ATTACHMENT, PERCEPTIONS OF SOCIAL SUPPORT, AND SOCIAL

INTEGRATION: IMPLICATIONS FOR ADOLESCENTS AT RISK OF

SCHOOL DROPOUT

by

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THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

In the
Faculty
of
Education

Counselling Psychology

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SIMON FRASER UNIVERSITY

Summer 2005/Approval 2005

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ABSTRACT

This study investigated the relationship between perceived social support and indices of school dropout risk. Theories of attachment and social integration provided the conceptual background for the study. Middle adolescents (36 girls, 39 boys, average age 14.37) completed the IPPA, assessing perceived social support from parents, peers, and teachers. Students were designated 'at risk' or 'not at risk' based on stringent indices of academic risk. Compared to 'not at risk' adolescents, those 'at risk' perceived: lower trust in, and higher alienation from, mothers, fathers, and teachers; lower overall support from mothers and teachers; and lower perceptions of mothers as sources of communicative support. Significant group differences were found in perceptions of relative support from mothers, fathers, peers and teachers. For the 'not at risk' group, peer support was associated with fewer risk indices. Mother support and communication, and teacher trust and alienation were associated with the likelihood of risk.

DEDICATION

This work is dedicated to my students and to my foster children, who have taught me so much about perceptions of trust, communication, and feelings of alienation. And to Brandy, for whom this understanding was too little, too late.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of variance (univariate)
β	Standardized multiple regression coefficient
BLR	Binary logistic regression
FA	Father Alienation
Father Comm	Father Communication
FC	Father Communication
FT	Father Trust
IPPA	Inventory of Parent and Peer Attachment
IWM	Internal Working Models
MANOVA	Multivariate analysis of variance
MA	Mother Alienation
MC	Mother Communication
Mother Comm	Mother Communication
MT	Mother Trust
N	Total number in a sample
p	Probability
PA	Peer Alienation
PC	Peer Communication
Peer Comm	Peer Communication
PT	Peer Trust
r	Pearson product-moment correlation
sd	Standard deviation of a sample
TA	Teacher Alienation
Teacher Comm	Teacher Communication
TC	Teacher Communication
TT	Teacher Trust
$\bar{x}$	Mean
Z	Fisher's transformation of r

CHAPTER 1:
INTRODUCTION

The Systemic Interrelationship of the Individual and Society

Whether at work or at home with our families, many of us have struggled with a

group member who does not act as one of the team. The scenarios cut across all social

strata and situations: the single parent works all day and comes home to a teenager

plugged into video games or television, seemingly oblivious to the messy house, and

refusing to help; the diligent student has to care for an addicted or negligent parent;

workers have to cover for an indolent boss or co-worker; and so on. Friction arises, as

over-taxed group members resent carrying an unequal load, worry about their child's,

family's or business' ability to succeed, or are unable to realize their own full potential.

Even more alarming are the acts of apparently senseless adolescent violence: swarming

teenagers injure or kill a familiar peer; gangs of youths randomly attack strangers; and

students shoot their teachers and fellow students. Less sensational or conspicuous, but

insidiously diminishing society as a whole, a large number of adolescents drop out of high

school before completion each year (Statistics Canada, 1995). Each of these challenging

scenarios and disturbing events demonstrates, to differing degrees, a lack of social

integration. To preclude such detrimental events, one is compelled to question the factors

underlying social antipathy or, conversely, social integration.

This is not a new issue. For more than two thousand years, theorists from Plato

and Marcus Aurelius to Adler, Bowlby and others have contemplated the concept of

social integration, or 'participation in the social network' (Cohen, Gottlieb, &

Underwood, 2000). Plato, for example, describes the individual within a universal

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principle of organisation, where "everyone ought to perform the one function in the community for which his nature best suited him" (Republic, 375/1945, p. 127). Moreover, he asserts that the welfare of both society and the individual psyche will be best assured "only if the several parts of our nature [Reason, Spirit, and Appetite] fulfil their [duty]" (pp. 139-140). Similarly, Marcus Aurelius admonishes that the benefit and improvement of society should be the primary consideration of all rational creatures, and their every separate act should contribute to the integration and coordination of the diverse elements giving form to the one universe (Staniforth, 1964). More recently, Adlerian theory "emphasizes the internal unity of all organisms and their unified functioning as integral parts of larger systems and the entire cosmos" (Sherman, 1987, p. 89). These are only a few of many sociological and psychological epistemologies describing a nested hierarchy of systemic, social interrelationships (Sheldrake, 1988), within which the interests of the individual are subsumed by those of the larger society, enhancing the welfare of both.

Clearly, however, some individuals do not adhere to societal precepts. A detailed examination of specific factors fostering social integration is essential to better understand those who flout societal dicta. Ideally, a deeper understanding will strengthen programs to socially integrate alienated individuals, decreasing antisocial behaviour.

In this chapter I address the pervasive problem of poor social integration, which affects all members of society to differing degrees. Firstly, I depict various social interactions that exemplify a lack of social integration. Secondly, I offer a brief look at philosophies conceptualizing social integration, and recognize the need for a more explicit

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understanding of factors underlying antisocial behaviour. Thirdly, I identify the central

role of one of those factors, social relations, in promoting social integration. Fourthly, I

examine social capital and social support, corresponding elements of social relations.

Fifthly, I describe the reciprocal relationship between perceptions of social support and

social collaboration. Next, I discuss adolescence as a particularly vulnerable time for

social integration or alienation. Then, I delineate the personal and societal consequences

of school dropout, a particular aspect of social alienation affecting adolescents. Finally, I

identify the need to examine and compare perceptions of social support in adolescents at

academic risk and not at academic risk of school dropout, to augment existing knowledge

in this area.

Social Capital, Social Support, and Social Integration

A plethora of research points to the crucial role of interpersonal relations in

marrying individual and societal interests; social relationships underlie the development

of mutually beneficial support systems, as well as the personal and social self. As

Youniss and Smollar (1985) assert, relations

> are essential to individual functioning–without them, the individual runs the risk
> of alienation and uncertainty. ... The individual needs to feel transcendent beyond
> self, as belonging to something with others. This sense of cohesion is every bit as
> fundamental to the persona as is individual identity. (p. 174)

Coleman (1988) theorizes, more pragmatically, that a distinct kind of resource

inherent in relationships promotes social integration. That resource is social capital, a

form of interactive social assistance to help one deal with life's challenges and to aid the

functioning of society. It exists in the form of reciprocal information channels,

expectations, obligations, and social norms. Communication may take many forms such

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as guidance, reassurance, or providing useful information. Social norms, and mutual obligations and expectations allow one to know what to anticipate or plan for, and what is expected of one in terms of behaviour and contribution. Predictable consequences ensue, both positive and negative, depending upon whether or not these expectations and obligations are met.

Social capital benefits both society and the individual. For example, the prescriptive norm within social capital that guides one to "forego self-interest and act in the interests of the collectivity," "generally leads persons to work for the public good," (p. 104) helping to build young nations, strengthen families, and engender social movements. As well, when individuals collaborate within relationships, they accumulate social capital of their own. Individuals can draw on social capital as required, enlisting the aid of other community members to help them achieve specific ends that otherwise could not be accomplished. Lack of social capital, by contrast, leads to alienated individuals who feel they do not benefit from society. Thus, they are less likely to adhere to its rules.

Corresponding to social capital, social support is "that assistance available to individuals and groups from within communities which can provide a buffer against adverse life events and living conditions, and can provide a positive resource for enhancing the quality of life" (nsw.gov.au/public-health). This component of social support is known as received support (Wills & Shinar, 2000). Social support comprises, in addition, "information leading the subject to believe that he is cared for and loved ... esteemed and valued ... and belongs to a network of communication and mutual obligation" (Cobb, 1976, p. 300). This constitutes perceived support, the expectation that

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significant others are available and responsive in times of need, based on a history of trust, positive communication, and feelings of affiliation with them.

Perceived support, moreover, is central to social integration. That is, the perception of being supported and valued by one's community increases one's inclination to be a healthy, productive member of that community, meeting the mutual obligations inherent in relationships with its members or institutions (Coleman, 1998; Wentzel, 1996). This has implications for society as a whole, as people who do not feel supported within a system not only are less likely to become contributing members within it, but more likely to undermine its healthy functioning (Allen, Moore, Kuperminc, & Bell, 1998; Berndt, 1979; Elgar, Knight, Worrall, & Sherman, 2003).

The reciprocal relationship between perceptions of support and social collaboration assumes crucial significance in adolescence, as young people attempt to find their place within society. As Youniss and Smollar (1985) articulate, adolescence is a time of a gradual but pronounced movement toward greater individuality, self-agency, and self-awareness. It is, simultaneously, a time of developing awareness of, and assuming responsibility for, the inextricable connection between the personal and social self. Responsibility, in this sense, "refers to realizing what is owed to others for the self's development and to recognizing that others are needed for the self's current functioning" (p. 168). When this responsible awareness develops, the adolescent's unique individuality emerges concomitantly with his or her social collaboration. When adolescents fail to recognize the symbiotic nature of their relationships with others, and instead feel alienated and devalued within their primary familial and societal

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relationships, subversion of the individual maturation and social integration processes is likely (Allen et al., 1998; Armsden & Greenberg, 1987; Elgar et al, 2003; Shyamala, McGee, & Stanton, 1992).

In summary, societies rely on systemic, social interrelationships, within which the actions of the individual ideally are consistent with fulfilling the interests of the larger society, benefiting both. The individual's perceptions of group affiliation and adherence to prescriptive norms promote this kind of collective behaviour. Perceptions of group alienation and defiance of society's precepts undermine personal and societal well-being. Social support is a key element engendering group affiliation. Social capital and social support are fundamental to the individual's social integration. Adolescence is a particularly vulnerable time for social integration.

Societal and Personal Consequences of Social Alienation

Research has shown that the individual's failure to integrate within the larger social community leads to lost economic opportunities, unrealized intellectual and creative potential, and disruption of the coherent functioning of society in general (Hymel & Ford, 2003; Jenkins, 2001; Prevatt, 2000; Statistics Canada, 1995; Woods, 1995). School dropout, for instance, has a potential impact on the prosperity of society as a whole, and on the individual's well-being. Cumulatively, dropouts cost the United States an estimated $250 billion annually in lost earnings, taxes, and social services (Jenkins, 2001). In Canada, the cost to society of those who dropped out of school over the course of just one school year was calculated at $4 billion (Statistics Canada, 1995). Hymel and Ford (2003) cite the lifetime economic cost of a single Canadian high school dropout at

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between $243,000 and $388,000 (US$). Current estimates are that approximately 30% of Canadian students drop out of secondary school annually (Potvin, Fortin, Marcotte & Royer, 2000; Prevatt, 2000; Statistics Canada, 1995).

Specific social outcomes associated with dropouts are lower literacy and future opportunities for education/training, an under-skilled labour force, decreased productivity, unrealized taxes, increased crime and violence, and a life-long dependency on welfare and other public assistance programs (Prevatt, 2000; Woods, 1995). In the United States, for example, dropouts make up a disproportionate number of welfare recipients or the unemployed (52%), the prison population (82%), and juveniles in court (85%) (Jenkins, 2001) and constitute a disproportionate percentage of the nation's prison and death row inmates (Lewit, 1992).

The potential personal effects of dropping out are equally profound: limited employment opportunities; lower employment rates and income levels; increased delinquency and alcohol and drug abuse; compromised physical and mental health; higher mortality and suicide rates; and a lower overall quality of life (Hauser, Simmons & Pager, 2000; Jenkins, 2001; Kaufman, Alt & Chapman, 2001; Statistics Canada, 1995; Woods, 1995).

In developing a profile of school dropouts, many researchers consider socio-economic, family structure, academic, employment, peer group affiliation, and psychological factors. A growing body of research (Audas & Willms, 2001; Ekstrom, Goertz, Pollack, & Rock, 1986; Hauser et al., 2000; Hymel, Comfort, Schonert-Reichl, & McDougall, 1996; Potvin et al., 2000; Rumberger, 1983) indicates that

many high school non-completers come from low socio-economic backgrounds, from single-parent households, from basic or general academic streams/programs, have failed at least one course during their high school career, work for pay more than 15 hours a week, have low self-esteem, are frustrated learners with short-range rather than long-range goals, feel alienated from teachers, peers, and curriculum, and are concrete rather than abstract thinkers.

(Statistics Canada, 1995, p. 1)

Research also reveals that a pattern of grade retention, high absenteeism, delinquent or deviant behaviour, and suspension is evident in early school leavers (Cairns, Cairns, & Neckerman, 1989; Croninger & Lee, 2001; Lunenburg, 1999; Jenkins, 2001; Statistics Canada, 1995).

Importantly, risk for school dropout is associated with low feelings of relatedness to peers, teachers, and the school community (Catterall, 1998; Croninger & Lee, 2001; Fine, 1986; MacLeod, 1987; Statistics Canada, 1995). For example, a significantly larger proportion of dropouts than graduates reported feeling that they did not enjoy school (41% versus 10%), did not belong at school (14% versus 5%), and did not get along with teachers (16% versus 2%). Similarly, more dropouts than graduates did not participate in class (23% versus 10%) or in extracurricular activities (45% versus 27%) (Statistics Canada, 1995). Statistics Canada also reported that 14.5% of dropouts cited not getting along with peers as a reason for dropping out. As Croninger and Lee's (2001) study involving 11,000 adolescents reveals, "not only do dropouts enter highschool with substantially lower achievement and less positive behaviours, they also have less support and guidance from teachers to address these difficulties" (p. 561). Without school friends or teachers to turn to for emotional or instrumental support, adolescents with perceptions of lower social support likely have a weaker affiliation with the school community and a

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concomitantly higher risk of school dropout.

The possible repercussions of school dropout make an examination of factors underlying the adolescent's affiliation with or alienation from other members in society, and their internalization or rejection of society's values and strictures, of paramount importance. A great deal remains to be understood, in particular, about the relationship between adolescents' perceptions of social support and their adherence to societal norms in the school setting. The main purpose of the present research, therefore, is to examine and compare perceptions of social support in adolescents at academic risk and not at academic risk of school dropout. Academic risk refers to factors such as grade retention, course failure, low attendance, discipline problems at school, and suspension (Croninger & Lee, 2001). This study investigates the relationship between adolescents' perceptions of social support, in terms of expectations of positive communication, trust, and sense of affiliation or alienation, and these indices of academic dropout risk, garnered from school records. An understanding of the relationship between these variables could contribute to the development of effective interventions to socially integrate alienated adolescents, reducing the likelihood of school dropout. The results also could be useful in establishing programs to help future students adjust to the school environment.

CHAPTER 2:
REVIEW OF LITERATURE

As outlined in Chapter 1, perceptions of social support, as evidenced in trust, communication, and feelings of affiliation, are of fundamental importance to the issue of school dropout. In this chapter, I review current knowledge of the development of perceptions of trust, communication, and affiliation in the individual, as advanced by Bowlby's (1969, 1973, 1979, 1980) attachment theory. I examine, as well, the connection of these factors to academic risk for dropout. In the first section, I trace the behavioural and cognitive development of these factors from infancy to adolescence, initially in interactions with a primary caregiver and then with significant others in the community. In the second section, I discuss the primarily stable but malleable nature of these factors, and implications for future relationships. In the third section, I provide evidence for the conceptual congruency of 'perceptions of social support' and attachment theory's 'cognitive expectations,' and argue for the applicability of attachment theory's research to investigations of social support. In the fourth section, I examine the psychological, social, and academic ramifications of perceptions of low and high social support, or insecure versus secure attachment. In the fifth section, I more specifically examine the impact of perceived parental, peer, teacher, and community support on the risk for dropout in middle adolescence. In the sixth section, I note that an extensive review of social support literature reveals a dearth of information about factors underlying middle adolescents' perceptions of social support, as well as the relationship between middle adolescents' perceptions of social support and academic risk indices. In the final section of this

chapter, I propose a study of the relationship between mother, father, peer, and teacher support and indices of risk of school dropout in two groups of middle adolescents, one at academic risk and the other not at academic risk of school leaving.

Attachment Theory: Genesis of Trust, Communication and Feelings of Affiliation

Investigating the genesis of social connectedness, Bowlby's (1969, 1973, 1979, 1980) theory of attachment explains the development of trust, communication, and feelings of affiliation from infancy to adulthood. It postulates a relationship among these factors and social integration, which has been supported by subsequent research.

The Behavioural Component of Attachment Style. Bowlby (1969, 1973, 1979, 1980) posits a biologically-based system of parent-child bonding, in which children are strongly disposed to seek proximity to a specific caregiver (usually the mother) when tired, frightened, or ill. This disposition is an inherent, stable, long-lasting attribute of the child. Attachment theory also postulates that children engage in a variety of attachment behaviours, to maintain or restore safety through proximity to that caregiver, thus enhancing survival. Further, the nature of the affectional bond, and the child's behaviour, vary as a function of how secure the child feels in relation to the attachment figure (Ainsworth, Blehar, Waters, & Wall, 1978) which, in turn, is based on their history with that attachment figure. That is, if a toddler perceives the attachment figure to be reliably responsive and physically accessible in times of distress, she forms a secure attachment. Her typical behaviour might include smiling and engaging in exploratory play away from the caregiver when relaxed, seeking physical contact when distressed, accepting comfort from the caregiver, and returning to play. If the child perceives the attachment figure to

be unreliable and/or unavailable, she forms an insecure attachment (either avoidant or ambivalent). Typical behaviour of a young child with an insecure attachment might include clinging to the caregiver even in the absence of threat, seeking but failing to be comforted when distressed and/or actively avoiding contact with the caregiver when he or she attempts to comfort, and failing to return to play.

