The Role of Hope in School-Aged Children’s Emotional Well-Being in Relation to School Environment and Optimism/Pessimism

Marc-Robert L. d’Entremont

Mount Saint Vincent University

A thesis submitted in partial fulfillment of the Masters of the Arts in School Psychology degree at Mount Saint Vincent University.
ACKNOWLEDGEMENT

I would like to express my sincere appreciation to my thesis supervisor, Dr. Daniel G. Lagacé-Séguin. Thank you for your valuable insight in child developmental issues in addition to your open-mindedness, support, and guidance in this and other research. I would also like to acknowledge David Kent for his contributions and suggestions, especially in the practical matters involved in this project.

I am deeply grateful for the cooperation from members of the Tri-County Regional School Board. I would like to especially thank Phil Landry for his approachability and openness to child developmental research. Also, I am in debt to Carol Arthurs for going beyond her role to make data collection more feasible and getting my foot in the door. To all the principals, teachers, parents, and students who have agreed to participate, I could not have completed this thesis without your assistance. Thank you.

It is difficult to imagine going through the process of completing a Master’s thesis without the support from family and friends. You have been there for me unconditionally and I am deeply appreciative. I would especially like to thank my wife, Nicole, mother and father, three brothers, and in-laws. Lastly, thank you to my classmates and professors who have made my experience in the School Psychology program a great one.
TABLE OF CONTENTS

ACKNOWLEDGEMENT.................................................................2

ABSTRACT ..................................................................................7

INTRODUCTION .............................................................................8
  School/Classroom Climate .......................................................9
  Optimism/Pessimism ............................................................11
  Childhood Depression ............................................................14
  Subjective Well-Being: Perceived Quality of Life .................16
  Classroom Climate, Optimism/Pessimism, and Students’ Emotional Well-Being ....19
  Hope Theory ...........................................................................23
  Hope in Children ....................................................................24
  Classroom Climate, Optimism/Pessimism, Emotional Well-Being, and Hope ....25
  Current Study & Hypotheses ...................................................28

METHOD ....................................................................................30
  Participants & Procedure .......................................................30
  Measures ................................................................................31
    Classroom climate .............................................................31
    Optimism and pessimism ....................................................31
    Depression .........................................................................32
    Perceived quality of life .....................................................32
    Hope ....................................................................................33

RESULTS ....................................................................................33
  Preliminary Correlational Analyses ........................................33
  Moderate Regression Analyses ..............................................35
    Overview .............................................................................36
    Depression .........................................................................37
    Life satisfaction: Friends ....................................................38
    Life satisfaction: School ....................................................39
    Life satisfaction: Self ........................................................39

DISCUSSION .............................................................................41
  Classroom Climate, Optimism/Pessimism, Hope, & Emotional Well-Being ....47
    Depression .........................................................................48
    Friends satisfaction ..........................................................50
    School satisfaction ............................................................51
    Self satisfaction ...............................................................55
  Implications ...........................................................................56
  Caveats and Future Research ...............................................57
  Conclusions .........................................................................59
REFERENCES ........................................................................................................61

APPENDICES

A. DEMOGRAPHIC QUESTIONNAIRE .................................................................73
B. MY CLASSROOM INVENTORY – SHORT FORM (MCI-SF) .........................74
C. THE YOUTH LIFE ORIENTATION TEST (YLOT) ........................................78
D. CHILDREN’S DEPRESSION INVENTORY (CDI) ........................................80
E. MULTIDIMENSIONAL STUDENTS’ LIFE SATISFACTION SCALE (MSLSS)...81
F. CHILDREN’S HOPE SCALE .........................................................................86

TABLES

1. CORRELATIONS BETWEEN CLASSROOM CLIMATE, OPTIMISM/PESSIMISM,
   AND HOPE ......................................................................................................89
2. CORRELATIONS BETWEEN EMOTIONAL WELL-BEING AND HOPE ..........90
3. CORRELATIONS BETWEEN CLASSROOM PERCEPTIONS,
   OPTIMISM/PESSIMISM, AND DEPRESSION ...........................................91
4. CORRELATIONS BETWEEN CLASSROOM CLIMATE, OPTIMISM/PESSIMISM,
   AND LIFE SATISFACTION ........................................................................92
5. PREDICTION OF DEPRESSION FROM CLASSROOM SATISFACTION AND
   HOPE ...........................................................................................................93
6. PREDICTION OF DEPRESSION FROM PESSIMISM AND HOPE ...............94
7. PREDICTION OF SATISFACTION WITH FRIENDS FROM CLASSROOM
   FRICITION AND HOPE ............................................................................95
8. PREDICTION OF SATISFACTION WITH FRIENDS FROM CLASSROOM
   COMPETITIVENESS AND HOPE ...............................................................96
9. PREDICTION OF SATISFACTION WITH FRIENDS FROM PESSIMISM AND
   HOPE ...........................................................................................................97
10. PREDICTION OF SATISFACTION WITH SCHOOL FROM CLASSROOM
    SATISFACTION AND HOPE ......................................................................98
11. PREDICTION OF SATISFACTION WITH SCHOOL FROM CLASSROOM DIFFICULTY AND HOPE.................................................................99

12. PREDICTION OF SATISFACTION WITH SCHOOL FROM OPTIMISM AND HOPE........................................................................100

13. PREDICTION OF SATISFACTION WITH SCHOOL FROM PESSIMISM AND HOPE........................................................................101

14. PREDICTION OF SATISFACTION WITH SELF FROM CLASSROOM COMPETITIVENESS AND HOPE...................................................102

15. PREDICTION OF SATISFACTION WITH SELF FROM CLASSROOM COHESIVENESS AND HOPE.........................................................103

FIGURES

1. MODERATED RELATION BETWEEN CLASSROOM SATISFACTION AND HOPE TO PREDICT DEPRESSION........................................104

2. MODERATED RELATION BETWEEN PESSIMISM AND HOPE TO PREDICT DEPRESSION.................................................................105

3. MODERATED RELATION BETWEEN CLASSROOM FRICTION AND HOPE TO PREDICT SATISFACTION WITH FRIENDS......................106

4. MODERATED RELATION BETWEEN CLASSROOM COMPETITIVENESS AND HOPE TO PREDICT SATISFACTION WITH FRIENDS........107

5. MODERATED RELATION BETWEEN PESSIMISM AND HOPE TO PREDICT SATISFACTION WITH FRIENDS........................................108

6. MODERATED RELATION BETWEEN CLASSROOM SATISFACTION AND HOPE TO PREDICT SATISFACTION WITH SCHOOL................109

7. MODERATED RELATION BETWEEN CLASSROOM DIFFICULTY AND HOPE TO PREDICT SATISFACTION WITH SCHOOL..................110

8. MODERATED RELATION BETWEEN OPTIMISM AND HOPE TO PREDICT SATISFACTION WITH SCHOOL...........................................111

9. MODERATED RELATION BETWEEN PESSIMISM AND HOPE TO PREDICT SATISFACTION WITH SCHOOL........................................112
10. MODERATED RELATION BETWEEN CLASSROOM COMPETITIVENESS AND HOPE TO PREDICT SATISFACTION WITH SELF

