office of the Vice-President at 220-3381.

Signature of Student

Date

APPENDIX E
STUDENT PERSONAL INFORMATION SHEET

Student Personal Information Sheet

Name: _____

Sex: Male or Female (Please Circle)

Family Information

Your parents are: Married, Divorced, Separated, Other _____

Who do you live with? (Include everyone in the household and indicate ages of your brothers and sisters)

Where were you born? _____

Where was your mother born? _____

Where was your father born? _____

What is your mother's occupation? (please state place of work if known)

What is your father's occupation? (please state place of work if known)

Is there anything else you feel is important to share about your family?

School Information

What other schools have you attended? Please indicate the grade(s) you were in at that particular school.

Do you feel you have any difficulties at school? _____ Please describe these difficulties.

Have you received any extra help, tutoring, or resource work in school or any special school placements? _____ Please describe.

What activities are you involved in at school (eg. clubs, sports)?

What activities are you involved in after school (eg. clubs, sports)?

How do you spend your leisure time (eg. watching TV, computer games, hanging out)?

Academic Achievement

Subject	Last Report Card Mark	Expected Mark This Term	If you worked to your potential, what mark do you think you could achieve this term
Science			
Mathematics			
Language Arts			
Social Studies			

APPENDIX F
TEACHER INFORMATION SHEET

Teacher Information Sheet

Name of Student: _____ Class: _____
 Subject: _____

Social Interactions

1. Would you consider this student to have a lack of friendships or an adequate number of friendships? _____
 2. How would you describe the quality of these friendships?
 3. Does this student have one or more best friends? _____
 What information could you provide about these friends.
-
4. How does this student interact with his/her friends?
 Above Average _____ Average _____ Below Average _____
 Indifferently _____ N/A _____
 5. How does this student interact with his/her peers other than friends?
 Above Average _____ Average _____ Below Average _____
 Indifferently _____ N/A _____
 6. How does this student respond to friendly approaches from peers?
 Above Average _____ Average _____ Below Average _____
 Indifferently _____ N/A _____
 7. How does this student respond to friendly approaches from adults?
 Above Average _____ Average _____ Below Average _____
 Indifferently _____ N/A _____
 8. Are there any other comments about this student's interactions with peers that may be helpful to this study?

Academic Achievement

1. What is this student's present mark in your class? _____
2. How do you feel this student is achieving in your class? Above
Average _____ Average _____ Below Average _____
Indifferently _____ N/A _____
3. How much time and effort do you feel this student is putting into
classwork? Above Average _____ Average _____ Below
Average _____ Indifferently _____ N/A _____
4. Describe the work habits of this student.
5. Are there any other comments about this student's academic
achievement that may be helpful to this study?

APPENDIX G
RELATIONAL PROVISION LONELINESS QUESTIONNAIRE

Relational Provision Loneliness Questionnaire

Please indicate whether the following items are:

- Always true ----- 1
 True most of the time ---- 2
 Sometimes true ----- 3
 Hardly ever true ----- 4
 Not at all true ----- 5

(by circling the correct response).

Peer Scale

1. I feel part of a group of friends that does things together. 5 4 3 2 1
2. There is someone my age I can turn to. 5 4 3 2 1
3. I have a lot in common with other children. 5 4 3 2 1
4. There is someone my age I could go to if I were feeling down. 5 4 3 2 1
5. I feel in tune with other children. 5 4 3 2 1
6. I have at least one really good friend I can talk to when something is bothering me. 5 4 3 2 1
7. I feel like other children want to be with me. 5 4 3 2 1
8. I have a friend who is really interested in hearing about my private thoughts and feelings. 5 4 3 2 1
9. I feel that I usually fit in with other children around me. 5 4 3 2 1
10. I have a friend I can tell everything to. 5 4 3 2 1
11. When I want to do something for fun, I can usually find friends to join me. 5 4 3 2 1
12. There is somebody my age who really understands me. 5 4 3 2 1
13. When I am with other children, I feel like I belong. 5 4 3 2 1
14. There is a friend I feel close to. 5 4 3 2 1

Family Scale

1. In my family, I feel part of a group of people that does things together. 5 4 3 2 1
2. There is someone in my family I can turn to. 5 4 3 2 1
3. I have a lot in common with people in my family. 5 4 3 2 1
4. There is someone in my family I could go to if I were feeling down. 5 4 3 2 1
5. I feel in tune with the people in my family. 5 4 3 2 1
6. I have at least one person in my family I can talk to when something is bothering me. 5 4 3 2 1
7. I feel like people in my family want to be with me. 5 4 3 2 1
8. I have someone in my family who is really interested in hearing about my private thoughts and feelings. 5 4 3 2 1
9. I feel that I usually fit in with my family. 5 4 3 2 1
10. I have someone in my family I can tell everything to. 5 4 3 2 1
11. When I want to do something for fun, I can usually find people in my family to join me. 5 4 3 2 1
12. There is someone in my family who really understands me. 5 4 3 2 1
13. When I am with my family, I feel like I belong. 5 4 3 2 1
14. There is someone in my family I feel close to. 5 4 3 2 1

APPENDIX H
LOUVAIN LONELINESS SCALE FOR CHILDREN AND ADOLESCENTS

The Louvain Loneliness Scale for Children and Adolescents

Please indicate whether the following items are:

often----- 1

sometimes ----- 2

seldom----- 3

never----- 4

by circling the correct response.