In older children, rather than close physical proximity, the security of attachment is associated with the degree to which the attachment figure is consistently emotionally available, responsive to their need for help, and encouraging of open communication (Sroufe & Waters, 1977). Supportive telephone calls and letters, for instance, might suffice for reassurance and contact, rather than flights to the mother's side. Thus, the behavioural dimension of attachment is subject to developmental changes arising from the cognitive and physical maturation of the individual.

As they mature, secure children increasingly may view adults other than mothers as subordinate attachment figures (Bowlby, 1969). Potential candidates might include fathers (Main & Weston, 1981), siblings (Buist, Dekovic, Meeus, & van Aken, 2004), romantic partners and peers (Ainsworth, 1989; Ainsworth & Marvin, 1995; Allen et al., 1998; Berndt, 1979; Bowlby, 1980), and teachers (Goodenow, 1993; Soucy & LaRose, 2000; Wentzel, 1998).

The Cognitive Component of Attachment Style. Through experiences with one or more attachment figures over time, particularly those in which help or support are needed or desired, the child develops cognitive expectations about the responsiveness of attachment figures to his or her needs. These expectations, as evidenced in trust,

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communication, and feelings of affiliation, are part of learned patterns of interaction, or internal working models (IWM). The IWM are surmised to persist throughout life (Bowlby, 1969; Sroufe & Waters, 1977), as repeated interaction patterns within a dyad become habitual and automatic, and reciprocal expectancies constrain the interpretation of each other's behaviour (Bretherton, Golby, & Cho, 1997). As Lyddon, Bradford, and Nelson (1993) succinctly summarize, "Working models are viewed as basically self-perpetuating because they are thought to represent an established cognitive system that predisposes the individual toward interpreting experiences in ways which are consistent with those models" (p. 2). Hence, early attachment experiences influence the child's responses within subsequent relationships in the larger community.

The predominately stable affective-cognitive dimension of the individual's attachment style, as represented in IWM, is important during adolescence, as it guides expectations about new relationships (Bretherton, 1985; Buist et al., 2004; Colin,1996; McCormick & Kennedy, 1994; Weiss, 1982). For example, an adolescent's early perceptions of a lack of supportive relationships with primary caregivers can contribute to skewed perceptions of others, a lack of coherent thinking about attachment-related experiences, and difficulty processing components of peer relationships, thus undermining the likelihood of stable relationships in adulthood (Allen et al., 1998; Carlivati, 2001; Grotevant & Cooper,1985; Youniss, 1983). Conversely, adolescents who are embedded in secure relationships that exemplify values such as commitment, open communication, empathy, cooperation, perspective-taking, and respect for the individual's uniqueness, develop a sense of self-worth "and the capacity to develop close, cooperative, and

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empathic relations with others" (Bretherton et al., 1997, p. 107). Thus, trust in a specific

partner, once established, "is likely to foster perceptions of support availability across

most dimensions of support .... " (Reis & Collins, 2000, p. 149).

The Dynamic Development of IWM. As described above, Bowlby (1973)

emphasized the constraining nature of IWM, which govern "a child's interpersonal

attributions or meaning-making in ongoing interactions with parents and later with others"

(Bretherton et al., p.105). However, "working models are open to questioning and

revision" (Bowlby, 1973, p. 323) in the context of interpersonal interactions with

significant others. Thus, while interaction patterns are predominately stable, and become

more so over time, they are not static. The reciprocal, dynamic nature of IWM allows

them to evolve with the individual's development, maturation, and ongoing interactions.

Despite the influence of earlier attachment experiences on later relationships, the

infant can form qualitatively different models of attachment with various attachment

figures, such as mother or father (Armsden & Greenberg, 1987; Buist et al., 2004; Main &

Weston, 1981). Elementary-school children also can demonstrate kinds of peer

relationships that are qualitatively different from those formed with their primary

attachment figures (Rholes & Simpson, 2004). During adolescence, relationships with

mothers and fathers differ systematically; fathers are seen as less trustworthy, less

communicative, and more distant than mothers (Youniss & Smollar, 1985). Adolescents'

relationships with peers and parents, although complementary and overlapping, also differ

significantly "in the contents they deal with, in the forms of communication that they

allow, and in the results of communication" (p. 158). Examining the qualitative

difference in adolescent attachment to parents and peers, Freeman and Brown (2001) report that "secure adolescents significantly favoured mothers over best friends, boy/girlfriends, and fathers," whereas insecure adolescents described peers as stronger sources of attachment support than parents (p. 653).

Further, during adolescence an increased capacity for abstract thinking may engender an integrated, coherent model of attachment, derived from cumulative experiences with various attachment figures (Carlivati, 2001). Accordingly,

> "attachment during the teenage years then becomes one's organization and processing of attachment-related thoughts, feelings, and emotions, rather than a specific categorization of a given relationship (for example, having a secure attachment relationship with one's teacher) as in infancy." (p. 11)

Hence, the external, relationship-dependent attachment construct of early childhood becomes an internal organization in adolescent attachment. This internal, cognitive organization provides a transition to adult attachment, which is seen as a characteristic of the individual in coping with intense affect (Allen & Land, 1999). It bears reiteration, however, that one's cognitive organization continues to evolve within the context of formative, reciprocal, interpersonal relationships, and is "never immutably 'fixed' by one's attachment history" (Rholes & Simpson, 2004, p. 7). Therefore, supportive relationships with subsequent caregivers may mitigate the effects of earlier unreliable or unresponsive caregiving.

Perceptions of Social Support as an Aspect of IWM. As defined in Chapter 1, perceptions of social support include experience-based expectations about the availability and responsiveness of others to one's needs. These expectations are consistent with trust, or "people's abstract expectations that they can count on partners to care for them and be

responsive to their needs, now and in the future" (Holmes & Rempel, 1989, p. 188).

These expectations are, as well, an element of the internal working models' learned

patterns of interaction. Similarly, feelings of acceptance and love, a component of

perceived social support, are the internal working models' absence of alienation.

Perceptions of social support, therefore, appear congruent with the cognitive expectations

of internal working models, as described by the theory of attachment. As Blain,

Thompson, and Whiffen (1993) suggest, "perceived social support may be an observable

manifestation of attachment style" (p. 228).

Given the parallel nature of the concepts of social support and internal working

models described above, it can be argued that attachment theory provides a useful

framework for investigations of social support. This researcher concurs with Cauce,

Mason, Gonzales, Miraga, and Liu (1996) who state:

> Self-report social support instruments essentially capture the degree to which an
> individual is involved in relationships believed to be characterized by acceptance,
> open communication, and love (Sarason et al., 1986). Self-reported attachment
> assesses the degree to which people characterize their relationships in terms of
> trust, open communication, and the absence of alienation. Thus, strong empirical
> associations between the two measures should not be surprising, since they
> essentially "pull for" the same psychological construct. At this point, we believe it
> is largely a matter of personal preference whether one calls that construct
> perceived support or self-reported attachment. (p. 146)

Hence, conclusions reached through research into the associations among IWM

and psychological, social, and academic outcomes in adolescence should apply to self-

reported, perceived social support.

Implications of Perceptions of Low and High Social Support

A growing body of research suggests that secure versus insecure attachment, or perceptions of high versus low social support, underlie psychological, social, and academic adjustment and, in turn, social integration. Hence, the perception of being supported and valued by one's community enhances the likelihood an individual will be a functional, contributing member within it, while those who do not feel supported within a system are more likely to undermine its healthy functioning (Bowlby, 1980; Coleman, 1988; Wentzel, 1996, 1997). As Elgar, et al. (2003) explain, "insecurely attached children, compared to securely attached children, are more likely to feel mistrust and anger towards the caregiver, to fail to internalise the caregiver's values, and to have less opportunity to develop the skills needed to regulate affect" (p. 37). Decades of research supports this inference in adolescence as well, as teenagers who do not feel secure in their relationships with their families and friends demonstrate compromised socioemotional development, poorer psychosocial functioning, and higher risk for criminal activity (Allen et al. 1998; Armsden & Greenberg, 1987; Elgar et al., 2003; Shyamala, McGee, & Stanton, 1992; Simons, Paternite, & Shore, 2001; Windle, 1992). The relation between insecure attachment and poor affect regulation is documented in the findings of Sund and Wichstrom (2002), who reported alienation subscores on a self-report measure of attachment to be the strongest predictor of severe depressive symptoms in their longitudinal study of 2,360 young adolescents.

By contrast, perceived levels of social support correlate significantly with indices of adjustment and reduced levels of psychological distress and conduct problems.

Sources of support in children's and adolescents' lives can range from family members to other significant persons, such as peers and teachers (Berndt, 1989; Bukowski & Hoza, 1989; DuBois et al. 1994; Parker & Asher, 1993; Soucy & Larose, 2000; Wentzel, 1996). For instance, intimate friendships are positively related to higher self-esteem and prosocial behaviour, higher peer popularity, and fewer emotional problems (Berndt & Savin-Williams, 1993; Hartup, 1992). Also, middle adolescents' perceptions of social support from both teachers and peers are related to their pursuit of prosocial goals (helping and cooperating) and social responsibility goals (following classroom rules and norms) (Wentzel, 1996). Teacher and peer support appear to play complementary roles, with peers seen as a source of companionship and emotional support, and teachers providing opportunities for self-expression and autonomous decision-making, and setting standards for performance (Youniss & Smollar, 1985; Wentzel, 1996), potentially enhancing academic success and social integration.

Social Support and School Adjustment.

Of particular relevance to the education system, attachment theory predicts that perceived support affects school adjustment, and hence the risk for dropout in middle adolescence. As Kerns et al. (2000) hypothesize,

> a secure attachment should foster exploration of the environment (Ainsworth et al., 1978), including the school setting. In addition, securely attached children are expected to be more engaged, more persistent, and more enthusiastic when tackling challenging tasks than are insecurely attached children (Sroufe, 1983, 1988). (p. 616)

Securely attached children are expected to have fewer school adjustment problems and to regulate their emotions better than insecurely attached children (Kerns et al., 2000).

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Research involving both children and adolescents confirms these expectations, as students who feel supported in their relationships show more positive academic adjustment and motivation (Kerns et al., 2000; Learner & Kruger, 1997; Wentzel, 1998), and greater academic, social, and emotional adjustment (Cauce, 1986; DuBois, Felner, Sherman, & Bull, 1994b; Muris, Meesters, van Melick, & Zwambag, 2001; Soucy & Larose, 2000). Berndt and Keefe (1996) also posit a relationship between friendship and school adjustment in terms of appropriate classroom behaviour, academic achievement, and positive attitudes toward classes, teachers, and other school experiences. Carlivati (2001), as well, found perceptions of high peer support to be predictive of scholastic competence and students' GPA, while perceived high maternal support is related to students having stronger connections to school and less likelihood of being suspended, expelled, or dropping out of school.

By contrast, adolescents who report a lack of supportive relationships are at greater risk of having academic problems (DuBois, Felner, Meares, & Krier, 1994a; Midgley, Feldlaufer, & Eccles, 1989; Phelan, Davidson, & Cao, 1991). Goodenow (1993), for example, found middle adolescents' sense of classroom belonging to be directly associated with their academic expectancies and values, two key components of academic motivation. Belonging and motivation, in turn, influenced actual classroom effort and achievement; that is, a low sense of classroom belonging was associated with low academic expectancies and values, as well as low classroom effort and achievement.

Importantly, the presence of secure and satisfying connections with others, or relatedness, fosters internalization of their important values (Goodenow, 1993). Further,

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"relatedness may have a domain-specific influence, such that the sense of belonging and of being supported in a particular context (e.g., school) should enhance motivation and engagement in that context" (Goodenow, 1993, p. 23). Goodenow's results support that hypothesis, as she identified 'teacher support' as the single dimension of belonging and support explaining more than one third of students' rating of the importance, interest, and value of the academic work of that class. DuBois et al. (1994b) more specifically observed that perceptions of support from high school personnel were associated with a variety of positive academic and socioemotional outcomes in socioeconomically disadvantaged youths, such as higher GPA, fewer absences and suspensions from school, and lower tobacco/alcohol or illicit drug use, reflective of increased motivation and engagement. Skinner and Belmont (1993) also found that the teacher's "affection, attunement, dedication of resources, and dependability" shape the extent to which students "feel that their needs are met, not only for relatedness but also for competence and self-determination" (p.577). Similarly, Croninger and Lee (2001) concluded that teacher trust, and communication through informal guidance talks, increased adolescents' likelihood of persisting through graduation.

Peer Support and School Adjustment

The concept that belonging and support enhance context-specific motivation and engagement applies to peer relatedness as well, although not always in ways that promote socialization in the larger sphere. Since students at risk for school dropout report relatively low feelings of relatedness to teachers and peers in the school context (Catterall, 1998; Croninger & Lee, 2001; Fine, 1986; MacLeod, 1987; Statistics Canada 1993,

1995), they might feel more supported by and affiliated with others who are similarly at risk, or who have already dropped out of school. Hymel et al. (1996) suggest that students at risk for school dropout do not necessarily lack social integration, but may affiliate with "peers who do not identify with or participate in the school context and who do not encourage school completion" (p. 327). These assumptions are consistent with Statistics Canada's (1995) findings that significantly more dropouts than graduates had close friends outside of school (70% versus 45%) and were less likely to actively participate in classroom or extracurricular activities. Ellenbogen and Chamberland (1997) identified similar trends, in that actual dropouts and future dropouts have more dropout friends; future dropouts are more likely to be rejected by their school peers; and at-risk individuals usually lack integration into their school's social network. Best friends, close friends, and peer groups do tend, however, to participate in similar kinds of risk-taking behaviour, such as the use of alcohol, drugs, and cigarettes (Ryan, 2000). Thus, while perceptions of high affiliation with highly motivated peers who participate in the school community have a positive effect on socialization expectations, perceptions of high affiliation with disaffected peers have a negative effect (Kindermann, McCollam, & Gibson, 1996).

Researchers caution, furthermore, that problems in adjustment are more likely when the sources of social support and self-esteem are not reasonably balanced between adult- and peer-oriented domains. Greater levels of externalizing problems are associated with stronger peer-oriented sources of support than sources within family or school (Dubois, Burk-Braxton, Swenson, Tevendale, Lockerd, & Moran, 2002; Goodenow, 1993). Externalizing problems, in turn, are predictive of greater risk for school dropout.

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Community Support and School Adjustment

A specific form of community relatedness, known as closure, is an essential element fostering students' connection to school, and adherence to social norms (Coleman,1988). Closure refers to supportive relations (discussion, consensus-seeking, communication, and reinforcing of each other, and so on) among various members of a community through which they can combine forces to constrain or promote particular actions, using collective sanctions and rewards. Thus, parents monitor, guide, reward, and reprove not only their own children, but those of their friends and neighbours as well. Where interpersonal and intergenerational closure exists between schools and communities, student behaviours and actions conform more closely to socially productive adult norms; with weaker school or community relationships, students develop peer cultures with norms and values often incompatible with acceptable adult community standards. Hence, they are more likely to act in ways antagonistic to society's norms, including skipping school or classes and engaging in behaviours that result in disciplinary action, factors which have been shown to increase the likelihood of early school dropout.

As Croninger and Lee (2001) convincingly argue, "young people who face economic and social hardships at home are especially dependent on schools for support and guidance if they cannot find these forms of social capital elsewhere in their lives" (p. 549). A difficulty arises, however, in initially identifying those students who feel least supported and most alienated from society. In addition, while many researchers suggest feelings of alienation, disenfranchisement, or isolation underlie the risk for school

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dropout, few studies have examined this empirically (Hymel et al., 1996). Furthermore, an extensive literature search has found no studies where concurrent perceptions of mother, father, peer, and teacher support in middle adolescents at risk and not at risk of school dropout were measured or compared. Little is known, therefore, about the strength of the relations among these four sources of support in middle adolescence, the statistical significance of differences between these sources of support, and whether perceptions of support differ significantly in adolescents who are or who are not at risk. More needs to be known, as well, about the specific facets of support 'at risk' students' might perceive as deficient, such as trust, communication, and/or affiliation, and in which specific relationships, such as with mother, father, peers, and/or teachers. Also lacking is an understanding of the relation between perceptions of these sources of support and indices of academic risk for school dropout, and whether these relations differ significantly in adolescents who are or who are not at risk.

Research Questions

The main purpose of the present study, therefore, is to examine and compare differences in the relation among perceived mother, father, peer, and teacher support, and the relation between perceived support and indices of risk of school dropout in 'at risk' and 'not at risk' middle adolescents. Hence, this study addresses the following questions: (1) Do middle adolescents perceive different degrees of social support from various sources, and do perceptions of sources of social support in adolescents at academic risk and not at academic risk of school dropout differ?