11. MODERATED RELATION BETWEEN CLASSROOM COHESIVENESS AND HOPE TO PREDICT SATISFACTION WITH SELF
Abstract

Interactions between classroom climate, dispositional optimism, and hope were examined in the prediction of emotional well-being in early adolescent students. The present study consisted of 98 students (32 boys, 65 girls, 1 unknown) in grades six, seven, and eight with a mean age of 12.51 years ($SD = .95$). Participants completed questionnaires regarding their classroom environment, future expectations, hopeful thinking, depression, and life satisfaction. Hierarchical multiple regression analyses revealed eleven interactions between classroom climate/dispositional optimism and hope in the prediction of depression and life satisfaction. As an example, it was found that classroom competitiveness was negatively related to satisfaction with friends for students low in hope but not for students with high hope. Implications of these interactions are discussed in terms of hope as a psychological strength and its role in promoting emotional well-being in early adolescent students.
The Role of Hope in School-Aged Children’s Emotional Well-Being in Relation to School Environment and Optimism/Pessimism

Most schools today have evolved into institutions with one prominent goal for students, which is to build academic skills. This is readily apparent by the emphasis placed in high-stakes testing and meeting curriculum outcomes (e.g., Jones, 2001). Perhaps due to this emphasis, students struggling in academic areas, such as language arts or mathematics, are quickly identified (e.g., Cohen, 2006) and make up the majority of school referrals for psychological services. School-aged children’s emotional development, an often forgotten aspect of education, has not received comparable attention in the school setting as their academic development. According to U.S. statistics, children’s lifetime prevalence rate of depression is up to 20% (Cicchetti & Toth, 1998) yet schools have been hesitant to work on improving students’ emotional development.

Recently, researchers have focused their efforts on examining variables related to children’s emotional well-being, such as classroom climate (e.g., Sink, 2005), optimism/pessimism (e.g., Chang & Sanna, 2003), and hope (e.g., Snyder et al., 1997). Each variable has been found to have an impact on students’ emotional development. However, less is known regarding how these variables interact in the prediction of students’ emotional well-being. In the present study, I examined the correlations and interactions of classroom climate, optimism/pessimism, and hope in the prediction of depression and life satisfaction in school-aged children.
School/Classroom Climate

In school systems today, there is a strong emphasis on providing instruction and supports for the academic skills of children (Cohen, 2006). On a survey, the majority of parents and educators who were asked what outcomes and skills they hoped schools will provide their students most often cited responses such as developing students into responsible adults, good health, and happiness (Cohen, 2006). Researchers have recently begun to notice the need to implement structures to enhance school-aged children’s social and emotional lives, structures that have been ignored to a certain extent until now. In response, some research attention has been devoted to the area of school climate, a measure of the consistency and quality of interactions between members of the school that influence school-aged children’s social and emotional well-being (Haynes, Emmons, & Ben-Avie, 1997; Kuperminc, Leadbeater, Emmons, & Blatt, 1997). Interactions among staff members, among students, between staff and students, and between the community and school are highly influential in determining the mood of the school environment (Haynes et al., 1997).

Many student psycho-social and academic outcomes have been found to be related to school climate (Haynes et al., 1997). For example, researchers have found a link between school climate and children’s self-esteem (Hoge, Smit, & Hanson, 1990), drop-out rate (Fortin, Marcotte, Potvin, Royer, & Joly, 2006), externalizing and internalizing behaviour (Kuperminc et al., 1997), absenteeism (Corville-Smith, Ryan, Adams, & Dalicandro, 1998), and academic achievement (Wood, Lawrenz, Huffman, & Schultz, 2006). In all instances, a positive school climate was found to be related to desirable school outcomes in children. Taken together, these findings highlight the
importance of school context in the development, well-being, and successes of school-aged children (Haynes et al., 1997). Interactions, within the confines of school, between personnel and students have been found to have a strong impact on children’s social, emotional, and academic outcomes and, therefore, should not be ignored when attempting to improve school experiences for all members.

Researchers have differentiated between school and classroom climate (e.g., Fraser & Fisher, 1982b; Sink, 2005). While both are contingent on the other, classroom climate refers to the interactions that occur only in the classroom or small learning environment and school climate refers to interactions that occur in the whole school (Sink, 2005). One of the most widely used measures of classroom climate, the My Class Inventory-Short Form (MCI-SF; Fraser & Fisher, 1982a), assesses perceptions of cohesiveness, friction, difficulty, satisfaction, and competitiveness in elementary and junior high school students’ classrooms (Fraser & Fisher, 1982; 1986).

Factors of classroom climate related to the school experiences of children have been examined in the literature. For example, Johnson, Johnson, and Anderson (1983) investigated how cooperative learning was related to grade four through nine students’ perceptions of teachers who are supportive in the classroom (i.e., an indication of their perceived classroom climate). The researchers found that high levels of cooperation were related to high goal and resource interdependence and children’s perceptions that teachers cared about the students and their academic success (Johnson et al., 1983). Cooperative students were also found more likely to care about their classmates’ academic successes, to believe that classmates were friends, and to perceive more academic help and affection from peers. Overall, cooperative learning was related to perceptions of academic and
personal support from teachers and peers, which increased students’ positive perceptions of classroom climate (Johnson et al., 1983).

Anderson, Hamilton, and Hattie (2004) examined the relations between classroom climate and high school students’ motivation. Motivation was measured by examining school engagement behaviours (i.e., teachers’ reports of students’ participation, self-reported engagement, and task completion). Affiliation, a measure of friendship between students in a class, was found to be the most influential aspect of classroom climate on students’ motivation (Anderson et al., 2004). The researchers argued that these findings support the notion that a sense of belonging in the classroom is beneficial towards students’ school achievement. Another, and more internal, construct that needs additional attention in the children’s literature is dispositional optimism.

*Optimism/Pessimism*

Expectations about future events (i.e., positive and negative thinking) can be defined as either optimistic and/or pessimistic (Scheier & Carver, 1985). Researchers have conceptualized expectations in a number of ways. For example, Seligman and colleagues (1984) conceptualized optimism and pessimism as explanatory styles towards already occurred events that have an impact on future behaviours and moods. Another closely related approach to expectations focused on hopelessness as it related to depression (Kazdin, Rodgers, & Colbus, 1986). In this model, hopelessness represents negative expectancies for future events and does not take into account positive expectancies.

Alternatively, Scheier and Carver (1985, 1987) conceived optimism and pessimism as representations of expectancies regarding future outcomes for events that
have yet to occur. This view is derived from expectancy-value theories (Scheier, Carver, & Bridges, 1994) in which individuals are thought to pursue their goals, even through adversity and setbacks, as long as their expectations to successfully reach their goals remain positive (Scheier & Carver, 1992). Conversely, when their expectations to reach goals become negative, they will likely disengage from their efforts. Expectancies associated with this model have been conceptualized in a general manner, rather than situation specific, which, in turn, suggests that optimism and pessimism represent aspects of personality (i.e., stable individual traits; Scheier & Carver, 1993). Sheier and Carver (1992) labelled this construct *dispositional optimism*.

Optimism and pessimism are cognitive constructs that have been found to be related to positive and negative outcome expectancies, respectively (Scheier & Carver, 1987). Individuals can be differentiated with respect to their levels of optimism and pessimism. For example, high levels of optimism have been found to be related to expectations of the best possible future outcomes whereas high levels of pessimism have been found to be related to expectations of the worse possible future outcome (Scheier & Carver, 1993).