- | | |
|--|---------|
| 1. I feel I have very strong ties with my parents. | 4 3 2 1 |
| 2. I withdraw from others to do things that can hardly
be done with a large number of people. | 4 3 2 1 |
| 3. My parents make time to pay attention to me. | 4 3 2 1 |
| 4. I think I have fewer friends than others. | 4 3 2 1 |
| 5. I feel isolated from other people. | 4 3 2 1 |
| 6. I want to be alone. | 4 3 2 1 |
| 7. I feel excluded by my classmates. | 4 3 2 1 |
| 8. When I'm lonely, I feel bored. | 4 3 2 1 |
| 9. I want to be better integrated in the class group. | 4 3 2 1 |
| 10. When I am alone, I feel bad. | 4 3 2 1 |
| 11. I feel left out by my parents. | 4 3 2 1 |
| 12. When I feel lonesome, I've got to see some friends. | 4 3 2 1 |
| 13. I am looking for a moment to be on my own. | 4 3 2 1 |
| 14. When I feel bored, I am unhappy. | 4 3 2 1 |
| 15. Making friends is hard for me. | 4 3 2 1 |

- | | |
|--|---------|
| 16. I find consolation with my parents. | 4 3 2 1 |
| 17. I am afraid the others won't let me join in. | 4 3 2 1 |
| 18. I find it hard to talk to my parents. | 4 3 2 1 |
| 19. When I am lonely, I want to be alone to think it over. | 4 3 2 1 |
| 20. When I am lonely, I don't know what to do. | 4 3 2 1 |
| 21. When I have an argument with someone, I want to be alone to think it over. | 4 3 2 1 |
| 22. To really have a good time I have to be with my friends. | 4 3 2 1 |
| 23. I feel alone at school. | 4 3 2 1 |
| 24. When I am lonely, time lasts long and no single activity seems attractive. | 4 3 2 1 |
| 25. I can get along with my parents very well. | 4 3 2 1 |
| 26. When I am alone, I quieten down. | 4 3 2 1 |
| 27. I think there is no single friend to whom I can tell everything. | 4 3 2 1 |
| 28. To think something over without disturbance, I want to be alone. | 4 3 2 1 |
| 29. When I am alone, I would like to have other people around. | 4 3 2 1 |
| 30. My parents are ready to listen to me or help me. | 4 3 2 1 |
| 31. I'm happy when I'm the only one at home for once, because then I can do some quiet thinking. | 4 3 2 1 |

	123
32. When I am bored, I go to see a friend.	4 3 2 1
33. I feel abandoned by my friends.	4 3 2 1
34. I feel unhappy when I have to do things on my own.	4 3 2 1
35. I feel left out by my friends.	4 3 2 1
36. I want to be alone to do some things.	4 3 2 1
37. I have the feeling that my parents and I belong together.	4 3 2 1
38. My parents share my interests.	4 3 2 1
39. When I am lonely, I go to see other people myself.	4 3 2 1
40. I keep away from others because they disturb me with their noise.	4 3 2 1
41. I feel sad because nobody wants to join in with me.	4 3 2 1
42. When I am bored, I feel lonesome.	4 3 2 1
43. My parents show real interest in me.	4 3 2 1
44. Being alone makes me take up my courage again.	4 3 2 1
45. I doubt whether my parents really love me.	4 3 2 1
46. At home I am looking for moments to be alone, so that I can do things on my own.	4 3 2 1
47. I feel sad because I have no friends.	4 3 2 1
48. At home I feel at ease.	4 3 2 1

APPENDIX I
FRIENDSHIP INTERVIEW

Friendship Interview

Do you feel friends are important?

1. What does having a friend mean to you?
2. What things are important in friendship?
3. What is a best friend?
4. How are you a friend to your friends?
5. Why is it important for you to have friends in your life?
6. Is there someone at school that you hang out with and have fun with?
What are the activities that you do together?
7. Is there someone in your neighbourhood that you hang out with and have fun with? What are the activities that you do together?
8. Is there someone in your family that you hang out with and have fun with? What are the activities that you do together?
9. What does loneliness mean to you?
10. Do you ever feel lonely? When?

APPENDIX J
FRIENDSHIP INTERVIEW DATA ORGANIZATION

Friendship Interview Data Organization

Please respond with the appropriate code for the response indicated.
Codes may be repeated as often as necessary.

Do you feel it is important to have friends?

- 1 - Yes
- 2 - No

1, 2, 3 What does having a friend mean to you?
What things are important in friendship?
What is a best friend?

- a) 1 - You help a friend out
- 2 - A friend helps you out

b) Please code the following characteristics.

- 3 - keep secrets, trust
- 4 - honest
- 5 - good listener, someone to talk to
- 6 - supportive, will be there for you in times of trouble/problems
- 7 - loyalty, will stick up for you in a conflict situation
- 8 - humour
- 9 - likes to do different activities
- 10 - sharing
- 11 - respects

4. How are you a friend to your friends?
Code the same as 1,2,3 b

5. Why is it important to have friends in your life?

- a) 1 - they help you out
- 2 - you help them out

b) Code the same as 1,2,3 b

9,10 Loneliness is:

- 1 - nobody to talk to - alone
- 2 - not part of a group

9,10 Loneliness is:

- 3 - situational
- 4 - ongoing