Research has shown that adolescents who demonstrate greater academic adjustment and fewer discipline problems report more supportive familial relationships, and that students who display more positive academic and socioemotional outcomes perceive stronger support from school personnel (Cauce, 1986; DuBois, Felner, Sherman, & Bull, 1994b; Kerns et al., 2000; Learner & Kruger, 1997; Muris, Meesters, van Melick, & Zwambag, 2001; Soucy & Larose, 2000; Wentzel, 1998). Therefore, students who were not at risk were expected to report higher perceptions of mother, father, and teacher support and lower perceptions of alienation from these sources than those who were at risk. Moreover, research has demonstrated that secure adolescents favour mothers over other sources of support, and that insecure adolescents report peers over parents as stronger sources of support. Therefore, 'not at risk' adolescents were expected to report greater support from mothers over fathers, peers, and teachers, while 'at risk' adolescents were expected to report more support from peers than from mothers, fathers, or teachers. While much research indicates that perceptions of peer support at school is associated with school adjustment, others suggest that adolescents at risk of school dropout also perceive support from their peers outside of school. Therefore, one would expect that perceptions of peer support would not differ significantly between 'at risk' and 'not at risk' adolescents.

(2) Do the strengths of associations among sources of social support differ in adolescents at risk and not at risk of school dropout?

Attachment theory predicts that children's attachment styles typically would be consistent across attachment figures. That is, the IWM of adolescents who are doing well

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would be based on experiences of trust and security, positive communication, and affiliation, and they would perceive mother, father, peers, and teachers as trustworthy and supportive. Hence, one would expect there to be a positive correlation among the corresponding sub-scales for the different attachment figures. The researcher is unaware of specific research examining this particular issue in 'at risk' middle adolescents. However, given the relationship between insecure attachment and increased discipline problems, we might expect that 'at risk' adolescents generally would have an insecure attachment, and a more pessimistic perception of the trustworthiness and responsiveness of the adults in their lives. Hence, we would expect fewer correlations among the corresponding sub-scales for the adult attachment figures.

(3) Do the strengths of associations between perceived social support and indices of academic risk differ in these two groups?

Research suggests that students with strong school adjustment perceive higher levels of familial, peer, and teacher support. Therefore, negative correlations between support variables and risk variables would be expected in students who were not at risk. Conversely, positive correlations between mother, father, peer, and teacher alienation and risk variables would be expected for students who were at risk.

(4) Are responses on a measure of social support or attachment related to the likelihood of being at risk of school dropout?

Research has shown that risk variables used in this study are associated with insecure attachment. It was expected, therefore, that responses on a measure of attachment would be related to the likelihood of inclusion in the 'at risk' group.

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CHAPTER 3:
METHOD

Participants

Seventy-five seventh, eighth, and ninth grade students voluntarily participated in this study. Participants ranged in age from 11.8 to 16 years, with a mean of 14.37 ($\underline{SD}$ = .84). Participants were recruited from one alternate and two regular middle schools in a suburban community in British Columbia. Five criteria were used to assign students to one of two groups: adolescents at academic risk of school leaving versus those not at academic risk of school leaving. Adolescents were included in the 'at risk' group if at least two of five possible academic risk factors were evident in their school record for the current academic year: 1) a "Fail"or "Incomplete" final grade in at least two core academic courses (Math, Science, English, Social Studies); 2) four or more discipline reports; 3) two or more in-school or out-of-school suspensions; 4) 20 or more absences; or 5) any history of grade retention. These stringent selection criteria were designed to discriminate between those adolescents already experiencing serious academic and social difficulties and those who were not. These or other similar but less rigorous criteria have been used to describe students as academically at risk in other studies (Allen et al., 1998; Carlivati, 2001; Catterall, 1998; Croninger & Lee, 2001; Rumberger, 1987). The 'not at risk' group consisted of 38 students (26 girls and 12 boys). The 'at risk' group included 37 students, (10 girls and 27 boys).

Instruments

Inventory of Parent and Peer Attachment, revised (IPPA, Armsden & Greenberg, 1989; Appendix A). Perceived mother, father, and peer support was assessed using this

self-report questionnaire. Founded on the concepts of attachment theory, the IPPA assesses the "affectively toned cognitive expectancies" (Armsden & Greenberg, 1987, p. 431) associated with internalized representations of mother, father, and peer attachment, in an effort to gauge the relative importance of parental and peer attachment in adolescence and young adulthood. The IPPA consists of three 25-item independently scored scales, assessing the participant's current perceptions of support in his/her relations with his/her mother, father and close peers. The mother and father scales are identical. The peer scale has one fewer item assessing communicative support, and one additional item assessing alienation. In addition, one question measuring trust, two questions assessing communication, and three questions assessing alienation are different on the parent and peer questionnaires.

The items on each of these scales were developed to discriminate three aspects of psychological security described in Bowlby's (1982) theory: trust, positive communication, and feelings of alienation. Trust refers to felt security that the attachment figure is consistently available, sensitive, and responsive to the adolescent's emotional needs. Communication refers to the degree and quality of verbal communication between the adolescent and the attachment figures. Alienation refers to the emotional isolation from or felt anger toward attachment figures. The student must rate each item on a 5-point Likert scale ranging from 1 = almost never true to 5 = almost always true. Sample items include "My mother understands me" (trust), "I tell my mother about my problems and troubles" (communication), and "I get upset easily around my mother" (alienation).

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Perceptions of teacher support were assessed using a modified version of the peer scale described above. The items that appeared on the teacher measure were identical to those on the peer instrument, other than an adaptation of the IPPA asking participants to refer to their relationship with their teacher. Specifically, the word "teacher" was substituted for the word "friend" on Part III of the IPPA. As students in middle school may have more than one teacher, students were instructed to respond to the questions by referring to the one teacher they felt had influenced them most that year. A copy of that instrument is attached at Appendix B.

Research has reported that scores on the IPPA have high reliability, construct validity, and concurrent and convergent validity values (Armsden & Greenberg, 1987; Lopez & Gover, 1993; Lyddon, Bradford, & Nelson, 1993; Reis and Collins, 2000; Shaver and Mikulincer, 2004; Soucy & Larose, 2000). Armsden and Greenberg (1987) provide details of the procedures that led to the original version of the IPPA. Based on the administration of the attachment measure to samples of adolescents and college students between the ages of 16 and 21 years, the authors reported strong internal consistency: Cronbach's coefficient alphas were .91, .91, and .86 for the Trust, Communication, and Alienation parent subscales respectively. The comparable coefficients for peer subscales were .91, .87, and .72 (Armsden & Greenberg, 1987). Three-week test-retest reliabilities were also robust, with alpha's of .93 and .86 for summary scores on parent and peer attachment measures respectively (Armsden & Greenberg, 1987). In the original 1987 version, a summary score for each scale was calculated by summing Trust and Communication raw scores and subtracting the

Alienation raw score, providing a rating for parents and peers. Acknowledging the problems inherent in the difference score method, Armsden and Greenberg (1989) created a revised version of the IPPA with a separate rating for mother, father, and peers, and recommend the use of individual sub-scale scores rather than the difference score.

In the revised version, used in this research, all negatively worded items and items measuring alienation were reverse-scored and the 25 items were summed for each scale, providing summary scores of perceived support. While there are equal numbers of items measuring trust on the mother, father, peer, and teacher questionnaires, the number of items measuring communication and alienation on the parent questionnaires differs from the peer and teacher scales. Rather than a summary score, the mean response score for each of the sub-scales were used to compare the students' responses between sub-scales.

While some researchers (de Haas, Bakermans-Kranenburg, & Ijzendoorn, 1994; Resnick, 1991) suggest that self report measures are unsuitable for accessing information about IWM as assessed by the Adult Attachment Interview (AAI), Shaver and Mikulincer (2004) argue that there is substantial and growing evidence that criticisms of self-report attachment measures advanced by researchers from the AAI tradition are exaggerated, if not completely invalid. Results of Shaver and Mikulincer's (2004) extensive review of empirical data "add to the construct validity of self-report attachment measures and bolster our confidence in these measures as suitable instruments for exploring the psychodynamics and interpersonal processes addressed by attachment theory" (p. 44). Moreover, Shaver and Mikulincer (2004) cite the IPPA as a "good example of self-report measures of parent-child attachment" (p. 163).

Academic Risk Data. Information regarding risk of school leaving was obtained from school records for the current academic year, such as: (1) number of days absent; (2) number of out-of-school suspensions; (3) number of in-school suspensions; (4) number of reportable incidents or discipline reports; (5) number of years behind the age-appropriate grade level; and (6) number of core academic courses receiving a final failing or Incomplete grade. Students were assigned to one of two groups, 'At risk' or 'Not at Risk' based on the presence or absence of these indices of risk (See Appendix C).

Procedure

School Board approval for participation of students was obtained following submission of an "Application to Conduct Research" form, a sample questionnaire and parent consent form, a letter of interim approval from Simon Fraser University's (SFU) Ethics Committee, and a statement of written approval and support from the researcher's Faculty Advisor outlining the reasonableness of the request, the experimental design, the sampling procedures, and the suitability of the research instrument. "Request for Ethical Approval of Research" forms were submitted to Simon Fraser University, and approval was granted. A letter seeking permission to conduct research was sent to principals of five middle schools (see Appendix D). Three principals gave their approval, with a total of five classes participating. A letter was sent to all parents in the five classes, (see Appendix E) explaining that this research was focussing on how teenagers' perceptions of supportive relationships with their parents, their teachers, and their peers relate to their functioning at school. It indicated that participation was voluntary, and that a participant could withdraw from the study at any time. The letter also described the questionnaire,

the benefits and lack of personal risks involved, the assurance of confidentiality, and that each student would receive a token of appreciation (pizza and/or a gel pen). It explained that results of the study would help school personnel to better meet the needs of their students. A similar letter (see Appendix F) was distributed out and read to the students of each class involved, and any questions the students had were answered by the researcher. An "Informed Consent for Minors or Captive and Dependent Populations" form was sent to each parent who indicated their child wished to participate and that they had given permission to do so (see Appendix G). Seventy-five parents, or 53 percent of those asked, returned signed consent forms, and their children participated in the study.

The self-report measures were administered in groups of up to 22 students, during regular school hours, by the same researcher. Students did not place their names on the questionnaires and were assured complete confidentiality. Students required between 15 and 20 minutes to complete the questionnaires. Information regarding school adjustment indicators was gathered at the end of the school year. Students who met the criteria for academic risk were assigned to the 'At Risk' group; those who did not were assigned to the 'Not At Risk' group. Assigned code numbers, rather than students' names, were used to track their questionnaires and relevant data.

CHAPTER 4:
RESULTS

Data Analysis

Reliability. The Statistical Program for the Social Sciences (SPSS) was used in all analyses. Cronbach's alpha analyses were performed to assess the internal consistency of mother, father, peer, and teacher trust, communication, and alienation scores. Cronbach alphas for the composite scores were .94 for mothers; .96 for fathers; .94 for peers; and .93 for teachers. Cronbach alphas for the sub-scales were as follows: .90 for mother trust; .88 for mother communication; .81 for mother alienation; .95 for father trust; .92 for father communication; .81 for father alienation; .94 for peer trust; .91 for peer communication; .72 for peer alienation; .94 for teacher trust; .88 for teacher communication; and .49 for teacher alienation. This very low Cronbach's alpha for teacher alienation undermines the confidence in interpreting results for analyses relating to that variable.

Means and standard deviations for the demographic variables are presented in Table 4.1.

Table 4.1   Demographic Variables for 'At Risk' and 'Not at Risk' Adolescents

		At Risk	Not At Risk
N		37	38
Age (in years)			
	mean	14.5	14.3
	sd	0.9	0.7
Gender			
	Male	73.0%	27.0%
	Female	31.6%	68.4%

Research Question 1

The first research question addressed whether middle adolescents perceived differing degrees of social support from various sources, and whether perceptions of social support in adolescents at risk and not at risk of school dropout differed. A 2 x 2 x 4 (risk status x gender x source of support) repeated measures mixed analysis of variance (ANOVA) was performed for the whole sample. Given the gender imbalance in the two groups, gender was considered as an independent variable to determine if it was a confounding variable.

The ANOVA was used to determine both between-participants and within-participants effects. The between-participants effects assessed whether means for perceived trust, communication, and alienation differed significantly between risk status groups or gender groups. Within-participants effects assessed whether the means of individuals' summary scores for perceived trust, communication, and alienation differed significantly, and whether there was a significant difference in the pairwise comparisons of the means for the individuals' perceived mother, father, peer, and teacher support. The within-participant repeated measures factor was perceived sources of support, and the four levels of this factor were mother, father, peer, and teacher support. The three measures entered in the analyses were the sub-scales trust, communication, and alienation. The between-participants factors, or independent variables, were at-risk-status and gender. The dependent variables were the students' scores on the sub-scales.

SPSS tests the assumption of sphericity with Mauchly's test. That is, it tests the hypothesis that the variances of the differences between the risk groups are equal (Field,

2000). Where Mauchly's test revealed significant differences in these variances ($p < .05$),

the Huynh and Feldt (1976) correction factor was applied to the degrees of freedom used

to assess the observed value of F. The Bonferroni technique was used to reduce the risk

of Type I errors by adjusting the alpha level.

Means and standard deviations for perceived trust, communicative support, and

alienation are presented at Table 4.2.

Table 4.2 **Means and standard deviations for perceived trust, communicative support, and alienation**

	Mean	SD
Trust		
At Risk	4.08	.58
Not at Risk	3.60	.61
Communicative Support		
At Risk	3.50	.61
Not at Risk	3.10	.68
Alienation		
At Risk	2.23	.53
Not at Risk	2.72	.64

Main Effects Between Adolescents Who Were and Were Not At Risk. The

ANOVA revealed a risk status main effect for perceived trust ($F[1,72] = 10.60, p = .002$),

communication ($F[1,72] = 6.04, p = .016$), and alienation ($F[1,72] = 11.73, p = .001$).

Specifically, the adolescents who were not at risk reported significantly higher means than

those who were at risk for perceived trust and communicative support, and significantly

lower alienation score means. These results indicate that adolescents who are not at risk

perceived higher levels of trust and communicative support, and lower levels of

alienation from various sources than did those who were at risk.

Differences in Perceptions of Social Support Within Participants. Within-

participant main effects also were found in scores for the entire sample for perceived trust

($F[2.9,72] = 16.3, p = .000$), communication, ($F[2.8,72] = 22.4, p = .000$) and alienation

($F[2.5,72] = 5.4, p = .003$). These results indicate significant differences in the extent of

support students felt they received; that is, they perceived differing levels of trust,

communication, and alienation in their relationships with parents, peers, and teachers.

To more precisely locate the mean differences contributing to these findings,

pairwise comparisons of means of mother, father, peer, and teacher support variables,

provided in the repeated measures ANOVA, were interpreted. These revealed that the

middle adolescents in this study, regardless of risk status, perceived mothers as more

trustworthy than fathers ($p = .000$) and teachers ($p = .000$). They also perceived mothers

as stronger sources of communicative support than fathers ($p = .000$) and teachers ($p =$

.000). As well, they perceived less alienation from mothers than fathers ($p = .020$). They

perceived peers as more trustworthy than fathers ($p = .003$) and teachers ($p = .000$).

Peers also were perceived as greater sources of communicative support than fathers ($p =$

.000) and teachers ($p = .000$).

No main effects were found for gender, nor was the Group x Support Source x

Gender interaction significant ($p > .05$). This suggests that any group differences were

related to risk status rather than to gender.

Repeated Measures ANOVAs for Adolescents at Risk and Not At Risk. The ANOVA for all participants did reveal that there were significant differences in perceived levels of support among the four support sources, within participants. It also revealed that there were differences between groups in the sub-scale scores for trust, communication, and alienation. However, it did not distinguish the sources of support on which the summary scores of adolescents who were and who were not at risk differed. Therefore, a separate repeated measures ANOVA was performed for each group, to identify and compare differences in mother, father, peer, and teacher overall support perceived by students who were and who were not at risk. As in the whole group ANOVA, the within-participant repeated measures factor was perceived sources of support, and the four levels of this factor were mother, father, peer, and teacher support. The three measures were the sub-scales trust, communication, and alienation. Means and standard deviations for social support summary scores for the two groups are presented in Table 4.3.

Table 4.3   **Means and standard deviations for social support summary scores for 'not at risk' (N = 38) and 'at risk' (N = 37) adolescents.**

	Group	Mean	St. Dev.
Mother Support	Not At Risk	105.46	17.82
	At Risk	91.29	19.03
Peer Support	Not At Risk	97.03	21.87
	At Risk	93.63	17.53
Father Support	Not At Risk	84.77	25.37
	At Risk	73.94	25.94
Teacher Support	Not At Risk	82.83	15.19
	At Risk	72.60	20.44
Overall Perceptions of Social Support	Not At Risk	370.09	50.28
	At Risk	331.46	55.47

Perceived Support Summary Score Differences Between Participants. Results indicate that adolescents who were not at risk perceived significantly greater support from mothers ($F[1,68] = 10.3, p = .002$) and teachers ($F[1,68] = 5.6, p = .020$) than did adolescents who were at risk. There were non-significant differences between groups regarding support perceived from peers ($F[1,68] = .52, p = .475$), and fathers ($F[1,68] = 3.1, p = .082$).