Dispositional optimism has been linked to a number of psychological outcomes in the adult literature (e.g., see Scheier & Carver, 1992). Optimism was found to be a protective factor against psychological distress related to postpartum depression (Carver & Gaines, 1987), coronary artery bypass surgery (Scheier et al., 1989), breast cancer (Carver et al., 1993), adjustment to first year in university (Aspinwall & Taylor, 1992), and acquired immunodeficiency syndrome (AIDS) in gay men (Taylor, Kemeny, Aspinwall, Schneider, Rodriguez, & Herbert, 1992).
The research on dispositional optimism in children and adolescents remains largely unexplored and unclear. Chang and Sanna (2003) noted this to be problematic for researchers and clinicians because they are forced to draw assumptions based on the adult literature on the mechanisms governing dispositional optimism when working with this age cohort.

Overall, it has been reported that children are typically more optimistic than pessimistic about their long-term outlook on life (Fischer & Leitenberg, 1986). Little is known about the origins of optimism and pessimism. However, in one study, researchers have examined how mothers’ parenting variables accounted for the development of optimism and pessimism in a community sample of children (Hasan & Power, 2002). Maternal pessimism was correlated with children’s pessimism but not with children’s depressive symptoms. However, maternal optimism was correlated with children’s depressive symptoms but not children’s optimism (Hasan & Power, 2002). Parents who espoused an over-controlling parenting style were more likely to have children with low optimism, high pessimism, and many depressive symptoms (Hasan & Power, 2002). Furthermore, a moderate level of control in mothers’ parenting was related to high levels of optimism in children. That is, mothers who gave their children autonomy in making decisions and were moderately controlling in their children’s friends and extracurricular activities were found to have children with the highest levels of optimism (Hasan & Power, 2002).

Children’s optimism and pessimism have been linked to their self-esteem (Fischer & Leitenberg, 1986). Children who were found to be pessimistic were likely to have a highly negative self-esteem. In adolescents, dispositional optimism was linked to
depressive symptoms, hopelessness, and stress (Chang & Sanna, 2003). Optimism was found to be associated with less depressive symptoms and hopelessness in adolescents with high levels of stress. Adolescents who were pessimistic and exposed to many hassles (stressors) reported more depressive and hopelessness symptoms than adolescents exposed to many hassles but who were optimistic (Chang & Sanna, 2003).

Recently, the Youth Life Orientation Test (YLOT) was developed, a questionnaire to measure dispositional optimism in children that yields scores for children’s optimism, pessimism, and total optimism (Ey et al., 2005). Ey and colleagues (2005) found that children high in optimism reported low levels and depression and their parents reported low levels of behaviour problems. Children high in pessimism reported many anxiety symptoms and their parents reported high levels of social and academic problems (Ey et al., 2005). Following is a discussion on depression, one aspect of children’s emotional well-being.

**Childhood Depression**

In recent years, there has been an abundance of attention focused towards understanding depression in childhood and adolescence (Cicchetti & Toth, 1998). Today, researchers agree that children experience depression, which was a much debated idea in the past (Birmaher et al., 1996). Rates of depression in childhood and adolescence have been found to be similar to rates in adulthood. For example, it is estimated that the point prevalence rate of major depressive disorder to be between 0.4% and 2.5% for children and between 0.4% and 8.3% for adolescents (Birmaher et al., 1996). Also, the estimated point prevalence rate for dysthymic disorder, a less severe but more prolonged depression, has been found to be between 0.6% and 1.7% for children and between 1.6%
and 8.0% for adolescents (Birmaher et al., 1996). Lifetime prevalence rates have been found to be between 15% and 20%, mirroring adult rates and suggesting that depression may have its roots during childhood (Cicchetti & Toth, 1998). In fact, by the end of high school, one of every five adolescent will likely have experienced a clinical depressive episode (Gillham & Reivich, 2004). Furthermore, one in four youths report high levels of subclinical depression at any point in time (Angold, 1988). However, approximately 70% to 80% of children and youths with depression are not receiving treatment (Cicchetti & Toth, 1998) indicating a need for more awareness around this disorder in school-aged individuals.

The presentation of depression in children and adolescents in comparison to adults has been debated over several years (e.g., see Weiss & Garber, 2003). Currently, the same diagnostic system is used for children and adults: the Diagnostic and Statistical Manual of Mental Disorders – Text Revision (DSM-IV-TR; APA, 2000). Common symptoms needed to diagnose depression include a depressed or irritable mood, anhedonia, disruption in appetite and/or sleep, fatigue, psychomotor agitation, excessive guilt and/or lack of self-esteem, inability to concentrate, and hopelessness and/or suicidal impulses (APA, 2000). Weiss and Garber’s (2003) meta-analysis generated inconclusive results about whether depression as a syndrome is different in children, adolescents, and adults or if the symptoms are identical throughout development but are expressed differently at each level (e.g., feelings of guilt may look different in children than adults due to differences in cognitive abilities). In a community sample of children and adolescents, sex differences differed for each age group (Craighead, Smucker, Craighead, & Ilardi, 1998). Specifically, girls were found to report lower levels of depression in
childhood than boys but reported higher levels than boys in adolescence (Craighead et al., 1998). Depressive disorders have a detrimental effect on children’s and adolescents’ outcomes, especially in the areas of social acceptability (Klein, Lewinsohn, & Seeley, 1997), academic achievement (Nolen-Hoeksema, Girgus, & Seligman, 1992), cigarette smoking (Windle & Windle, 2001), substance abuse (Rao, 2006), and suicide (Stoelb & Chiriboga, 1998).

Beck’s (1967) cognitive theory of depression is one of the most widely studied theories of depression and is comprised of three components: negative schemas, cognitive triad, and cognitive distortions. Negative schemas act as filters to external stimuli that negatively influence how individuals perceive their environment (Beck, 1967). Negative views of the self, world, and future make up individuals’ cognitive triad and are common in depressed individuals (Beck, 1967). Cognitive distortions are errors in judgments that validate negative schemas despite contradictory evidence (Beck, 1967). Questionnaires have been developed to measure depression based on Beck’s theory (e.g., the Beck Depression Inventory; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). One widely researched measure of childhood depression that is also founded in Beck’s cognitive theory of depression is Kovacs’ (1992) Children’s Depression Inventory (CDI) and will be used as one measure of children’s emotional well-being. However, another construct measuring children’s emotional well-being is perceived quality of life.

Subjective Well-Being: Perceived Quality of Life

Subjective well-being (SWB) is a term that captures, on an individual level, whether we are content with our life situations (Gilman & Huebner, 2003). Researchers have examined the relations between SWB and objective variables (e.g., family income...
and crime rate) and found only weak correlations (Diener & Suh, 1997), giving support for SWB being governed by internal mechanisms (Gilma & Huebner, 2003). Diener and colleagues (1999) argued that SWB is a composite of positive affect, negative affect, and life satisfaction, which are all orthogonal to each other and measurable in adults and children. Whereas positive and negative affect are indicators of one’s mood, life satisfaction represents cognitive appraisals about one’s life situation, which is the focus of the present study.

A well researched measure of children’s life satisfaction is perceived quality of life (PQOL; see Huebner, Suldo, Smith, & McKnight, 2004). Individuals who have their most important and immediate needs met possess high levels of PQOL (Huebner et al., 2004). Initial research on PQOL was focused on factors that correlated with it. For example, researchers found that internal factors (e.g., internal locus of control, self-esteem) were stronger correlates of PQOL than demographic variables (e.g., gender, age, SES). In a sample of early adolescents, personality and temperamental variables such as neuroticism and anxiety were found to negatively impact life satisfaction (Fogle, Huebner, & Laughlin, 2002).

Environmentally, home and school factors have been found to correlate with children’s PQOL (Huebner et al., 2004). Adolescents’ positive and negative acute events and chronic life experiences were related to their levels of PQOL (Ash & Huebner, 2001). Youths with high levels of negative acute events and chronic life experiences were found to have lower PQOL ratings than other youths with lower levels of negative events and experiences. McCullough, Huebner, and Laughlin (2000) found that daily events predicted PQOL beyond that of major life events in adolescents. Low levels of PQOL
have been linked to negative perceptions towards school and teachers (Huebner, Funk, & Gilman, 2000). Furthermore, adolescents who participated in structured school extracurricular activities were found to have higher levels of school satisfaction than those who did not participate in activities (Gilman, 2001).

More recently, research interests around PQOL evolved to determining pathways contributing to children’s life satisfaction by building on the previously mentioned correlational studies (Huebner et al., 2004). Internal factors were found to be most influential in mediating children and youths’ PQOL in relation to external events. For example, locus of control was reported to mediate the relation between negative events and PQOL in adolescents (Ash & Huebner, 2001). Youths who reported high levels of external locus of control in relation to intense negative events were more likely to have high levels of PQOL. Social self-efficacy, which refers to how well individuals believe they can deal with future social tasks, was also found to be a mediator between low levels of extraversion, a measure of tendencies towards sociability, and PQOL (Fogle et al., 2002).

In addition, PQOL also acts as a mediator in the relation between external factors and children’s behaviours (Huebner et al., 2004). For example, Suldo and Huebner (2004) found that PQOL mediated the relation between parenting practices and adolescents’ internalizing and externalizing behaviours. In a study examining the relations between PQOL, intense stressful life events, and internalizing behaviours in adolescents, it was found that PQOL mediated the relation between the two variables (McKnight, Huebner, & Suldo, 2002). In the present study, I will use Huebner’s (2004) measure of life satisfaction *Multidimensional Students’ Life Satisfaction Scale (MSLSS)*
to measure children’s PQOL. The MSLSS measures children’s life satisfaction in a number of areas, including family, friends, school, self, and living environment (i.e., neighborhood). To date, PQOL has not been examined in relation to cognitive variables such as hope and optimism/pessimism in children.

*Classroom Climate, Optimism/Pessimism, and Students’ Emotional Well-Being*

The relations between classroom climate, optimism/pessimism, and affective well-being have been documented in the literature. For example, Somersalo, Solantaus, and Almqvist (2002) examined the relation between classroom climate and mental health in primary school-aged children. With a longitudinal design, they investigated whether children with emotional and behavioural difficulties in the second grade were more affected by classroom climate in the sixth grade than other children. The results indicated that internalizing/externalizing problems and classroom climate in grade two were independently predictive of internalizing/externalizing problems in grade six for both sexes (Somersalo et al., 2002). However, interactions between internalizing/externalizing problems in grade two and classroom climate in grade six were found only for girls. Girls with social and emotional problems in grade two were more likely to be affected by poor classroom environment in grade six than girls with lower levels of problems (Somersalo et al., 2002). When internalizing and externalizing problems were examined separately, an interaction was found between girls’ externalizing problems in grade two and classroom climate in grade six in predicting internalizing/externalizing problems in grade six (Somersalo, 2002).

Using a wider perspective of school environment, Loukas and Robinson (2004) investigated how effortful control, an aspect of students’ temperament, interacted with...
school climate to predict internalizing and externalizing problems in early adolescents. Differences in the role of school climate influences were found between boys and girls (Loukas & Robinson, 2004). Girls’ perceptions of competition and friction among students were found to influence the relations between effortful control and externalizing problems. That is, low levels of competition and friction between students decreased the likelihood of conduct problems in girls low in effortful control (Loukas & Robinson, 2004). However, for boys, perceived cohesion and friction among students and satisfaction with classes were found to moderate the relation between effortful control and internalizing problems (Loukas & Robinson, 2004). Specifically, high levels of cohesion between students, high levels of satisfaction with classes, and low levels of friction among students decreased the likelihood of depressive symptoms for boys low in effortful control (Loukas & Robinson, 2004).

Other researchers have examined the relations between school climate and social and emotional development of middle school students (Loukas, Suzuki, & Horton, 2006). Specifically, Loukas et al. (2006) examined whether school connectedness acted as a mediator between school climate variables (friction, cohesion, competition, and satisfaction with classes) and depressive and conduct problems one year later. The results indicated that students who reported high levels of connectedness with their school were less likely to show behaviour problems one year later (Loukas et al., 2006). However, school connectedness did not contribute variance additional to the school climate variables in the prediction of depressive symptoms (Loukas et al., 2006).

School climate was also linked to changes in psychopathology following a two-year interval (Kasen, Johnson, & Cohen, 1990). Schools ridden with conflict were found
to have increases in students reporting externalizing behaviours. However, high levels of depressive symptoms in students were linked to schools that promoted emotional discussions (i.e., social facilitation) between students and teachers, which was a counterintuitive finding (Kasen et al., 1990). It was argued that focusing on negative feelings exacerbated students’, especially adolescents’, internalized moods (Kasen et al., 1990). Schools with high conflict coupled with high social facilitation were more likely to have more severe psychopathology in students.

With regards to the relation between optimism/pessimism and emotional well-being, it is not surprising that the two constructs have been found to be linked in the literature since our expectations of future events have an influence on our present behaviours and affect (Scheier & Carver, 1992). More specifically, optimism was found to act as a buffer against negative affect while pessimism acts as a risk factor for internalizing problems in adults (Marshall, Wortman, Kusulas, Hervig, & Vickers, Jr., 1992). However, research with childhood populations is lagging when compared to the literature on adult populations.

In a study with undergraduate students, Chang (1998) examined whether optimism acted as a buffer between perceived stress and psychological well-being (i.e., depression and life satisfaction). Optimism moderated the relation between perceived stress and both depression and global life satisfaction in separate equations (Chang, 1998). Similarly, Scheier and colleagues (1994) found that optimism was a significant predictor of depression after controlling for neuroticism, trait anxiety, self-mastery, and self-esteem.
Boman, Smith, and Curtis (2003) investigated how optimism/pessimism and explanatory style (i.e., how we attribute cause of events) were related to the development of anger in high school students and how they differ between sexes. It was investigated whether students with higher levels of pessimism coupled with highly negative explanatory styles displayed more severe forms of anger (e.g., destructive school behaviour) than other students (Boman et al., 2003). The overall results revealed that students’ negative explanatory style was linked to their anger intensity while pessimism was linked to perceptions of hostility towards school. Further, both anger intensity and school hostility led to a higher likelihood of destructive school behaviours (Boman et al., 2003). However, pathways differed for males and females. For males, only those with highly negative explanatory styles were likely to report high levels of anger intensity and to report high levels of destructive school behaviours. The path for females was more complex. Those with highly negative explanatory styles were likely to have high levels of pessimism (Boman et al., 2003). Also, girls with high levels of pessimism and school hostility were likely to report high levels of anger intensity (Boman et al., 2003). Therefore, high school girls’ anger is influenced by their attitudes about school and their pessimistic dispositions and high levels of anger do not always lead to destructive behaviours (Boman et al., 2003).