Perceived Support Summary Score Differences Within Participants. For adolescents who were not at risk, perceptions of mothers as sources of support were significantly higher than perceptions of fathers ($p = .000$) or teachers ($p = .000$) as sources of support, and perceptions of peers as sources of support were significantly higher than perceptions of teachers as sources of support ($p = .006$). There were non-significant

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differences between perceptions of mothers and peers, peers and fathers, and fathers and teachers as sources of support.

For adolescents who were at risk, mothers were perceived as significantly greater sources of support than fathers ($p = .006$) and teachers ($p = .003$). Peers were perceived as greater sources of support than fathers ($p = .000$) and teachers ($p = .000$). There were non-significant differences between perceptions of mothers and peers, and between perceptions of fathers and teachers as sources of support.

These results indicate consistent perceptions of support availability across sources of support, albeit gradually diminishing in strength, for adolescents who were not at risk. Mothers and peers were seen as equally supportive, as were peers and fathers, and fathers and teachers. For adolescents who were at risk, by contrast, fathers and teachers were perceived as significantly lower sources of support than mothers or peers.

These separate ANOVAs also yielded means and standard deviations for the distinct support variables, which are presented in Table 4.4. Means of perceived trust, communication, and alienation are depicted graphically at Figures 4.1, 4.2, and 4.3, respectively.

Table 4.4 Means and standard deviations for separate support variables for 'not at risk' (N = 38) and 'at risk' (N = 37) adolescents.

	Group	Mean	Std. Dev.
Mother Trust	Not At Risk	4.49	.53
	At Risk	4.02	.83
Peer Trust	Not At Risk	4.13	.95
	At Risk	4.04	.82
Father Trust	Not At Risk	3.82	1.11
	At Risk	3.19	1.22
Teacher Trust	Not At Risk	3.77	.88
	At Risk	3.14	1.14
Mother Communication	Not At Risk	4.02	.68
	At Risk	3.39	.90
Peer Communication	Not At Risk	3.76	1.12
	At Risk	3.54	.90
Father Communication	Not At Risk	3.06	1.08
	At Risk	2.65	1.13
Teacher Communication	Not At Risk	2.97	.77
	At Risk	2.80	1.04
Mother Alienation	Not At Risk	2.03	.72
	At Risk	2.64	.97
Peer Alienation	Not At Risk	2.24	.76
	At Risk	2.48	.79
Father Alienation	Not At Risk	2.48	1.02
	At Risk	3.00	1.09
Teacher Alienation	Not At Risk	2.26	.56
	At Risk	2.75	.67

Figure 4.1. Mean trust item ratings by source for each group.
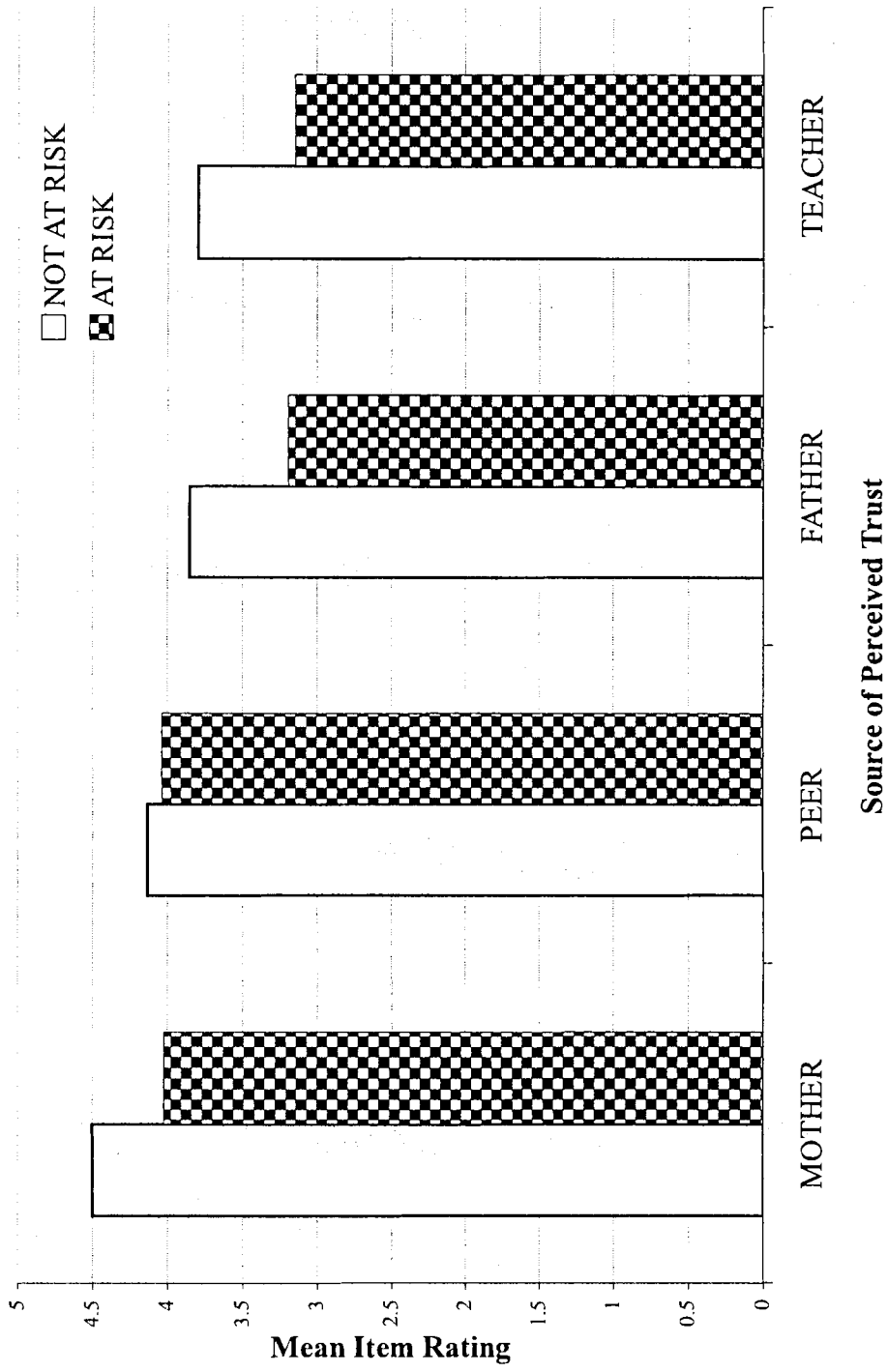
Figure 4.2. Mean communication item ratings by source for each group.
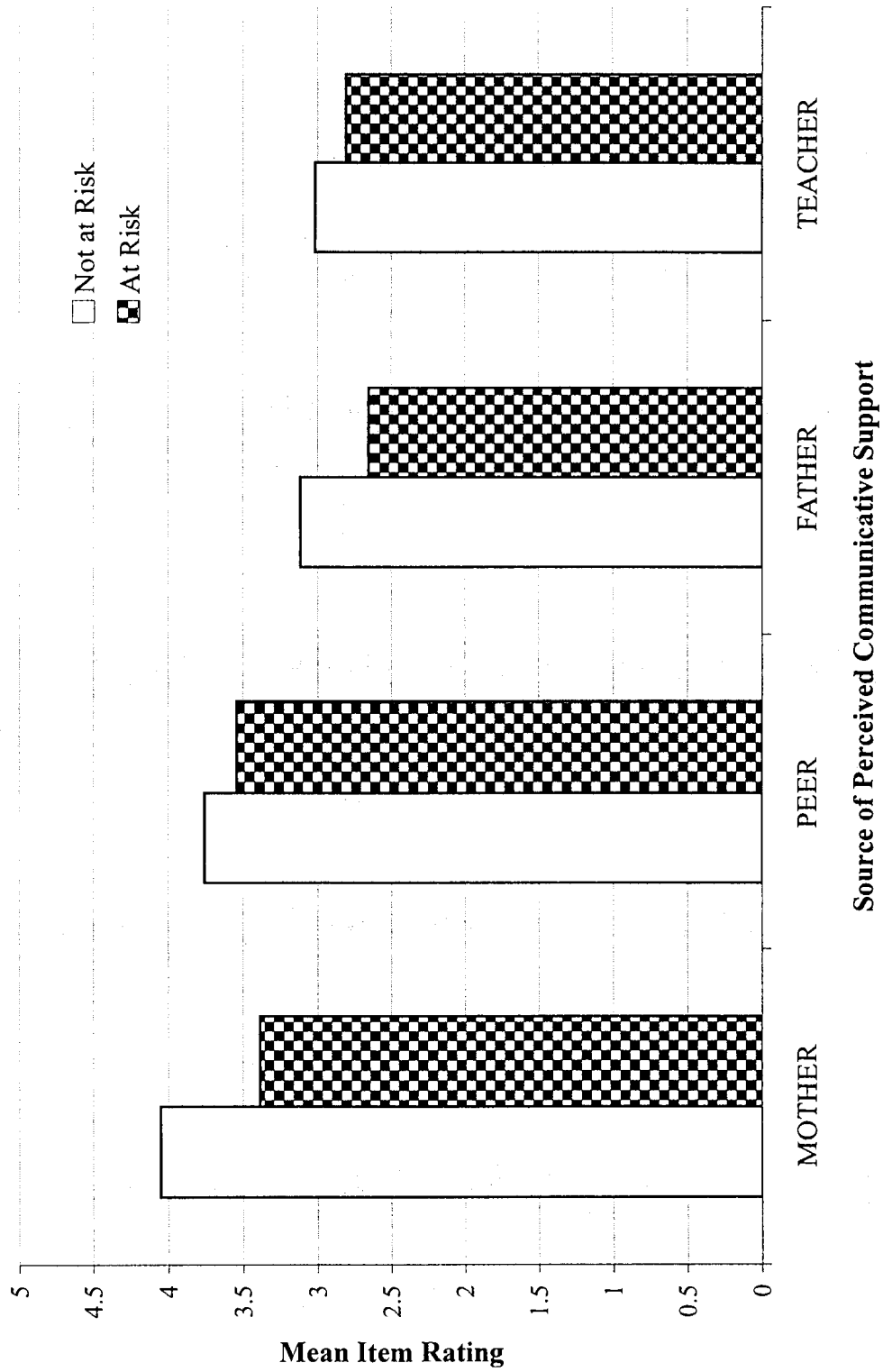
Figure 4.3. Mean alienation item ratings by source for each group.

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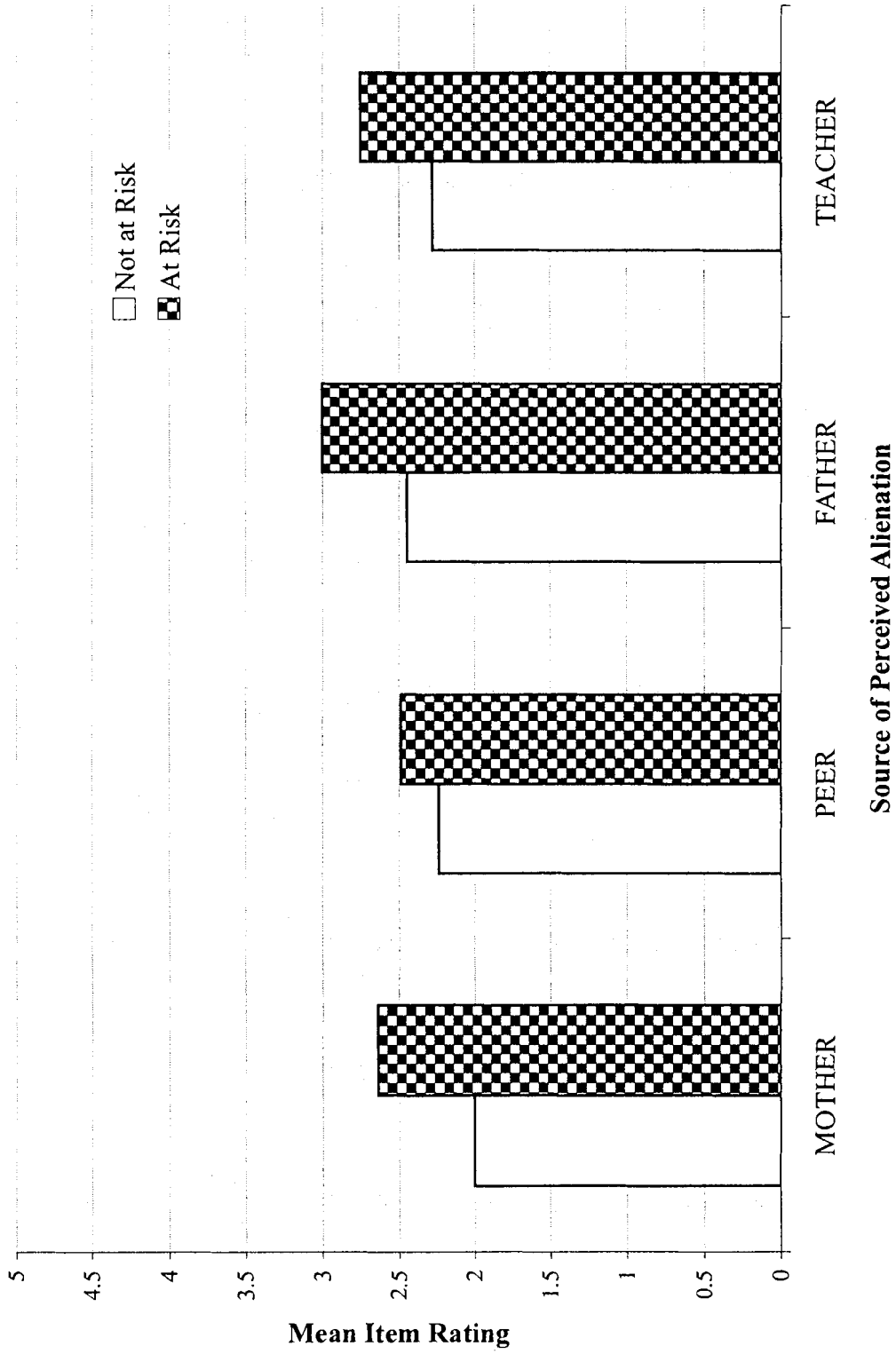
The ANOVA for adolescents who were not at risk indicated statistically significant risk status effects on summary scores for perceived trust $(F[2.4,86] = 6.4, p = .001)$, communication, $(F[2.3,82] = 13.7, p = .000)$ and alienation $(F[2.5,72] = 2.9, p = .059)$. The ANOVA for students who were at risk yielded similar results, with main effects of summary scores for perceived trust $(F[2.8, 72] = 10.9, p = .000)$, communicative support $(F[2.5,90] = 9.8, p = .000)$, and alienation $(F[2.7,72] = 3.4, p = .030)$. These results indicate that adolescents who were and who were not at risk perceived differing levels of trust, communicative support, or alienation in their relationships with mothers, fathers, peers, and/or teachers.

To determine whether the differences between the means of mother, father, peer, and teacher support variables were the same for adolescents who were and who were not at risk, pairwise comparisons of the means reported in Table 4.4, provided in the repeated measures ANOVA, were interpreted.

Sub-Scale Score Differences Within Participants, Adolescents Not At Risk.
For adolescents who were not at risk, as expected, students perceived mothers as more trustworthy than fathers $(p = .000)$ and teachers $(p = .000)$. They also perceived mothers as more communicatively supportive than fathers $(p = .000)$ and teachers $(p = .000)$. Finally, they perceived peers as greater sources of communicative support than teachers $(p = .004)$.

Contrary to expectations, while perceptions of mothers as sources of trust and communicative support were higher than those for peers, and perceptions of perceived alienation from mothers were lower than those for peers, the differences did not reach

statistical significance. As well, peers, fathers, and teachers were perceived as equally trustworthy, and perceptions of affiliation/alienation were equivalent for these sources of support. Perceptions of fathers and teachers, and of fathers and peers as sources of communicative support did not differ significantly. Peers were perceived as greater sources of communicative support than teachers. These results suggest that students who are not at risk perceive similar degrees of support from fathers, peers, and teachers, excepting with respect to peer/teacher communication, and mothers are perceived as greater sources of support than fathers or teachers.

Sub-Scale Score Differences Within Participants, Adolescents At Risk. For students who were at risk, pairwise comparisons of means of mother, father, peer, and teacher support variables also revealed that they perceived mothers as more trustworthy than fathers ($p = .003$) and teachers ($p = .007$). They also perceived peers as more trustworthy than fathers ($p = .001$) and teachers ($p = .002$). They viewed peers as greater sources of communicative support than fathers ($p = .000$) and teachers ($p = .007$). They perceived mothers as sources of greater communicative support than fathers ($p = .003$). Moreover, they perceived equivalent levels of affiliation/alienation between all pairs of sources. Further, there were non-significant differences between mothers and peers, and between fathers and teachers with respect to perceived trust and communicative support.