Overall, there have been many research studies that have linked school climate and optimism/pessimism to emotional well-being. Another construct that may provide further insight into students’ well-being as it relates to their school environment and cognitive expectancy style is hope. To date, no researchers have examined these variables in unison in a sample of early adolescent students.
**Hope Theory**

Snyder and colleagues’ (1991) hope theory provides a sound cognitive conceptualization of hope. Snyder’s hope is a goal motivational construct that describes how we reach those goals through pathways and agency (the motivation to reach goals) thinking. According to Snyder (2002), emotions are linked to hope as a reaction to how one is doing during goal attainment. That is, individuals who are successfully approaching or have reached their goals display positive emotions whereas those who are not successful display negative emotions (Snyder, 2002).

**Goals.** Snyder (2002) described two types of goals that apply to hope theory: positive and negative goal outcomes. Doing something for the first time, sustaining a previously attained goal, and expanding on a previously attained goal constitute positive goal outcomes. On the other hand, negative goals are characterized by the absence of an event. For example, preventing something from occurring and delaying something from happening constitutes negative goal outcomes. Snyder (2002) argues that not all goals have to be for the betterment of our life situations; that is, hope theory does not discriminate between socially desirable and undesirable goals.

**Pathways thinking.** Pathways thinking refers to finding routes for goal attainment (Snyder, 2002). Snyder (2002) stated that we are constantly linking past experiences to imagined future goals. Individuals who can develop well articulated pathways towards reaching their goals are more likely to be successful and, therefore, are likely to display higher levels of hope than others (Snyder, 2002). Individuals with low hope are likely to be less confident in their pathways than those high in hope. Furthermore, individuals high
in hope have been found to be more likely to be flexible with pathways when faced with hurdles than those low in hope (Snyder, 2002).

Agency thinking. Agency thinking is the motivational aspect of Hope theory (Snyder, 2002). Individuals who have the motivation to set their pathways thinking in motion are high in agency thinking. Also, agency thinking has been linked to using alternative paths and to using self-talk to provide self-encouragement when faced with barriers (Snyder, 2002).

Hope in Children

Snyder and colleagues (Snyder et al., 1997) developed the Children’s Hope Scale (CHS) to extend the hope theory to younger populations. Similar to findings with adult populations, the Children’s Hope Scale produced two factors that accounted for a large quantity of variance: pathways and agency thinking (Snyder et al., 1997). Furthermore, Snyder et al. (1997) administered the Children’s Hope Scale to multiple age cohorts producing similar results in mean hope levels along with high correlations in test-retest reliabilities. Taken together, these results suggested that hope develops early on in childhood and takes on a trait-like characteristic. That is, hope is relatively stable over time (Snyder et al., 1997).

Hope has been linked to many positive outcomes in children and adults (see Snyder, 2002). Notably, elementary school children who reported high levels of hope were likely to have high achievement test scores (Snyder et al., 1997). Similarly, high school students with high levels of hope had higher grade point averages than students with low hope (Snyder et al., 1991). In athletics, girls at a summer camp with high hope were more likely to set goals specific to their sport and to be less likely to want to quit
than girls with low hope (Brown, Curry, Hagstrom, & Sandstedt, 1999, as cited in Snyder, 2002). After accounting for social support and stress, children of incarcerated mothers with high levels of hope were found to show better internal and external behavioral adjustment than those with low hope levels (Hagen, Myers, & Mackintosh, 2005). Hagen et al. (2005) suggested that hope is a protective factor against maladjustment in children with high levels of stress and low social support. Furthermore, pathways thinking was related to social support while agency thinking was not (Hagen et al., 2005). Because of these findings, it was suggested that in order to increase hope in children, pathways thinking should be targeted.

Classroom Climate, Optimism/Pessimism, Emotional Well-Being, and Hope

Hope in children and adolescents, as it relates to school, cognitive, and emotional well-being variables, has received little attention in the literature. To date, only one study was conducted examining the contributions of hope and school climate in relation to adolescents’ school completion (Worrell & Hale, 2001). Worrell and Hale (2001) found that perceived school climate did not contribute variance towards at-risk students’ decision to drop out of school whereas hope was a protective factor against dropout in this sample. However, the authors measured hope with three single item questions that asked about how important it was for students to attend university in the future, the likelihood of obtaining a good job by age 30, and the likelihood of struggling in the future (Worrell & Hale, 2001), which differs significantly from Snyder’s model of agency and pathways thinking abilities. Therefore, the relations between hope theory and classroom climate are currently unknown.
Because dispositional optimism and hope are both related to future expectations, researchers have examined whether they measure the same or separate trait in adults; that is, whether both constructs measured a higher-order global factor of expectations (Bryant & Cvengros, 2004). Hope and dispositional optimism were found to be highly correlated (Bryant & Cvengros, 2004). However, discriminate analyses revealed the two constructs to be associated with different criterion variables. Hope was found to associate highly with self-efficacy while dispositional optimism was found to associate highly with positive reappraisal, a coping strategy, suggesting that they are distinct personality traits in adults (Bryant & Cvengros, 2004). Based on these findings, the authors concluded that hope is highly influential in attainment of specific goals whereas dispositional optimism is related to more general outcomes.

Examination of the relations between hope and dispositional optimism in children is lacking in the literature. Ey et al. (2005) reported that high levels of optimism were related with high levels of hope and high levels of pessimism were related with low levels of hope in children. To date, no other researchers have examined the relations between these constructs.

Hope has been linked to emotional well-being in children. Snyder and colleagues (1997) examined the correlations between hope and emotional difficulties in children as one aspect of their evaluation of the Children’s Hope Scale. Children high in hope were more likely to have high levels of self-esteem and low levels of depression (Snyder et al., 1997). In a different study, hope was found to buffer against stressful situations to promote emotional well-being (Valle, Huebner, & Suldo, 2006). Valle et al. (2006) examined the relations between hope, stressful life events, life satisfaction, and
psychopathology over the course of one year in non-clinical young adolescents. Hope at Time 1 was found to predict life satisfaction and internalizing behaviours at Time 2 (Valle et al., 2006). They also investigated whether hope moderated the effects of stressful life events in the prediction of life satisfaction, internalizing behaviours, and externalizing behaviours. Hope was found to be a protective factor against the negative impact of stressful life events in the prediction of life satisfaction and internalizing behaviours but not in the prediction of externalizing behaviours (Valle et al., 2006). Adolescents with high levels of hope had higher life satisfaction and lower internalizing behaviours than adolescents with low levels of hope. Therefore, the authors concluded that hope acts as a psychological strength protecting youths against psychopathology (Valle et al., 2006).

In another study, Barnum and colleagues (1998) investigated whether hope acts as a protective factor against externalizing and internalizing behaviour problems in adolescents with burn injuries and matched controls without burn injuries. No differences were found between both groups on levels of hope (Barnum et al., 1998). Therefore, the authors combined both groups to analyze the data. It was reported that hope predicted externalizing behaviour problems over and above adolescents’ perceived social support (Barnum et al., 1998). Adolescents with high levels of hope were more likely to report lower levels of externalizing behaviours than other youths. Barnum et al. (1998) suggested that adolescents who can formulate many pathways to reach a goal are less likely to resort to aggressive behaviours to achieve these goals. Hope was also predictive of global self-worth (Barnum et al., 1998). However, adolescents’ perceived social support was equally predictive of global self-worth. The authors argued that hope and
social support are highly correlated and it is likely that hope often is developed within social networks for youths (Barnum et al., 1998). Overall, hope has been found to be related to children’s school context, dispositional optimism, and emotional well-being. However, to date, these variables have never been investigated in unison.

Current Study & Hypotheses

The present study was designed to examine the relations between classroom climate, dispositional optimism, hope, depression, and perceived quality of life in early adolescent students. In addition to examining the simple correlations between all variables, I examined whether perceived classroom climate and dispositional optimism interacted with hope in the prediction of emotional well-being. In other words, I investigated whether hope moderated the relations between children’s perceived classroom climate and dispositional optimism in the prediction of depression and life satisfaction.

Several hypotheses drawn from this study were exploratory due to a lack of research conducted with these variables in unison. For example, students’ hope and perceptions of classroom climate have not been examined directly. However, it was hypothesized that the total hope subscale of the CHS is positively correlated with the positive subscales of the MCI-SF (i.e., satisfaction and cohesiveness) and negatively correlated with the negative subscales of the MCI-SF (i.e., friction, competitiveness, and difficulty. Based on Ey et al.’s (2005) findings that optimism was related to high hope levels and pessimism to low hope levels, it was expected that total hope is positively correlated with the optimism subscale of the YLOT and negatively correlated with the pessimism subscale. Consistent with Snyder et al.’s (1997) findings that high hope was
related to low levels of depression in children and Valle et al.’s (2006) findings of a significant positive correlation between hope and life satisfaction, it was hypothesized that total hope is negatively correlated with the total depression score of the CDI and positively correlated with all subscales of the MSLSS.

Loukas et al. (2006) found that positive school climate variables were negatively correlated with children’s depressive symptoms. From these findings, depression was hypothesized to be negatively correlated with the positive classroom climate subscales and positively correlated with the negative classroom climate subscales in the present study. Based on results from Somersalo et al. (2002) that a positive school climate was related to a lack of psychopathology in children, all subscales of the MSLSS were hypothesized to be positively correlated with the positive classroom climate subscales and negatively correlated with the negative classroom climate subscales. In addition, it was expected for depression to be negatively correlated with the optimism subscale of the YLOT and positively correlated with the pessimism subscale. These hypotheses are based on Ey et al.’s (2005) findings of a significant correlation between optimism and the CDI. Lastly, it was expected that all MSLSS subscales are positively correlated with optimism and negatively correlated with pessimism. These hypotheses stem from research with an adult sample (no research between these variables has been conducted with children to date) that revealed life satisfaction to be positively correlated with optimism and negatively correlated with pessimism (Baily, Eng, Frisch, & Snyder, 2007).

The main purpose of this study was to examine whether hope moderated the relation between classroom climate, dispositional optimism, and emotional well-being in children. To date, little research has been conducted in this area with childhood samples.
However, Valle et al. (2006) reported hope to be a psychological buffer against stressful life events to promote higher life satisfaction and lower internalizing behaviour problems. Therefore, hope was expected to interact with children’s perceptions of classroom climate and dispositional optimism to promote emotional well-being in the present study. It was expected that high hope levels in children predict lower levels of depression and higher levels of life satisfaction, especially for children who endorse negative perceptions of classroom climate and who report low optimism and/or high pessimism levels.

Method

Participants & Procedure

The present study included 98 students with no documented mental illness/disability between the ages of 10 and 14 years who were in grades six, seven, and eight from schools in the Tri-County Regional School Board in Nova Scotia. Students with diagnosed mental illnesses/disabilities were not eligible to participate in the study to control for the possibility of those illnesses/disabilities to influence the emotional outcomes. The participants consisted of 32 boys, 65 girls, and one participant who did not provide any demographic information. Mean age of participants was 12.51 years (SD = .95). Forty-two students were in grade six, 24 in grade seven, and 31 in grade eight.

Letters and parental consent forms were delivered to school principals who distributed them to classroom teachers to be sent home to parents by students. When consent forms were returned to the classroom teacher, principals re-collected them to be picked-up by the researcher. Data was collected in groups (e.g., all grade six students from school A whose parents consented to the study). After listening to the researcher
read a letter detailing the study, students provided informed consent and completed six questionnaires.

**Measures**

The following measures were included in the present study: a three-item demographic questionnaire (i.e., sex, grade, and age), the *My Class Inventory-Short Form* (MCI-SF; Fraser & Fisher, 1982a), the *Youth Life Orientation Test* (YLOT; Ey et al., 2005), the *Children’s Depression Inventory* (CDI; Kovacs, 1992), the *Multidimensional Students’ Life Satisfaction Scale* (MSLSS; Huebner, 1994), and the *Children’s Hope Scale* (CHS; Snyder et al., 1997) (see Appendices A, B, C, D, E, and F, respectively).

**Classroom climate.** Children’s perceptions of their classroom climate were measured with the *My Classroom Inventory-Short Form* (MCI-SF; Fraser & Fisher, 1982a). The MCI-SF is a 25-item, self-report measure. On each item, children are asked whether they agree or disagree with the statement by circling a *yes* or *no* response. The measure yields five subscales: satisfaction (e.g., “Some pupils are not happy in class”), friction (e.g., “Children are always fighting with each other”), competitiveness (e.g., “Some pupils feel bad when they don’t do as well as the others”), difficulty (e.g., “Schoolwork is hard to do”), and cohesiveness (e.g., “In my class everybody is my friend”). In the present study, the MCI-SF was found to have acceptable psychometric properties with Cronbach’s alpha coefficients ranging from .68 to .80 (see Appendix B).

**Optimism and pessimism.** Optimism and pessimism were measured with the *Youth Life Orientation Test* (YLOT; Ey et al., 2005). This self-report scale was derived from the *Life Orientation Test – Revised* (LOT-R; Sheier et al., 1994). Ey and colleagues (2005) modified the wording to make it appropriate for use with elementary school-aged students.
children. The YLOT contains twelve items rated on a 4-point Likert-type scale ranging from 0 *not true for me* to 3 *true for me*. The YLOT yields three scores: an optimism score (e.g., “I usually expect to have a good day”), a pessimism score (e.g., “When things are good, I expect something to go wrong”), and a total optimism score by combining the adding the optimism score with reverse-coded pessimism scores. However, for the purposes of the present study, total optimism scores will not be reported. Cronbach’s alpha coefficients were found to be acceptable in the present study: .85 for optimism and .85 for pessimism (see Appendix C).

*Depression.* Depression in children was measured with the *Children’s Depression Inventory* (*CDI*; Kovacs, 1992). The CDI is a 27-item, self-report measure that covers a wide range of childhood and adolescent depressive symptoms such as negative mood (e.g., sadness), interpersonal problems (e.g., enjoyment of social situations), ineffectiveness (e.g., perceptions of ability in achieving in school), anhedonia (e.g., loss of enjoyment in activities), and negative self-esteem (e.g., perceptions of self). Each item is presented with three choices, from 0 to 2, of increasing pathology and yields a total score between 0 and 54. For each item, children are asked to choose one option that best describes them in the past two weeks. In the present study, a Cronbach’s alpha coefficient level of .92 was found for the total CDI score (see Appendix D).

*Perceived quality of life.* The *Multidimensional Students’ Life Satisfaction Scale* (*MSLSS*; Huebner, 1994) was used as a measure of children’s perceived quality of life, a measure of subjective well-being. The MSLSS was designed to measure children’s well-being in many domains of their day-to-day lives. The 40-item self-report questionnaire assesses children’s Family (e.g., “I enjoy being home with my family”), Friends (e.g.,
“My friends are nice to me”), School (e.g., “School is interesting”), Self (e.g., “I am a nice person”), and Living Environment (e.g., “I like my neighborhood”) domains. Each item is rated on a 4-point Likert-type scale ranging from 1 \textit{never} to 4 \textit{almost always}. The MSLSS was found to have adequate psychometric properties with alpha coefficients of .85, .83, .86, .83, and .82 for the Family, Friends, School, Living Environment, and Self subscales, respectively (see Appendix E).