Again unexpectedly, students who were at risk perceived mothers and peers as equally trustworthy and as equal sources of communicative support. They also perceived themselves as equally affiliated to mothers and peers. Peers were seen as greater sources of communicative support than teachers, while mothers and teachers were perceived as

equal sources of communicative support and affiliation. These results suggest that adolescents who were at risk perceived their mothers and peers as similar sources of support. Fathers and teachers, who also were perceived similarly in terms of support availability, were ranked lower than mothers and peers as sources of support, although there was less disparity between perceived support from mothers and teachers than from peers and teachers.

Differences Between Groups in Relative Strengths of Sources of Support. Comparing the results for the two groups, the ANOVA revealed that the relative strength of perceived peer support over sources other than mother differed between groups. For example, adolescents who were at risk perceived peers as significantly more trustworthy and as greater sources of communicative support than fathers, and they perceived peers as significantly more trustworthy than teachers. By contrast, there was a non-significant difference between these variables for adolescents who were not at risk. These results indicate that, for adolescents who were at risk, peers were perceived as greater sources of support than fathers or teachers, whereas adolescents who were not at risk perceived peers, teachers, and fathers as equivalent sources of supportive communication and affiliation (again excepting peer/teacher communication), and as equally trustworthy.

As well, for students who were at risk, mothers and teachers were perceived as equivalent sources of communicative support, whereas students who were not at risk perceived their mothers as significantly greater sources of communicative support. The equivalence of mothers and teachers suggests that, for students who were at risk, mothers were perceived as relatively weaker sources of communicative support, compared to the

perceptions of students who were not at risk, while peers were perceived as relatively stronger sources of communicative support.

A 2 x 4 (risk status x source of support) MANOVA was performed to identify which aspects of perceived support differed significantly between adolescents who were and who were not at risk. For means and standard deviations for the scores for these separate support variables, see Table 4.4.

Sub-Scale Score Differences Between Participants. Between-participants differences achieved statistical significance on the following variables: mother trust ($F[1,68] = 6.3, p < .01$); father trust ($F[1,68] = 4.2, p = .04$); teacher trust ($F[1,68] = 6.8 p < .01$); mother communication ($F[1,68] = 9.5, p < .003$); mother alienation ($F[1,68] = 8.1, p < .006$); father alienation ($F[1,68] = 3.5, p < .06$); and teacher alienation ($F[1,68] = 9.9, p < .002$).

On these variables, as expected, students who were not at risk reported higher levels of trust and communication, and lower scores on alienation than did students who were at risk. These results indicate that students who were not at risk trusted their mothers, fathers, and teachers more than did students who were at risk. As well, they perceived lower levels of alienation from mothers, fathers, and teachers than did students who were at risk. Moreover, they perceived mothers as greater sources of communicative support than did those who were at risk. Also as expected, those who were and who were not at risk perceived peers as similarly trustworthy, and as equivalent sources of support. Perceived levels of alienation from peers also were similar for adolescents at risk and not at risk of school dropout. Unexpectedly, both groups perceived similar levels of

communicative support from fathers and from teachers. As well, at the $p < .06$ level, only a marginal difference between groups was found with respect to perceptions of alienation from fathers.

Summary of Findings for Question 1. Thus, perceptions of social support differ between adolescents at academic risk and not at academic risk of school dropout. Adolescents who are not at risk trust mothers, fathers, and teachers more than adolescents who are at risk. They also see mothers as providing more communicative support. As well, they perceive less alienation from mothers, fathers, and teachers. Within participants, the adolescents in this study did perceive differing degrees of social support from various sources, and those perceptions differed by risk status. For adolescents who were not and were not at risk, perceptions of mothers and peers as sources of support were similar, as were perceptions of alienation from mothers, fathers, peers, and teachers. For those who were not at risk, peers, fathers, and teachers were seen as similar sources of support, except that peers are seen as greater sources of communicative support than teachers. For those who were at risk, peers were seen as greater sources of communicative support and as more trustworthy than fathers and teachers, whereas mothers were perceived as more trustworthy than fathers and teachers, and a greater source of communicative support than fathers.

Research Question 2

Pearson correlations were used to determine whether the strengths of the associations among the sources of social support differed in adolescents who were and who were not at risk of school dropout. Due to the gender imbalance between the two groups, a partial correlation was performed to control for gender effects. As well, owing

to the low internal consistency of the scores for perceived teacher alienation, this variable was not included in the correlations. The Bonferroni technique was used to reduce the risk of Type I errors by adjusting the alpha level. The resulting acceptable alpha level for this analysis was p<.004. Results are presented at Table 4.5.

Table 4.5   **Associations among sources of perceived support, controlling for gender. 'At risk' above diagonal; 'not at risk' below diagonal.**

	Mother Support	Father Support	Peer Support	Teacher Support
Mother Support		.24	.58**	-.08
Father Support	.54**		.35	.40
Peer Support	.24	-.15		.04
Teacher Support	.02	.14	.18	

Note: *$p < .004$

Perceptions of support from mothers and fathers were significantly related ($r = .54$, $p = .004$) for adolescents who were not at risk, but were not significantly related for those who were at risk. For adolescents who were at risk, perceptions of support from mothers and peers were associated ($r = .58$, $p = .004$). This was not the case for those who were not at risk.

To evaluate whether the groups' correlations were significantly different from one another, Fisher's r to Z transformations were performed. The difference between perceptions of support from fathers and peers for adolescents who were and who were not at risk reached statistical significance ($Z = 2.13$, $p = .03$). This result indicates that perceptions of support from fathers and peers were more strongly related for adolescents

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who were at risk than for those who were not at risk.

Separate Pearson correlations were computed for each group to assess the associations among the separate variables of support. The Bonferroni technique again was used to reduce the risk of Type I errors by adjusting the alpha level. The resulting acceptable alpha level for this analysis was $p < .000$. Results of these correlations for both groups are presented at Table 4.6.

Table 4.6   Correlations among support variables in 'at risk' and 'not at risk' adolescents. 'Not at risk' group (N=38) results above diagonal. 'At risk' group (N=37) results below diagonal.

	MT	MC	MA	FT	FC	FA	PT	PC	PA	TT	TC
Mother Trust (MT) r		.83*	-.79*	.60*	.50	-.41	.16	.12	-.19	.22	.22
Mother Communication (MC) r	.75*		-.81	.53	.54*	-.41	.28	.24	-.31	.32	.38
Mother Alienation (MA) r	-.59*	-.57*		-.44	-.46	.35	-.34	-.26	.53	-.29	-.24
Father Trust (FT) r	.22	.24	-.13		.82*	-.89*	.00	-.08	.00	.21	.23
Father Communication (FC) r	.26	.37	-.12	.87*		-.80*	-.05	-.09	.03	.02	.24
Father Alienation (FA) r	-.05	-.15	.26	-.53	-.46		.04	.12	.01	-.13	-.09
Peer Trust (PT) r	.37	.56*	-.23	.32	.35	-.18		.89*	-.67*	.35	.16
Peer Communication (PC) r	.41	.66*	-.10	.32	.40	-.03	.69*		-.46	.23	.11
Peer Alienation (PA) r	-.18	-.43	.43	-.01	-.17	.29	-.50	-.21		-.22	-.03
Teacher Trust (TT) r	-.15	-.10	.08	.34	.22	-.29	.04	.02	.14		.86*
Teacher Communication (TC) r	-.17	-.13	.25	.35	.31	-.15	.04	.14	.19	.74*	

Note: *$p < .000$

As revealed in Table 4.6, a number of statistically significant correlations among support variables in each of the groups were found. In both groups, for each of the sources of support, trust and communication were positively correlated with each other and negatively correlated with alienation, with strengths ranging from r = .59 to .89.

Differences were apparent, however, with respect to correlations among mother and father support variables. For adolescents who were not at risk, perceptions of mothers as trustworthy were positively correlated with perceptions of fathers as trustworthy (r = .60, p = .000) and as sources of communicative support (r = .50, p = .000). Similarly, perceptions of mothers as sources of communicative support were positively correlated with perceptions of fathers as sources of communicative support (r = .54, p = .000). These results indicate that adolescents who were not at risk, and who perceived mothers as trustworthy, were likely to perceive fathers as trustworthy, and as sources of communicative support. As well, those who perceived mothers as sources of communicative support were likely to perceive fathers in the same way. By comparison, for students who were at risk, correlations between perceptions of mothers and fathers as sources of support did not reach statistical significance.

For adolescents who were at risk, perceptions of mothers as sources of communicative support were correlated with perceptions of peers as trustworthy (r = .56, p = .000) and as sources of communicative support (r = .66, p = .000). These results indicate that adolescents who were at risk, and who perceived mothers as sources of communicative support, were likely to see peers as trustworthy and as sources of communicative support. For students who were not at risk, by comparison, correlations among mother and peer support variables did not reach statistical significance.

For adolescents who were and were not at risk no significant correlations were found among father and peer support variables, among parental and teacher support variables, nor among peer and teacher support variables.

Fisher's r to Z transformations were used to examine differences between groups in correlations among support variables. Significant group differences were found in correlations between the following support variables: father communication and alienation ($Z = 2.50$, $p = .01$); mother and father trust ($Z = 1.96, p = .05$); mother and teacher communication ($Z = 2.20, p = .03$); mother alienation and teacher communication ($Z = 2.07, p = .04$); and father and peer communication ($Z = 2.13, p = .03$). These results are discussed below.

Although there was a negative correlation for both groups between perceptions of fathers as sources of communicative support and perceptions of alienation from fathers, the correlation was much stronger for adolescents who were not at risk. This suggests that adolescents who were not at risk, and who viewed fathers as sources of communicative support, were less likely to feel alienated from them than were adolescents at risk who also perceived fathers as sources of communicative support. Alternatively, adolescents who were not at risk, and who felt affiliated with fathers, were much more likely to view them as sources of communicative support than adolescents who were at risk, and who perceived themselves as affiliated with their fathers.

Perceptions of mothers and fathers as trustworthy were positively correlated for students who were and who were not at risk. However, the correlation was much stronger for adolescents who were not at risk. This suggests that adolescents who were not at risk,

and who felt they could trust their mothers, were more likely to feel they could trust their fathers than were adolescents who were at risk.

Perceptions of mothers and teachers as sources of communicative support were positively correlated for students who were not at risk, and negatively correlated for students who were at risk. This indicates that students who were not at risk, and who felt they could talk with their mothers were likely to feel that they could talk to their teachers. By contrast, students who were at risk, and who felt they could talk with their mothers, were less likely to feel that they could talk with their teachers or *vice versa*.

Perceptions of alienation from mothers were negatively correlated with perceptions of teachers as sources of communicative support for students who were not at risk, and positively correlated for those who were at risk. This suggests that students who were not at risk, and who felt affiliated with their mothers, saw teachers as sources of communicative support, whereas students who were at risk, and who felt alienated from their mothers, tended to feel they could talk with their teachers.

Similarly, perceptions of fathers and peers as sources of communicative support were negatively correlated for students who were not at risk, and positively correlated for students who were at risk. This indicates that students who were not at risk, and who felt they could talk with peers, tended not to perceive fathers as sources of communicative support, whereas adolescents who were at risk, and who felt they could talk with peers, also felt they could talk with fathers.

Summary of Findings for Question 2. A moderate difference was found in the strengths of the associations among perceptions of support from various sources for

adolescents who were and who were not at risk of school dropout. For adolescents who were not at risk, a stronger relationship was apparent between perceptions of trust in mothers and fathers, between perceptions of mothers and teachers as sources of communicative support, between perceptions of alienation from mothers and teachers as sources of communicative support, and between perceptions of fathers and peers as sources of communicative support.

Research Question 3

Pearson correlations were used to determine whether the strengths of associations among variables of support and indices of risk of school leaving differed in students who were and who were not at risk. The acceptable alpha level for this analysis, following the Bonferroni adjustment, was $p < .000$. Results for adolescents who were not at risk are presented at Table 4.7, and for those who are at risk at Table 4.8.

Table 4.7   Associations Among Support Variables and Academic Risk Indices in 'Not at Risk' Adolescents (N = 38).

		Mother Trust	Mother Communication	Mother Alienation	Father Trust	Father Communication	Father Alienation	Peer Trust	Peer Communication	Peer Alienation	Teacher Trust	Teacher Communication
Grade Retention	r	.10	.20	-.11	.13	.23	-.12	.13	.12	.05	.15	.11
Percent Attendance	r	.10	.03	-.03	.14	.12	-.14	.32	.25	-.13	.05	.08
In School Suspension	r	-.23	-.18	.18	-.22	.01	.10	-.33	-.27	.29	-.23	-.05
Out of School Suspension	r	—	—	—	—	—	—	—	—	—	—	—
Discipline Reports	r	-.22	-.09	.19	-.01	.14	-.08	-.60*	-.55*	.42	-.07	.13

Note: *p < .000

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Table 4.8   Associations Among Support Variables and Academic Risk Indices in 'At Risk' Adolescents (N = 37).

		Mother Trust	Mother Communication	Mother Alienation	Father Trust	Father Communication	Father Alienation	Peer Trust	Peer Communication	Peer Alienation	Teacher Trust	Teacher Communication
Grade Retention	r	.20	.24	-.15	-.09	-.13	-.10	-.05	.38	.02	-.30	-.29
Percent Attendance	r	-.15	-.08	.17	.19	.01	-.07	.04	.03	.02	-.00	-.06
In School Suspension	r	-.05	-.18	.23	-.20	-.06	.17	-.07	-.32	.03	-.22	-.13
Out of School Suspension	r	.03	-.02	.07	-.35	-.13	.10	.04	-.24	-.20	-.26	-.19
Discipline Reports	r	.18	.16	.04	.01	.13	-.08	.25	.03	-.21	-.19	-.14

For adolescents who were not at risk, perceptions of peers as trustworthy were negatively correlated with discipline reports ($r = -.60$, $p = .000$). Similarly, perceptions of peers as sources of communicative support were negatively correlated with discipline reports ($r = -.55$, $p < .000$). These results indicate that students who were not at risk, and who perceived peers as trustworthy and as sources of communicative support, tended to have fewer discipline reports. As well, perceptions of peers as sources of support were more strongly related to positive school behaviour than were perceptions of parents or teachers as sources of support. By contrast, no significant correlations were found between perceptions of support and indices of academic risk for students who were at risk of school dropout.

Fisher's r to Z transformations were used to examine differences between groups in these correlations. Significant differences between groups were found in the following correlations: perceptions of peers as trustworthy with receiving discipline reports ($Z = 3.94$, $p < . 000$); perceptions of peers as sources of communicative support with receiving discipline reports ($Z = 3.63$, $p < .000$); and perceptions of alienation from peers with receiving discipline reports ($Z = -2.74$, $p < .006$). These results indicate that the relationship between students' perceptions of peer support and less disruptive school behaviour was much stronger for those who were not at risk than it was for those at risk.

Summary of Findings for Question 3. Perceptions of peers as sources of support appeared to be particularly salient for students who were not at risk. Those who were not at risk, and who perceived peers as trustworthy and as sources of communicative support were more likely to conform to school expectations. Those who were not at risk,

and who perceived themselves as affiliated with their peers also were less likely to require discipline at school. Perceptions of parents or teachers as sources of support were not significantly related to risk indices for students who were and who were not at risk. Moreover, perceptions of peer support were not significantly related to indices of academic risk for students who were at risk.

Research Question 4.

A binary logistic regression analysis was used to determine whether adolescents' responses to the IPPA were likely to be associated with risk status. To answer this question thoroughly, two analyses were performed. To determine which specific facets of perceived support were most likely to be associated with risk status, the first binary logistic regression included as covariates the mean scores for the subscales for mother, father, peer, and teacher trust, communication, and alienation. Means of these variables can be found at Table 4.4. The second logistic regression also included the summary scores for mother, father, peer, and teacher support to determine whether perceived support from any source was more likely to be associated with risk status than were distinct aspects of perceived support. For means of these variables, see Table 4.3. The binary dependent variable used in the logistic regression model was risk status. The method was forward stepwise likelihood ratio; each variable was entered into the regression equation in a stepwise fashion if it accounted for a significant proportion of variance in the dependent variable at the $p < .05$ significance level. Results for the first binary logistic regression are at Table 4.9.

Table 4.9 **Binary Logistic Regression of Likelihood of Association Between Risk Status and Perceptions of Aspects of Support**

| | B(SE) | 95% Confidence Interval. for exp b | | |
		Lower	exp(b)	Upper
Included				
Step 1				
Mother communication	-.99	.20	.37	.70
Constant	3.77		39.10	
Step 2				
Mother communication	-.82*	.23	.44	.86
Teacher alienation	1.04*	1.21	2.84	6.66
Constant	.42		1.53	

Note: *p < .02

For adolescents who perceived mothers as strong sources of communicative support or who perceived themselves as highly alienated from teachers, this model correctly classified 70.3% of the students who were at risk. Logistic regression results show that students who reported low perceptions of mothers as sources of communicative support (adjusted odds ratio = .44 Wald Chi-square = 5.86, df = 1, p = .016) were 44 percent more likely to be at risk. Similarly, students who reported high perceptions of alienation from teachers (adjusted odds ratio = 2.84, Wald Chi-square = 5.73, df = 1, p = .017) were almost three times more likely to be at risk. However, these latter results are mitigated by the low internal consistency of this aspect of the sub-scales.