\textit{Hope}. The \textit{Children’s Hope Scale} (CHS; Snyder et al., 1997) was used to measure children’s level of hope. The self-report questionnaire consists of six items: three items measure Agency thinking (e.g., “I think I am doing pretty well”) and the remaining three measure Pathways thinking (e.g., “I can think of many ways to get the things in life that are most important to me”). A Total Hope score is yielded by summing the Agency and Pathways thinking items. Items are rated on a 6-point Likert-type scale ranging from 1 \textit{none of the time} to 6 \textit{all of the time}. The CHS was found to have acceptable psychometric properties in the present study with Cronbach’s alpha coefficient levels of .89, .85, and .78 for Total Hope, Agency, and Pathways, respectively (see Appendix F).

Results

\textit{Preliminary Correlational Analyses}

Preliminary analyses revealed that assumptions were met for linearity and homogeneity of variance. Regarding normality, most variables were found to be acceptable with the exception of perceptions of Classroom Difficulty, Optimism, Total Optimism, Total Hope, Satisfaction with Friends, and Total Depression. However, no further transformations were performed on these data to preserve the natural occurrence
of findings with this non-clinical sample of early adolescents. No sex differences were found for any variables in the present study; therefore, all analyses included males and females.

A series of correlations were conducted between all variables. When examining the correlations between classroom climate, dispositional optimism, and hope, it was found that students’ total hope was significantly and positively correlated with their perceptions of classroom satisfaction, $r = .29, p < .01$, classroom cohesiveness, $r = .29, p < .01$, and optimism, $r = .65, p < .001$ (see Table 1). Hope was found to be significantly and negatively correlated to students’ perceptions of classroom friction, $r = -.24, p = .05$, classroom difficulty, $r = -.37, p = .001$, and pessimism, $r = -.56, p = .001$. However, hope was not correlated with students’ perceptions of classroom competitiveness, $r = .00, ns$.

The correlations between students’ hope and emotional well-being variables are depicted in Table 2. Hope was found to be significantly and positively correlated with family satisfaction, $r = .67, p < .001$, friends satisfaction, $r = .51, p < .001$, school satisfaction, $r = .58, p < .001$, living environment satisfaction, $r = .53, p < .001$, and self satisfaction, $r = .67, p < .001$. Hope was also found to be significantly and negatively correlated with depression, $r = -.70, p < .001$.

The correlations between students’ perceptions of classroom climate, dispositional optimism, and depression are presented in Table 3. Depression was found to be significantly and positively correlated with students’ perceptions of classroom difficulty, $r = .32, p < .01$, and pessimism, $r = .74, p < .001$, and significantly and negatively correlated with perceptions of classroom satisfaction, $r = -.34, p = .001$ and optimism, $r = -.72, p < .001$. Depression was found to be uncorrelated with students’
perceptions of classroom friction, $r = .21$, ns, classroom competitiveness, $r = .12$, ns, and classroom cohesiveness, $r = -.19$, ns.

Results of correlations between classroom climate, dispositional optimism, and the life satisfaction variable were also explored (see Table 4). Students’ family satisfaction was found to be significantly and positively correlated with perceptions of classroom satisfaction, $r = .25$, $p < .05$, and optimism, $r = .55$, $p < .001$, and significantly and negatively correlated with perceptions of classroom friction, $r = -.27$, $p < .01$, perceptions of classroom difficulty, $r = -.23$, $p < .05$, and pessimism, $r = -.52$, $p < .001$. Students’ family satisfaction was found to be uncorrelated with their perceptions of classroom satisfaction, $r = .25$, ns, classroom competitiveness, $r = -.09$, ns, and classroom cohesiveness, $r = .18$, ns.

Students’ friends satisfaction was found to be significantly and positively correlated with perceptions of classroom cohesiveness, $r = .27$, $p < .01$, and optimism, $r = .47$, $p < .001$, and significantly and negatively correlated with perceptions of classroom competitiveness, $r = -.32$, $p < .01$, perceptions of classroom difficulty, $r = -.27$, $p < .01$, and pessimism, $r = -.54$, $p < .001$. Friends satisfaction was not correlated with students’ perceptions of classroom satisfaction, $r = .20$, ns, and classroom friction, $r = -.21$, ns.

School satisfaction was found to be significantly and positively correlated with students’ perceptions of classroom satisfaction, $r = .58$, $p < .001$, perceptions of classroom cohesiveness, $r = .27$, $p < .01$, and optimism, $r = .59$, $p < .001$, and significantly and negatively correlated with perceptions of classroom friction, $r = -.24$, $p < .05$, classroom difficulty, $r = -.35$, $p < .001$, and pessimism, $r = -.52$, $p < .001$. School
satisfaction was not correlated with students’ perceptions of classroom competitiveness, \( r = .02, \text{ns} \).

Students’ satisfaction with their living environment was found to be significantly and positively correlated with perceptions of classroom satisfaction, \( r = .40, p < .001 \), classroom cohesiveness, \( r = .22, p < .05 \), and optimism, \( r = .47, p < .001 \), and significantly and negatively correlated with perceptions of classroom friction, \( r = -.29, p < .01 \), classroom difficulty, \( r = -.32, p < .01 \), and pessimism, \( r = -.40, p < .001 \). Students’ perceptions of classroom competitiveness was not correlated with their living environment satisfaction, \( r = -.20, \text{ns} \).

Lastly, students’ self satisfaction was found to be significantly and positively correlated with perceptions of classroom satisfaction, \( r = .30, p < .01 \), perceptions of classroom cohesiveness, \( r = .26, p = .01 \), and optimism, \( r = .64, p < .001 \), and negatively correlated with perceptions of classroom friction, \( r = -.21, p < .05 \), perceptions of classroom competitiveness, \( r = -.20, p < .05 \), and pessimism, \( r = -.62, p < .001 \). Students’ self satisfaction was uncorrelated with perceptions of classroom difficulty, \( r = -.20, \text{ns} \).

**Moderated Regression Analyses**

**Overview.** A number of hierarchical multiple regression analyses following Cohen’s partialed products technique (Cohen & Cohen, 1983) were used to explore the interactions between students’ classroom perceptions/dispositional optimism and hope in the prediction of emotional well-being. When examining the interaction between classroom climate and hope, classroom climate (satisfaction, friction, competitiveness, difficulty, or cohesiveness) was entered in the first step of the regression equation, total hope was entered in the second step, and the multiplication term (e.g., classroom
satisfaction x hope) was entered in the final step. An identical procedure was used to examine the interaction between optimism/pessimism and total hope. Separate equations were computed for the total depression variable and each of the five life satisfaction variables (i.e., family, friends, school, living environment, and self satisfaction). A total of eleven significant interactions were found. Of the eleven interactions, no significant interactions were found when predicting students’ family and living environment satisfaction.

Depression. Two significant interactions were found when predicting depression. First, results from regression analyses showed a significant interaction between students’ perceptions of classroom satisfaction and hope \[ R^2_{\text{change}} = .04, F(1, 80) = 7.33, p < .05 \]. Results are displayed in Table 5. Follow-up analyses were examined by computing two regression analyses: one for participants whose total hope scores fell below the median (low hope) and one for participants whose total hope scores were above the median (high hope). Other researchers have employed similar statistical procedures to examine interactions and simple effects (e.g., see Lagacé-Séguin & d’Entremont, 2006). Follow-up analyses revealed that classroom satisfaction was significantly and negatively associated with total depression scores for students with low levels of hope \( \beta = -.43, t = -3.12, p < .01 \). However, the relation between classroom satisfaction and depression for students with high levels of hope was not significant \( \beta = -.04, t = -.23, \text{ns} \) (see Figure 1). In this case, hope acted as a buffer against negative perceptions of classroom satisfaction to prevent elevated depression levels.