The second binary logistic regression analysis was performed to assess whether perceptions of overall support from mothers, fathers, peers, and/or teachers also were

likely to be associated with risk status. As well, it was used to determine whether overall

perceived support from any of these four sources was more likely to be associated with

risk status than were the elements of support identified by the first regression. Again, the

binary dependent variable used in the logistic regression model was risk status, and the

covariates were the mean scores for mother, father, peer, and teacher trust,

communication, and alienation, as well as the summary scores for mother, father, peer,

and teacher support. The method was forward stepwise likelihood ratio; each variable

was entered into the regression equation in a stepwise fashion if it accounted for a

significant proportion of variance in the dependent variable at the $p < .05$ significance

level. Results are presented at Table 4.10.

Table 4.10   Binary Logistic Regression of Likelihood of Association Between Risk Status and Perceptions of Aspects/Overall Support

	B(SE)	95% C.I. for exp b Lower	exp(b)	Upper
Included				
Step 1 Mother support	-.04***	.929	.96	.99
Constant	4.30**		74.07	
Step 2 Teacher trust	-.68**	.296	.51	.87
Mother support	-.05***	.927	.96	.99
Constant	6.70***		842.09	

Note: ***$p < .001$; **$p < .01$

For adolescents who reported high perceptions of teachers as trustworthy or of

overall mother support, the model correctly classified 68.6% of the students who were not

at risk, and 77.1% of students who were at risk. The overall accuracy of classification is,

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therefore, the weighted average of these two values (72.9%). Logistic regression results show that students who reported low perceptions of teacher trust (adjusted odds ratio = .51 Wald Chi-square = 6.05, df = 1, p = .014) were 51 percent more likely to be at risk. Similarly, students who reported low perceptions of overall mother support (adjusted odds ratio = .96, Wald Chi-square = 8.16, df = 1, p = .004) were almost twice as likely to be at risk.

Summary of Findings for Question 4

These results suggest that perceptions of communicative support and overall support from mothers were associated with whether or not students were likely to be at risk of school dropout. Similarly, perceptions of alienation from teachers, and of teachers as trustworthy, were associated with whether or not students were likely to be at risk. Taken together, these results emphasize the importance of perceived support from mothers and teachers in the successful integration of adolescents within the school context.

Summary of Analyses

In summary, as expected, students who were at risk perceived significantly lower levels of trust and communicative support and higher levels of alienation from mothers, fathers and teachers than did students who were not at risk. Also as expected, for adolescents who were and who were not at risk, no statistically significant differences were found between perceptions of peers as trustworthy, as sources of communicative support, or as sources of overall support. As well, both groups perceived similar levels of affiliation with peers. Further, students who were and were not at risk perceived similar levels of communicative support from their fathers, and from their teachers.

Contrary to expectations, for students who were and who were not at risk, mothers and peers were perceived as equally reliable sources of overall support, and fathers and teachers were seen as equivalent sources of overall support. As well, for both groups, mothers were seen as greater sources of overall support than fathers and teachers. For adolescents who were not at risk, peers and fathers were seen as equivalent sources of support, but peers were perceived as greater sources of overall support than teachers. For those who were at risk, by contrast, peers were perceived as greater sources of overall support than fathers and teachers.

There were similarities in aspects of perceived social support. Both groups perceived mothers as more trustworthy than fathers and teachers. In addition, there were non-significant differences between perceptions of mothers and peers as trustworthy and as sources of communicative support. As well, for both groups, fathers and teachers were seen as equivalent sources of supportive communication. As well, both groups perceived mothers as greater sources of communicative support than fathers, and both perceived peers as greater sources of communicative support than teachers. Further, for both groups, perceptions of alienation did not differ significantly among sources of support.

Some differences between groups in perceptions of support were apparent, however. For students who were not at risk, fathers, peers, and teachers were perceived as equally reliable sources of overall support. By contrast, students who were at risk perceived peers as significantly greater sources of overall support than fathers or teachers. Unexpectedly, although students who were at risk perceived peers as more trustworthy than fathers and teachers, and as stronger sources of communicative support than fathers

and teachers, they perceived themselves as equally alienated from or affiliated with peers, fathers, and teachers.

Students who were not at risk, moreover, perceived mothers as more trustworthy than fathers or teachers, and peers, teachers, and fathers were perceived as equally trustworthy. In comparison, students who were at risk perceived mothers and peers as more trustworthy than fathers or teachers. Students who were not at risk perceived mothers as providing more communicative support than teachers, whereas students who were at risk perceived mothers and teachers as equal sources of communicative support. Conversely, for students who were at risk, peers were perceived as greater sources of communicative support than fathers, whereas fathers and peers were perceived as equivalent sources of communicative support for students who were not at risk. These differences arose from the lower perceptions of mothers and fathers as sources of support in students who were at risk compared to those who were not at risk, rather than from an increase in perceptions of teachers or peers as sources of support.

There were stronger relationships between perceptions of trust in mothers and fathers, and among perceptions of communicative support from and affiliation with mothers and teachers for students who were not at risk, compared to those who were at risk. Conversely, there was a stronger relationship between perceptions of overall support from fathers and peers for students who were at risk.

As well, an association was found between the likelihood of being at risk of school dropout and perceptions of mothers as sources of overall support, mothers as sources of supportive communication, teachers as trustworthy, and alienation from

teachers. Students who perceived mothers as strong sources of communicative support, and who perceived low levels of alienation from teachers, were much less likely to be at risk of school dropout. As well, those who perceived high levels of mother support overall, and who perceived teachers as trustworthy, were much less likely to be at risk.

Although the ANOVA did not find perception of mothers as sources of support to be significantly greater than perceptions of peers as sources support for students who were or were not at risk, the prominent role of perceptions of mothers as sources of support is apparent in their relationship to likelihood of risk status.

Cumulatively, these results also suggest a stronger and broader base of support for students who were not at risk than for students who were at risk, both in terms of the higher levels of perceived support and the fact that more sources are seen as equally reliable sources of support.

CHAPTER 5:
DISCUSSION AND CONCLUSIONS

Discussion

Many psychological and sociological epistemologies describe humans as integral elements within a nested hierarchy of symbiotic systems (Sheldrake, 1988), such as families, communities, and so on. Within such systems, social relations form the foundation of personal and societal well-being (Youniss & Smollar, 1985). Social relations also underlie mutually beneficial support systems that serve individual and societal interests (Coleman, 1988). Social support, a central facet of social relations, is the individual's intrinsic belief that he or she is valued, and belongs within a network of caring communication, mutual obligation, and trust (Cobb, 1976). When strong social support is perceived, one is more inclined to be a collaborative, contributing member of society and social integration is more likely (Coleman, 1998; Wentzel, 1996). When one perceives low social support and high alienation from others, one is more likely to contravene societal expectations and rules (Allen et al., 1998; Berndt, 1979; Elgar et al., 2003). Students who do not follow school rules and norms, and who experience less positive academic and socioemotional outcomes, are at greater risk of school dropout and are less likely to integrate socially.

Based on these concepts, one might expect students at risk of school dropout to perceive lower levels of trust and communicative support and higher levels of alienation from a variety of sources of social support than students who are not at risk of school dropout. However, I found no studies that examined this question empirically.

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Therefore, in this study, I investigated whether adolescents at risk and not at risk of school dropout perceived different degrees of social support from various sources. As well, I analyzed strengths of associations among sources of social support for differences between these two groups of adolescents. Further, I assessed whether strengths of associations between perceived social support and indices of academic risk differed in adolescents at risk and not at risk for school dropout. Finally, I considered whether responses on a measure of social support or attachment predicted risk status.

Differences in Perceived Support. In this study, adolescents who were at risk reported lower levels of perceived overall support from mothers and teachers than did students who were not at risk. Adolescents who were at risk perceived mothers, fathers, and teachers as significantly less trustworthy than did students who were at risk. They also perceived mothers as weaker sources of communicative support than did students who were not at risk. Students who were at risk perceived significantly greater alienation from mothers, fathers, and teachers than did students who were not at risk. These results suggest that adolescents who were not at risk felt affiliated with mothers, fathers, peers, and teachers, whom they perceived as reliably trustworthy and communicatively supportive. Hence, they appear to have internal working models consistent with secure attachment styles. Adolescents who were at risk felt comparatively alienated from mothers, fathers, and teachers, whom they perceived as untrustworthy, and communicatively unsupportive. Therefore, their internal working models appear consistent with insecure attachment styles.

Results from this study support Bowlby's (1969) theory that perceptions of less

responsive and accessible support from caregivers are associated with insecure attachment

styles. They also are consistent with previous research findings that insecure adolescents,

who are more likely to experience behavioural difficulties in school, also tend to perceive

lower parental and teacher support than secure students (Cauce, 1986; Croninger & Lee,

2001; Goodenow, 1993; Kerns et al., 2000; Learner & Kruger, 1997; Wentzel, 1998).

As expected, no statistically detectable difference was found between groups in

perceptions of peers as trustworthy, as sources of communicative support, or as overall

sources of support. Nor were there significant differences between groups in perceptions

of alienation from peers. These results are consistent with previous research indicating

that, although students who are at risk lack integration into the school environment, they

nonetheless can perceive strong support from peers outside the school context

(Ellenbogen & Chamberland; 1997; Hymel et al., 1996; Statistics Canada, 1995).

Interestingly, students who were at risk perceived fathers as significantly less

trustworthy than did students who were at not risk. They also perceived significantly

more alienation from fathers than did students who were not at risk. However, students

who were and were not at risk perceived equivalent levels of communicative support and

overall support from fathers. These results are consistent with those of Freeman and

Brown (2001), who found non-significant differences in perceptions of fathers as sources

of support for both secure and insecure attachment groups. It is possible that more

adolescents who were at risk came from single-parent families headed by mothers. For

these adolescents, perceived alienation from fathers might have been high because a

father figure was not present in the home. One would speculate, however, the perceived availability of fathers as a source of communicative support then would also be lower, as would perceptions of fathers as sources of support overall, which this study did not find.

There also was no significant difference between students who were and were not at risk with respect to perceptions of teachers as sources of communicative support. These results are inconsistent with those of previous research indicating that adolescents who were at risk of school dropout perceived a lack of supportive communication from teachers, in comparison with students who were not at risk (Croninger & Lee, 2001).

Results from this study also indicate that, in some respects, perceptions of the relative support received from various sources did not differ between groups. For example, for adolescents who were and who were not at risk, mothers and peers were perceived as equivalent sources of support, as were fathers and teachers. For adolescents who were and who were not at risk, mothers and peers were perceived as greater sources of support than fathers and teachers. These results support those of previous research that found fathers tended to be perceived as less supportive than mothers or peers (Youniss & Smollar, 1985). Indeed, they support the conclusion by Freeman and Brown (2001) that both insecure and secure attachment groups position "fathers at the bottom of the attachment hierarchy" (p. 666). Moreover, these results extend this conclusion, as this study found that teachers share that lowly position with fathers.

However, these results appear inconsistent with previous findings that secure adolescents rate mothers over peers and fathers, whereas insecure adolescents rate peers over parents, as sources of support (Freeman & Brown, 2001). This inconsistency is

particularly noteworthy as participants in this study were younger than those in the study by Freeman and Brown (2001). As Blain et al. (1993) observe, "for adolescents, age-appropriate behavior is to move toward their friends as the primary source of socialization" (p. 237). Thus, elementary school children attached more importance to parental support, whereas during middle and late adolescence, students tended to place a higher value on peer-related support (Furman & Buhrmester, 1992). For students who were at risk, and who appear to have insecure IMWs, the similar ratings of mothers and peers might have been part of the natural transition during adolescence from parents to peers as primary sources of perceived support. While the same might have been true for students who were not at risk, and who appear to have secure IMWs, this would be inconsistent with the previous findings cited above, where perceived mother support retained its primacy into late adolescence. These results are mitigated by the findings of the correlations and regression analyses, which will be discussed subsequently.

In other respects, perceptions of the relative strength of support received from various sources differed between groups. Firstly, perceived support from peers assumed greater prominence for students who were at risk. For instance, students who were at risk perceived greater overall support from peers than from fathers or teachers, whereas for students who were not at risk there was no statistically detectable difference between perceived support from peers, fathers, and teachers. Similarly, students who were at risk perceived peers as more trustworthy and as greater sources of communicative support than fathers and teachers, whereas there was a non-significant difference between these sources for students who were not at risk. Again, these results are consistent with

previous research that found insecure adolescents perceived greater support from peers than from parents (Freeman & Brown, 2001; Youniss & Smollar, 1985). However, these differences between students who were and were not at risk were due to perceptions of fathers and teachers as less trustworthy, and to higher perceptions of alienation from fathers and teachers, rather than to perceptions of peers as more supportive. As pointed out by Goodenow (1993), the perceived lack of secure and satisfying connections with these adult sources of social support can undermine internalization of their important values, and weaken motivation and engagement in the school context.

Secondly, consistent with other studies (Kerns et al., 2000; Soucy & Larose, 2000), adolescents who were not at risk perceived mothers as particularly important sources of communicative support. For example, they perceived mothers as significantly greater sources of communicative support than teachers, whereas adolescents who were at risk perceived teachers and mothers as equally available in terms of communicative support. Again, for students who were at risk, the differences between groups in the relative strength of perceived support from teachers derived from lower perceptions of mothers as sources of communicative support, rather than from an increase in perceptions of teachers as sources of support. Lower perceptions of mothers and fathers as sources of communicative support for adolescents who were at risk are consistent with previous research that found dropouts had difficulty discussing personal matters with parents, and frequently felt misunderstood (Rumberger & Thomas, 2000).

Given their perceptions of peers as more trustworthy than fathers and teachers, and

as stronger sources of communicative support than fathers and teachers, one might have expected that students who were at risk might have felt significantly more affiliated with peers than with fathers or teachers. Instead, they perceived similar levels of alienation from fathers, teachers, and mothers. Similarly, given the higher perceptions of mothers over fathers as sources of trust and communicative support, it is surprising that there was no detectable significant difference between perceptions of affiliation with mothers and fathers for students who were at risk, particularly if this was due to a lack of or weak father figure in the home. As well, despite trusting teachers less than mothers and peers, and despite perceiving relatively high levels of alienation from teachers, students who were at risk perceived themselves as equally alienated from mothers, peers, and teachers. Perhaps this provides empirical evidence, the absence of which was noted by Hymel et al. (1996), for greater feelings of alienation or isolation underlying the risk for school dropout.

Collectively, these results suggest stronger and broader perceptions of support for students who were not at risk than for those who were at risk, in terms of the higher levels of perceived support, the lower levels of perceived alienation, and the perceptions of more sources of support being equally available.

Consistency in Perceptions of Support Across Sources of Support. The influence of internal working models on expectations for subsequent relationships suggests that secure adolescents with a coherent model of expectations would perceive consistent levels of support availability from various attachment figures (Bowlby, 1969). However, I found no studies that examined this question empirically. In a study such as

this, consistency of expectations would be apparent in more and stronger correlations among support variables from those different support figures. Conversely, insecure adolescents with incoherent models of expectations might perceive less consistent levels of support from various attachment figures, with fewer and weaker correlations among support variables, and stronger associations among alienation variables. Although results from this study are consistent with these expectations, only four of these differences in correlations reached statistical significance between groups. Significant differences between groups with respect to these correlations, are discussed below.

Firstly, those who felt they could trust their mothers tended to feel they could trust their fathers. Secondly, students who were not at risk, and who perceived communicative support from their mothers, tended to perceived communicative support from their teachers. By contrast, students who were at risk, and who perceived communicative support from their mothers, tended not to perceive communicative support from their teachers, or *vice versa*. This indicates an inconsistency in perceptions of adults as sources of support for students who were at risk. Thirdly, students who were not at risk, and who felt affiliated with their mothers tended to perceive teachers as sources of communicative support. By contrast, students who were at risk, and who felt alienated from their mothers tended to perceive teachers as sources of communicative support or *vice versa*. Again, these results suggest a consistency in perceived support availability for students who were not at risk that is not apparent for students who were at risk. Finally, and conversely, consistency in perceptions of support from peers and fathers was found for adolescents who were at risk. Adolescents who were at risk, and who

perceived peers as sources of communicative support, tended to perceived fathers in a similar way. However, adolescents who were not at risk, and who perceived peers as sources of communicative support, tended not to perceive fathers as sources of communicative support. As well, there was a significantly stronger correlation between perceptions of overall support from fathers and peers for students who were at risk, compared to those who were not at risk of school dropout. These results suggest a consistency of perceptions between peers and fathers as sources of support for adolescents who were at risk, but not for those who were not at risk.

Also resulting in a significant difference between adolescents who were and were not at risk, the negative correlation between perceptions of fathers as sources of communicative support and perceptions of alienation from fathers was much stronger for adolescents who were not at risk. This suggests that adolescents who were not at risk, and who felt they could talk with their fathers, were less likely to feel alienated from them than were adolescents who were at risk, and who felt they could talk with their fathers.

The greater cumulative number and strength of significant correlations between perceptions of mothers, fathers, and teachers as sources of support suggest that adolescents who were not at risk perceived a more consistent base of adult support to which they could turn, compared to those who were at risk. As well, perceptions of support from fathers, peers, and teachers were more consistent with perceptions of support from mothers for adolescents who were not at risk, compared to those who were.

Perceived Support and Academic Risk. Research has demonstrated that perceptions of higher familial, peer, and teacher support are related to lower indices of

academic risk (Cauce, 1986; DuBois et al., 1994b; Kerns et al., 2000; Learner & Kruger, 1997; Wentzel, 1998). Therefore, one would expect a stronger negative correlation among all support variables and risk variables for students who were not at risk. In this study, differences between students who were and were not at risk, with respect to these correlations, did not reach statistical significance.

Significant differences between groups were evident, however, in correlations between support and risk variables. They revealed that, for students who were not at risk, those who felt they could trust and talk with their peers, and/or who perceived themselves as affiliated with peers, were more likely to conform to school expectations. Conversely, for students who were at risk, perceptions of peers and adults as sources of support were not significantly associated with risk variables.

No significant associations were found among perceptions of mothers as sources of support and risk indices for students who were or who were not at risk. These results appear inconsistent with the findings of Kerns, et al. (2000), who found that "both mother-child and father-child variables were related to children's school adjustment, although the effects were weaker for fathers" (p. 624). However, that study was investigating motivation and positive indices of adjustment, rather than indices of academic risk. They also are counter to results obtained by Carlivati (2001), who found perceptions of maternal support were related to students having stronger connections to school and less likelihood of being suspended, expelled, or dropping out of school. This is particularly puzzling, as the students who were moderately at risk in the latter study included older adolescents, who would presumably be farther along in the transition from

parent to peer as the primary source of perceived support. Therefore, a stronger relationship between maternal support and positive school behaviour would be expected in the younger participants in this study. Perhaps, for the more severely at risk adolescents in this study, lower perceptions of mothers as trustworthy sources of communicative support and affiliation negate any moderating influence they might have over inappropriate school behaviour.

Finally, perceptions of support from mothers were related to the likelihood of being at risk of school dropout. Thus, while the ANOVAs did not find perceptions of mothers as sources of support to be significantly greater than perceptions of peers as sources of support for either group, the prominent role of perceived support from mothers is apparent in its relationship to risk status. Adolescents in this study who perceived low support from mothers were 96% more likely to be at risk for school dropout. Those who perceived mothers as low sources of communicative support were 44% more likely to be at risk. As well, students who perceived teachers as highly trustworthy were half as likely to be at risk for school dropout. Moreover, students who perceived high levels of alienation from their teachers were 2.8 times more likely to be at risk for school dropout. These results are consistent previous studies that found supportive relationships with parents and teachers were associated with positive school adjustment (Hess & Holloway, 1984; Parker & Asher, 1987; Wentzel 1998).

Since Pearson correlations showed a clear connection between perceptions of peers as sources of support and risk variables for students who were not at risk, it might appear surprising that peer support variables do not predict risk status. However, the

similar perceptions of peers as trustworthy, and as sources of communicative support, and the similar perceptions of affiliation with peers reported by students who were and who were not at risk, would not differentiate risk status. Perhaps students who were not at risk tended to identify as peers those schoolmates who were not at risk, and who might encourage behaviours associated with school adjustment. Students who were at risk might have identified as peers other adolescents outside of school, or other students who were at risk, and who might not encourage such behaviours (Ellenbogen & Chamberland; 1997; Hymel et al., 1996; Statistics Canada, 1995). As Cauce et al. (1986) hypothesize, generally low-achieving students, with closer ties to informal sources of support such as peers, "may also be subject to greater pressure to conform and thus have poor attitudes toward school and do less well" (p. 427).

Implications

The theoretical implications are clear. Bowlby's (1969) attachment theory suggests that children who perceive lower levels of social support and higher levels of alienation from their primary caregiver, usually the mother, develop insecure internal working models. These models set the expectations for support availability in subsequent relationships, such that children and adolescents perceive levels of support from significant others in their lives that are consistent with those they initially perceived from

mothers. Further, adolescents with insecure internal working models tend to experience greater challenges with psychological, social, and academic adjustment.

Compared to adolescents who were not at risk for school dropout, adolescents in

this study who were at risk perceived lower levels of social support and higher levels of alienation from mothers. They also perceived similarly lower levels of social support and higher levels of alienation from fathers, and teachers. They also demonstrated poor social and academic adjustment in the school context. Thus, they appear to have insecure internal working models.

This study has practical implications, as well. Healthy relationships underlie healthy individuals and societies. Building positive relationships between children and adults in the family, the school, the community, and beyond is central to constructing positive perceptions of significant others and of self. Not surprisingly, interventions for children and adolescents exhibiting antisocial behaviour are more effective if directed at relationship-building with adults and peers in the child's broader systemic context, rather than focusing solely on the acting out student (Frick, 2001; Dishion, McCord, Poulin, 1999; Windle, 1992; Davis, 2003; Carlivati, 2001). Conversely, "peer-group interventions increase adolescent problem behavior and negative life outcomes in adulthood" (Dishion et al., 1999, p. 755).

The school is uniquely positioned to coordinate these supportive services, particularly in the lives of marginalized students who may not have their social/emotional needs met constructively outside of school (Croninger & Lee, 2001). Parenting programs, mentoring experiences, professional development workshops for school staff, and inclusive, cooperative learning activities in the classroom have been proven to be effective interventions for adolescents who are at risk (Dishion et al, 1999; Goodenow, 1993). As well, teachers can more actively build supportive relations with parents,

particularly those of students who are at risk, through discussion, communication, consensus-seeking, and reinforcing of each other's expectations. Students could be involved, as much as possible, as active participants in these discussions, helping to reach consensus around expectations, standards, and sanctions. These forms of intergenerational closure have "considerable value in reducing the probability of dropping out of high school" (Coleman, 1988, p. 119).

It is important, however, to first of all identify students whose perceptions of social support are low. The ability of the IPPA to differentiate risk status might provide a useful tool in that process, if other factors show risk.

Limitations

A number of factors restrict generalizing the results of this study. Generalizing results arising from this study will be limited to middle school students at risk of school leaving. In addition, the data for this study were gathered from a relatively small and uniform sample, also limiting the external validity of the findings. For example, participants in this study were drawn from five classes within three schools in the same community. A larger cross-section of schools and classes would provide more representative results. It also would help to control for the effects of quality of teaching and resources, teacher personality and engagement, classroom style, and school size, effectiveness and equity of school policies and practices, and school environment, all of which have been shown to have an effect on attitudes toward school (Cohen, 1998). As well, the present study was undertaken in a mid-sized, semi-rural community in southwestern British Columbia, and the results may not be extrapolated to large, urban

populations. Future studies should include a larger sample size and more ethnically and socioeconomically diverse samples to allow for matched samples, and to enhance our understanding of the effects of such variables on perceptions of support availability.

In addition, a significant limitation of this study is the lack of demographic data. There may, in fact, be demographic variables that would explain the results. Another limitation is that nine of the 75 participants were my students, which could have introduced possible bias as, despite cautions to the contrary, they might have represented teacher support as more available than it was in reality. However, supplemental analysis revealed that results were consistent when controlled for teacher effects.

Moreover, the present study relies primarily on a single adolescent self-report measure to assess perceptions of support, rather than multiple observers such as peers, parents, and/or teachers. Additional sources of information, from parents, teachers, and their identified closest peers might provide a more complete or balanced picture, as would random interviews to probe the youth's attitudes more deeply; however, they reached beyond the scope of this study. Further, self-report measures intrinsically are subject to possible bias and distortion based on social desirability (Freeman & Brown, 2001); the possibility exists that adolescents might report their relations with their parents and teachers more positively than they actually are. However, this study addressed adolescents' perceptions of support, not received support, and self-reports are recognized as valid for that purpose (Freeman & Brown, 2001; Shaver and Mikulincer, 2004). Further, the low reliability of teacher alienation scores negated the use of relevant data in the Pearson correlations. Had I modified the parental rather than the peer version of the

IPPA, and undertaken a test run, the reliability scores might have been higher. Finally, while I have measured three salient aspects of social support, I recognize that other important aspects of relationships with significant others may have an equally important influence on adolescents' school adjustment.

Conclusions

Consistent with previous research (Allen et al., 1998; Berndt, 1979; Elgar et al., 2003), this study found significantly lower perceptions of support and higher perceptions of alienation in middle adolescents who were more likely to contravene societal expectations for behaviour in the school context. Those who perceived significantly higher levels of social support from a variety of sources were more likely to collaborate within the school environment (Coleman, 1998; Wentzel, 1996).

This study is consistent with and adds to previous research as it identifies which of the four sources of support (mother, father, peer, and/or teacher) were perceived as lower in students at risk of school dropout. Teachers were not previously considered in empirical comparisons of perceived support from mothers, fathers, and peers. Overall perceptions of mothers and teachers as sources of support were lower for adolescents who were at risk than for those who were not at risk. Perceptions of fathers as sources of support did not differ significantly between students who were and were not at risk, nor did perceptions of peers as sources of support. However, the question of whom these two groups of adolescents identified as peers was not addressed. Previous studies have shown that students who are at risk affiliate with peers outside of the school context, where students who are not at risk affiliate with their schoolmates (Ellenbogen & Chamberland,

1997; Statistics Canada 1993, 1995). Should the present study be replicated in future research, it would be useful to identify whether or not this is the case.

This study also adds to previous research as it identified which aspects of social support from mothers, fathers, peers, and teachers were different, as perceived by adolescents who were and were not at risk. Students who were at risk perceived mothers, fathers, and teachers as significantly less trustworthy than did those who were not at risk. They also perceived mothers as weaker sources of communicative support than did adolescents who were not at risk. As well, adolescents who were at risk perceived significantly greater alienation from mothers, fathers, and teachers than did adolescents who were not at risk.

In this study, mothers and peers were perceived as equivalent sources of support by both groups, contrary to previous findings that secure adolescents perceived mothers as greater sources of support than peers, whereas insecure adolescents perceived greater support from peers than mothers (Freeman & Brown, 2001; Youniss & Smollar, 1985). However, adolescents who were not at risk did perceive mothers as significantly greater sources of communicative support than did those who were at risk. As well, students who were not at risk perceived mothers as significantly greater sources of communicative support than teachers, whereas students who were at risk perceived mothers and teachers as equivalent sources of communicative support. Perceptions of mothers as strong sources of overall support, as well, were significantly associated with decreased likelihood of being at risk of school dropout. Since the participants in this study were younger than those in the above studies, the inconsistent findings for students who were at

risk might reflect the ongoing transition from mothers to peers as the primary source of perceived support.

There were differences between perceived support from fathers and peers in adolescents who were and were not at risk. Adolescents who were not at risk perceived peers and fathers as equivalent sources of overall support, but perceived peers as greater sources of overall support than teachers. Students who were at risk perceived peers as greater sources of overall support than both fathers and teachers. These findings of low perceptions of support from fathers are consistent with previous research by Freeman and Brown (2001). However, the lack of demographic data in this study constrains the interpretation of these results. It might be that more of the students who were at risk were from single parent families, and did not have the support of a second parent consistently available. In that case, the adolescent might have turned to his or her peers as alternative support figures. Should this study be replicated, including demographic data would reveal whether this is the case. As well, future qualitative studies might be effective in revealing why fathers are perceived as relatively weak sources of support, even for adolescents who are not at risk.

Consistent with Carlivati's (2001) study, there were significant correlations between perceptions of peers and mothers as sources of support for adolescents who were at risk. However, the differences in these correlations between adolescents who were and were not at risk for school dropout did not reach statistical significance. Differences between groups did reach statistical significance with respect to perceptions of fathers and peers as sources of support, which were more strongly related for adolescents who were at

risk, compared to those who were not at risk. Perhaps adolescents who are at risk tend to perceive their parents, and particularly their fathers, not as supportive authority figures providing a secure base, but as similar to their peers. Future studies might include interviews or relevant questionnaires to ascertain whether this is the case.

For adolescents who were at risk, perceived support from mothers, fathers, and teachers was weaker relative to that perceived from peers, in comparison to those who were not at risk. These findings support previous studies that found a link between behavioural problems and greater support from peers, relative to family members and school personnel (Dubois, et al., 1998; DuBois et al., 1999; Wentzel, 1998).

Given the perceptions of more sources of support being equally available, the higher levels of perceived support, and the lower levels of perceived alienation, adolescents who were not at risk appeared to perceive a stronger and broader base of support. I have found no previous research that addresses this question.

Results indicate a relationship between perceived levels of support from peers and indices of academic risk. Peer support seemed to be particularly salient for students who were not at risk. These results are inconsistent with previous research that found maternal attachment was related to less likelihood of disciplinary action (Carlivati, 2001). Again, future research could determine whether or not students who are not at risk tend to identify other schoolmates who are not at risk as peers, while those who are at risk identify with a peer group outside of school or with other students who are at risk.

Finally, data collected in this study suggest perceptions of mothers as sources of communicative support, as well as overall perceptions of mothers as sources of support, are related to the likelihood of being at risk. Perceptions of teachers as trustworthy, and

perceptions of alienation from teachers also appeared to be related to the likelihood of being at risk. Specifically, students who reported low perceptions of social support from those sources were significantly more likely to be at risk, while those who perceived strong support from these sources were significantly less likely to be at risk. This relationship between perceived support from teachers and risk status has been identified in previous studies (Croninger & Lee, 2001; DuBois et al., 1994b; Goodenow, 1993; Hess & Holloway, 1984; Hymel & Ford, 2003; Skinner & Belmont (1993); Parker & Asher, 1987; Wentzel & Asher, 1995).

Thus, compared to adolescents who were not at risk for school dropout, those who were at risk perceived lower levels of support from adults in their lives. They had less trust in adults. They perceived adults as less reliable sources of reassurance, guidance, encouragement, and useful information. They felt more alienated from the adults who, in an ideal world, would have provided a buffer against distressing events and adverse living conditions. In sum, they perceived unreliable relationships with the significant adults in their families and in society. Accurate or not, these perceptions contribute to their challenges in meeting the expectations of society. Unless their perceptions change, they will continue to experience difficulty integrating socially. Further research into adolescents' perceptions of social support, and related systemic interventions, are essential to the well-being of these individuals, and to society as a whole.

INVENTORY OF PARENT AND PEER ATTACHMENT (IPPA)
Authors:
ʃ1989 Gay C. Armsden, Ph.D. and Mark T. Greenberg, Ph.D.

This questionnaire asks about your relationships with important people in your life; your mother, your father, and your close friends. Please read the directions to each part carefully.

Part I

Some of the following statements asks about your feelings about your <u>mother</u> or the person who has acted as your mother. If you have more than one person acting as your mother (e.g. a natural mother and a step-mother) answer the questions for the one you feel has most influenced you.

Please read each statement and circle the <u>ONE</u> number that tells how true the statement is for you now.

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
1. My mother respects my feelings.	1	2	3	4	5
2. I feel my mother does a good job as my mother.	1	2	3	4	5
3. I wish I had a different mother.	1	2	3	4	5
4. My mother accepts me as I am.	1	2	3	4	5
5. I like to get my mother's point of view on things I'm concerned about.	1	2	3	4	5
6. I feel it's no use letting my feelings show around my mother.	1	2	3	4	5
7. My mother can tell when I'm upset about something.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
8. Talking over my problems with my mother makes me feel ashamed or foolish.	1	2	3	4	5
9. My mother expects too much from me.	1	2	3	4	5
10. I get upset easily around my mother.	1	2	3	4	5
11. I get upset a lot more than my mother knows about.	1	2	3	4	5
12. When we discuss things, my mother cares about my point of view.	1	2	3	4	5
13. My mother trusts my judgment.	1	2	3	4	5
14. My mother has her own problems, so I don't bother her with mine.	1	2	3	4	5
15. My mother helps me to understand myself better.	1	2	3	4	5
16. I tell my mother about my problems and troubles.	1	2	3	4	5
17. I feel angry with my mother.	1	2	3	4	5
18. I don't get much attention from my mother.	1	2	3	4	5
19. My mother helps me to talk about my difficulties.	1	2	3	4	5
20. My mother understands me.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
21. When I am angry about something, my mother tries to be understanding.	1	2	3	4	5
22. I trust my mother.	1	2	3	4	5
23. My mother doesn't understand what I'm going through these days.	1	2	3	4	5
24. I can count on my mother when I need to get something off my chest.	1	2	3	4	5
25. If my mother knows something is bothering me, she asks me about it.	1	2	3	4	5

Part II

This part asks about your feelings bout your <u>father</u>, or the man who has acted as your father. If you have more than one person acting as your father (e.g. natural and step-father) answer the question for the one you feel has most influenced you.

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
1. My father respects my feelings.	1	2	3	4	5
2. I feel my father does a good job as my father.	1	2	3	4	5
3. I wish I had a different father.	1	2	3	4	5
4. My father accepts me as I am.	1	2	3	4	5
5. I like to get my father's point of view on things I'm concerned about.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
6. I feel it's no use letting my feelings show around my father.	1	2	3	4	5
7. My father can tell when I'm upset about something.	1	2	3	4	5
8. Talking over my problems with my father makes me feel ashamed or foolish.	1	2	3	4	5
9. My father expects too much from me.	1	2	3	4	5
10. I get upset easily around my father.	1	2	3	4	5
11. I get upset a lot more than my father knows about.	1	2	3	4	5
12. When we discuss things, my father cares about my point of view.	1	2	3	4	5
13.My father trusts my judgment.	1	2	3	4	5
14. My father has his own problems, so I don't bother him with mine.	1	2	3	4	5
15. My father helps me to understand myself better.	1	2	3	4	5
16. I tell my father about my problems and troubles	1	2	3	4	5
17. I feel angry with my father	1	2	3	4	5
18. I don't get much attention from my father.	1	2	3	4	5
19. My father helps me to talk about my difficulties.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
20. My father understands me.	1	2	3	4	5
21. When I am angry about something, my father tries to be understanding.	1	2	3	4	5
22. I trust my father.	1	2	3	4	5
23. My father doesn't understand what I'm going through these days.	1	2	3	4	5
24. I can count on my father when I need to get something off my chest.	1	2	3	4	5
25. If my father knows something is bothering me, he asks me about it.	1	2	3	4	5

Part III

This part asks about your feelings about your relationships with your close friends. Please read each statement and circle the ONE number that tells how true the statement is for you now.

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
1. I like to get my friend's point of view on things I'm concerned about.	1	2	3	4	5
2. My friends can tell when I'm upset about something.	1	2	3	4	5
3. When we discuss things, my friends care about my point of view.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
4. Talking over my problems with friends makes me feel ashamed or foolish.	1	2	3	4	5
5. I wish I had different friends.	1	2	3	4	5
6. My friends understand me.	1	2	3	4	5
7. My friends encourage me to talk about my difficulties.	1	2	3	4	5
8. My friends accept me as I am.	1	2	3	4	5
9. I feel the need to be in touch with my friends more often.	1	2	3	4	5
10. My friends don't understand what I'm going through these days.	1	2	3	4	5
11. I feel alone or apart when I am with my friends.	1	2	3	4	5
12. My friends listen to what I have to say.	1	2	3	4	5
13. I feel my friends are good friends.	1	2	3	4	5
14. My friends are fairly easy to talk to.	1	2	3	4	5
15. When I am angry about something, my friends try to be understanding.	1	2	3	4	5
16. My friends help me to understand myself better.	1	2	3	4	5
17. My friends care about how I am feeling.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
18. I feel angry with my friends.	1	2	3	4	5
19. I can count on my friends when I need to get something off my chest.	1	2	3	4	5
20. I trust my friends.	1	2	3	4	5
21. My friends respect my feelings.	1	2	3	4	5
22. I get upset a lot more than my friends know about.	1	2	3	4	5
23. It seems as if my friends are irritated with me for no reason.	1	2	3	4	5
24. I can tell my friends about my problems and troubles.	1	2	3	4	5
25. If my friends know something is bothering me, they ask me about it.	1	2	3	4	5

Appendix B

Modified IPPA, Teacher Version

Part IV

This part asks about your feelings about your relationships with your <u>teacher</u>. If you have more than one person acting as your teacher answer the questions for the one you feel has most influenced you.

Please read each statement and circle the <u>ONE</u> number that tells how true the statement is for you now.

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
1. I like to get my teacher's point of view on things I'm concerned about.	1	2	3	4	5
2. My teacher can tell when I'm upset about something.	1	2	3	4	5
3. When we discuss things, my teacher cares about my point of view.	1	2	3	4	5
4. Talking over my problems with my teacher makes me feel ashamed or foolish.	1	2	3	4	5
5. I wish I had a different teacher.	1	2	3	4	5
6. My teacher understands me.	1	2	3	4	5
7. My teacher encourages me to talk about my difficulties.	1	2	3	4	5
8. My teacher accepts me as I am.	1	2	3	4	5
9. I feel the need to be in touch with my teacher more often.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some- times True	Often True	Almost Always or Always True
10. My teacher doesn't understand what I'm going through these days.	1	2	3	4	5
11. I feel alone or apart when I am with my teacher.	1	2	3	4	5
12. My teacher listens to what I have to say.	1	2	3	4	5
13. I feel my teacher is a good teacher.	1	2	3	4	5
14. My teacher is fairly easy to talk to.	1	2	3	4	5
15. When I am angry about something, my teacher tries to be understanding.	1	2	3	4	5
16. My teacher helps me to understand myself better.	1	2	3	4	5
17. My teacher cares about how I'm feeling.	1	2	3	4	5
18. I feel angry with my teacher.	1	2	3	4	5
19. I can count on my teacher when I need to get something off my chest.	1	2	3	4	5
20. I trust my teacher.	1	2	3	4	5
21. My teacher respects my feelings.	1	2	3	4	5
22. I get upset a lot more than my teacher knows about.	1	2	3	4	5

	Almost Never or Never True	Not Very Often True	Some-times True	Often True	Almost Always or Always True
23. It seems as if my teacher is irritated with me for no reason.	1	2	3	4	5
24. I can tell my teacher about my problems and troubles.	1	2	3	4	5
25. If my teacher knows something is bothering me, he or she asks me about it.	1	2	3	4	5

Appendix C

Assignment of Participants to Risk Status

Not at Risk = Group 1
At Risk = Group 2

Group	ID Number	Days Absent	In-school Suspension	Out-of-school Suspension	Discipline Reports	Failed / Incomplete Courses	Held Back
1	1	6	0	0	0	0	No
1	3	4	0	0	0	0	No
1	5	4	0	0	1	0	No
1	6	10	0	0	0	0	No
1	7	6	0	0	0	0	No
1	9	39	0	0	0	0	No
1	10	18	0	0	1	0	No
1	11	21	0	0	0	0	No
1	12	13	0	0	2	0	No
1	13	1	0	0	2	0	No
1	15	5	0	0	0	0	No
1	16	8	1	0	3	0	No
1	17	10	0	0	0	0	No
1	19	9	0	0	0	0	No
1	20	8	0	0	0	1	No
1	21	20	0	0	3	0	No
1	22	9	0	0	0	0	No
1	23	6	1	0	7	0	No
1	24	4	0	0	0	0	No
1	26	7	0	0	0	0	No

Group	ID Number	Days Absent	In-school Suspension	Out-of-school Suspension	Discipline Reports	Failed / Incomplete Courses	Held Back
1	27	2	0	0	0	0	No
1	28	7	0	0	5	0	No
1	29	3	0	0	0	0	No
1	30	40	0	0	1	0	No
1	32	1	0	0	0	0	No
1	33	9	0	0	0	0	No
1	34	1	0	0	0	0	No
1	35	13	0	0	0	0	No
1	36	3	0	0	0	0	No
1	38	8	0	0	0	0	No
1	39	3	0	0	0	0	No
1	40	8	0	0	0	0	Yes
1	43	2	1	0	1	0	No
1	44	7	0	0	0	0	No
1	45	7	0	0	0	0	No
1	46	7	0	0	0	0	No
1	47	1	0	0	0	0	No
1	48	1	0	0	0	0	No
2	2	23	1	0	6	3	No
2	4	29	1	0	6	4	No
2	8	24	0	0	4	2	No
2	14	20	0	0	0	2	No
2	18	49	0	0	8	4	No
2	25	22	0	0	0	2	No
2	31	10	5	1	7	3	Yes

Group	ID Number	Days Absent	In-school Suspension	Out-of-school Suspension	Discipline Reports	Failed / Incomplete Courses	Held Back
2	37	21	3	1	6	0	No
2	41	28	2	0	3	0	No
2	42	23	3	1	6	1	Yes
2	49	20	0	0	0	4	Yes
2	50	36	2	15	2	4	Yes
2	51	48	33	18	22	3	Yes
2	52	57	1	1	1	3	Yes
2	53	33	4	8	3	3	Yes
2	54	68	18	21	4	3	Yes
2	55	31	4	6	3	3	Yes
2	56	1	5	0	0	3	Yes
2	57	90	5	34	4	4	Yes
2	58	92	13	7	0	4	Yes
2	60	26	5	24	9	4	Yes
2	61	40	4	5	5	2	Yes
2	62	48	0	6	14	3	Yes
2	63	73	71	31	18	4	Yes
2	64	33	33	8	9	2	Yes
2	65	0	0	0	0	3	Yes
2	66	55	55	7	10	4	Yes
2	67	30	30	1	5	4	Yes
2	68	89	89	5	1	3	Yes
2	69	31	31	1	0	4	Yes
2	70	46	46	29	13	4	Yes
2	71	92	92	15	2	3	Yes

Group	ID Number	Days Absent	In-school Suspension	Out-of-school Suspension	Discipline Reports	Failed / Incomplete Courses	Held Back
2	72	30	30	7	4	0	Yes
2	73	10	10	0	2	3	Yes
2	74	14	14	4	6	3	Yes
2	76	94	94	10	9	2	Yes
2	77	79	79	13	6	4	Yes

Request for Principal's Consent

I am completing my Masters in Counseling Psychology at Simon Fraser University. As part of my Masters program, I am conducting research in an area in which I am greatly interested -- I want to learn more about how teenagers perceive their world. Many researchers before me have asked parents, teachers, psychologists, and others or their viewpoints, as they try to gain a greater understanding of the teenage world. Other researchers ask teenagers themselves about questions of importance in their own lives. In this research, I am focusing on how teenagers' perceptions of supportive relationships with their parents, their teachers, and their peers relate to their functioning at school.

I would very much appreciate your consent, permitting your students to participate in the completion of my research. I am looking for volunteers to fill out four versions of the same questionnaire, relating to their perceptions of support from their mother, father, peers, and teacher. Each questionnaire is made up of 25 statements. Participants are asked to indicate how true each statement is for them, on a scale of (1) to (5), where (1) means "Almost Never or Never True," (2) is "Not Very Often True," (3) means "Sometimes True," (4) is "Often True," and (5) is "Almost Always or Always True." On average, it takes approximately 15 to 20 minutes to complete all four questionnaires. Responses to the questionnaires will be translated into a number, which I will then correlate with the student's level of school adjustment, such as attendance, participation, etc.

Participation in this research is entirely voluntary, and all responses will be completely confidential. Instead of names, numbers will be placed on the questionnaires. Participants are, of course, free to withdraw from the study at any time if they change their minds about completing the questionnaires. Students who complete the questionnaires will receive a small token of my appreciation.

There are no personal risks to participants. The benefits are that both participants and the researcher will be able to contribute to the body of knowledge about factors relating to students' success at school. This will, in turn, help school personnel to better met the needs of their students.

Thank you for any help you can give me with this,

Gloria Beshara

Appendix E

Request for Parental Consent

I am completing my Masters in Counseling Psychology at Simon Fraser University. As part of my Masters program, I am conducting research in an area in which I am greatly interested -- I want to learn more about how teenagers perceive their world. Many researchers before me have asked parents, teachers, psychologists, and others for their viewpoints, as they try to gain a greater understanding of the teenage world. Other researchers ask teenagers themselves about questions of importance in their own lives. In this research, I am focusing on how teenagers' perceptions of supportive relationships with their parents, their teachers, and their peers relate to their functioning at school.

I would very much appreciate your consent, permitting your son or daughter to participate in the completion of my research. I am looking for volunteers to fill out four versions of the same questionnaire, relating to their perceptions of support from their mother, father, peers, and teacher. Each questionnaire is made up of 25 statements. Participants are asked to indicate how true each statement is for them, on a scale of (1) to (5), where (1) means "Almost Never or Never True," (2) is "Not Very Often True," (3) means "Sometimes True," (4) is "Often True," and (5) is "Almost Always or Always True." On average, it takes approximately 15 to 20 minutes to complete all four questionnaires. Responses to the questionnaires will be translated into a number, which I will then correlate with the student's level of school adjustment, such as attendance, participation, and so on.

Participation in this research is entirely voluntary, and all responses will be completely confidential. Instead of names, numbers will be placed on the questionnaires. Participants are, of course, free to withdraw from the study at any time if they change their minds about completing the questionnaires. Students who complete the questionnaires will receive a small token of my appreciation.

There are no personal risks to participants. The benefits are that both participants and the researcher will be able to contribute to the body of knowledge about factors relating to students' success at school. This will, in turn, help school personnel to better met the needs of their students.

Thank you for any help you can give me with this,

Gloria Beshara

Student Information Letter

Anyone interested in Participating in Research?

I am completing my Masters in Counseling Psychology at Simon Fraser University. As part of my Masters program, I am conducting research in an area in which I am greatly interested -- I want to learn more about what teenagers really think. Many researchers before me have asked parents, teachers, psychologists, and others in authority for their viewpoints, as they try to gain a greater understanding of the teenage world. Other researchers think, as I do, that it also is extremely important to hear from teenagers themselves on questions of importance in their own lives. In this research, I am focusing on how teenagers view the support they receive in their relationships with their parents, their teachers, and their peers. I will look, as well, at how their opinions relate to their functioning at school.

I would very much appreciate your help in completing my research. I am looking for volunteers who would be interested in completing four versions of the same questionnaire, relating to the perceived support of their mother, father, peers, and teacher. Each questionnaire is made up of 25 statements. Participants are asked to indicate how true each statement is for them, on a scale of (1) to (5), where (1) means "Almost Never or Never True," (2) is "Not Very Often True," (3) means "Sometimes True," (4) is "Often True," and (5) is "Almost Always or Always True." On average, it takes approximately 15 to 20 minutes to complete all four questionnaires.

Participation in this research is entirely voluntary, and all responses will be completely confidential. Instead of names, numbers will be placed on the questionnaires. Participants are, of course, free to withdraw from the study at any time if they change their minds about completing the questionnaires. Students who complete the questionnaires will receive a small token of my appreciation.

SIMON FRASER UNIVERSITY
Form 3: INFORMED CONSENT FOR MINORS or CAPTIVE AND DEPENDENT POPULATIONS
CONSENT BY PARENT, GUARDIAN TO ALLOW PARTICIPATION IN A RESEARCH STUDY

Titled: The relationship between middle adolescents' perceptions of social support and their school success

Investigator Name: Gloria Beshara   Investigator Department: Education

The University and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and to ensure your full understanding of the procedures, risks, and benefits described below.

Risks to the participant, third parties or society:
There are no personal risks to participants, third parties or society. Self-report measures will be administered in small groups of up to six students, during regular school hours, by the same researcher. Students will not place their names on the questionnaires and will be assured complete confidentiality. Each student's personal identification number (PIN) will be used to identify and track the survey that she or he will complete, as well as information regarding school adjustment indicators, which will be gathered at the end of the school year. Information gathered through this research will be secured by the researcher.

Benefits of study to the development of new knowledge:
A gap exists in our understanding of perceptions of social support in adolescents, particularly those who have been marginalized within the educational system, and who are at greater risk of school leaving. This study attempts to address this void. As well, few researchers have assessed at-risk middle adolescents' perceptions of parental, peer, and teacher support in a single study. Therefore, I will examine the perceived quality of their relationships with parents, teachers, and peers, and the correlation of those perceptions to school adjustment. The present study may provide insight, as well, into the relative perceptions of parental versus peer support in an unique population of socially alienated adolescents. Finally, by assessing the students' perception of social support contacts, we may develop possible methods of intervention and (re)integration of the alienated individual.

Procedures:

Participants will be students from middle schools in School District #33, between the ages of 14 and 16. As well, some participants will be recruited from an Alternate middle school in the same school district; students referred to this public school are at risk of school leaving.
Participants will complete questionnaires regarding the perceived support of their mother, father, closest peers, and teacher.

Your signature on this form will signify that you have received a document which describes the procedures, possible risks, and benefits of this research study, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to allow the minor named below to participate in the study.

Name Parent, Guardian or other (PRINT):
who is the (*relationship to minor*) (PRINT): of
First name of minor (PRINT):   Last name of minor (PRINT):

I certify that I understand the procedures to be used and have fully explained them to:
Name of minor participant:
and the participant knows that myself, or he or she has the right to withdraw from the study at any time, and that any complaints about the study may be brought to the chief researcher named above or to:

Department, School or Faculty:
Education   Chair, Director or Dean: Dr. Kelleen Toohey
8888 University Way, Simon Fraser University, Burnaby, British Columbia, V5A 1S6, Canada
I may obtain copies of the results of this study, upon its completion by contacting the researcher named above or:
Gloria Beshara: gbeshara@sfu.ca
I certify that I understand the procedures to be used and that I understand the Study Information Document, and that I have been able to receive clarification of any aspects of this study about which I have had questions.

Last Name Parent or Guardian:
First Name Parent or Guardian: Signature:
Witness if required: Date (use format MM/DD/YYYY)
:

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