As displayed in Table 6, a significant interaction was found between pessimism and hope in the prediction of students’ depression \[ R^2_{\text{change}} = .03, F(1, 81) = 9.15, p < \]
Follow-up analyses revealed that pessimism was significantly and positively associated with depression for students with low hope levels ($\beta = .71, t = 6.48, p < .001$) and significantly and positively associated with depression for students with high hope levels ($\beta = .71, t = 6.32, p < .001$) (see Figure 2). The role of hope in relation to pessimism and depression was complex and may require an alternative approach to decipher the complexities in future research.

**Life satisfaction: Friends.** Three significant interactions were found when predicting students’ satisfaction with friends. First, as shown in Table 7, a significant interaction was found between perceptions of classroom friction and hope when predicting students’ satisfaction with friends [$R^2_{\text{change}} = .08, F(1, 90) = 11.65, p = .001$]. Follow-up analyses revealed that classroom friction was significantly and negatively associated with satisfaction with friends for students with low hope levels ($\beta = -.38, t = 6.48, p < .01$), but not for students with high hope levels ($\beta = .13, t = .85, ns$) (see Figure 3). In relation to satisfaction with friendships in classrooms with friction between classmates, hope acted as a buffer to prevent decreases in friends satisfaction.

A significant interaction was found between classroom competitiveness and hope in the prediction of students’ satisfaction with friends [$R^2_{\text{change}} = .06, F(1, 91) = 9.01, p < .01$]. Results are displayed in Table 8. Follow-up analyses revealed that classroom competitiveness was significantly and negatively related with satisfaction with friends for students with low hope levels ($\beta = -.61, t = -5.22, p < .001$), but not for students with high hope levels.
levels of hope ($\beta = -.15, t = -1.02, ns$) (see Figure 4). Again, hope buffered against
competition in the classroom to maintain friends satisfaction.

As shown in Table 9, a significant interaction was found between pessimism and
hope in the prediction of students’ satisfaction with friends [$R^2_{\text{change}} = .06, F(1, 91) = 9.29, p < .01$]. Follow-up analyses revealed that pessimism was significantly and
negatively associated with satisfaction with friends for students with low levels of hope
($\beta = -.54, t = -4.42, p < .001$) and students with high levels of hope ($\beta = -.31, t = -2.13, p < .05$) (see Figure 5). The relation between pessimism and friends satisfaction was found
to be significant for students with high and low hope. However, the predictive power was
higher for students with low hope indicating that hope acted as a buffer, albeit in a partial
manner.

Life satisfaction: School. A total of four interactions were found to be significant
when predicting students’ school satisfaction. First, a significant interaction was found
between classroom satisfaction and hope [$R^2_{\text{change}} = .02, F(1, 89) = 4.17, p < .05$]. Results
are displayed in Table 10. Follow-up analyses showed that classroom satisfaction was
significantly and positively associated with school satisfaction for students with low
levels of hope ($\beta = .62, t = 5.36, p < .001$) and for students with high levels of hope ($\beta = .52, t = 3.95, p < .001$) (see Figure 6). Again, hope acted as a partial buffer between
classroom satisfaction and school satisfaction since the predictive power was found to be
higher for students with low hope than those with high hope.

Secondly, a significant interaction was found between classroom difficulty and
hope in the prediction of school satisfaction [$R^2_{\text{change}} = .03, F(1, 91) = 4.57, p < .05$].
Results are displayed in Table 11. Follow-up analyses revealed that classroom difficulty
was significantly and negatively related to school satisfaction for students with low hope levels \((\beta = -.37, t = -2.75, p < .01)\) but not for students with high hope levels \((\beta = -.11, t = - .73, ns)\) (see Figure 7). In this case, hope buffered against perceptions of highly difficult classwork to prevent decreases in school satisfaction.

As shown in Table 12, a significant interaction was found between optimism and hope in the prediction of students' satisfaction with school \([R_{\text{change}}^2 = .04, F(1, 91) = 5.84, p < .05]\). Follow-up analyses showed that optimism was associated with school satisfaction for students with low hope levels \((\beta = .68, t = 6.43, p < .001)\) but not for students with high hope levels \((\beta = .23, t = 1.54, ns)\) (see Figure 8). Hope protected students from low levels of optimism to prevent decreases in school satisfaction.

Lastly, a significant interaction was found between pessimism and hope in the prediction of students' satisfaction with school \([R_{\text{change}}^2 = .04, F(1, 91) = 6.88, p = .01]\). Results are displayed in Table 13. Follow-up analyses revealed that pessimism was significantly and negatively associated with school satisfaction for students with low levels of hope \((\beta = -.58, t = -4.92, p < .001)\) but not for students with high levels of hope \((\beta = -.25, t = -1.69, ns)\) (see Figure 9). In the prediction of school satisfaction, hope acts as a buffer against elevated levels of pessimism.

*Life satisfaction: Self.* Two significant interactions were found in the prediction of students' self satisfaction. First, as displayed in Table 14, a significant interaction was found between classroom competitiveness and hope \([R_{\text{change}}^2 = .02, F(1, 91) = 4.38, p < .05]\). Follow-up analyses revealed that classroom competitiveness was significantly and negatively associated with self satisfaction for students with low hope levels \((\beta = -.48, t = -3.70, p = .001)\) but not for students with high hope levels \((\beta = -.17, t = -1.14, ns)\) (see
Figure 10). Hope was a protective factor against competitive classmates to prevent students from being unsatisfied with themselves.

Second, as shown in Table 15, a significant interaction was found between classroom cohesiveness and hope in the prediction of students’ self satisfaction \( R^2_{change} = .04, F(1, 91) = 8.08, p < .01 \). Follow-up analyses showed that classroom cohesiveness was significantly and positively associated with self satisfaction for students with low hope levels \( \beta = .49, t = 3.86, p < .001 \) but not for students with high hope levels \( \beta = -.13, t = -.89, ns \) (see Figure 11). Again, hope acted as a buffer against low levels of cohesiveness in classrooms to prevent decreases in students’ self satisfaction.

Discussion

The purpose of the present study was to examine the role of hope in the relation between early adolescent students’ perceptions of classroom climate or dispositional optimism and emotional well-being. That is, it was investigated whether hope acted as a buffer against negative classroom climate variables, low optimism, or high pessimism to uphold low levels of depression and/or high levels of life satisfaction. Interactions between each of five classroom climate variables and hope were examined to predict depression and each of five life satisfaction outcomes. Similarly, interactions between optimism/pessimism and hope were examined in the prediction of depression and life satisfaction variables. First, however, correlations were investigated.

Results of correlational analyses were in the expected direction for all variables. Consistent with hypotheses, depression was found to be positively correlated with negative classroom climate variables (i.e., friction, competitiveness, and difficulty) and negatively correlated with positive classroom climate variables (i.e., satisfaction and
cohesiveness). However, only classroom satisfaction and classroom difficulty correlated significantly with students’ depression. Students who perceived schoolwork to be difficult and/or were not satisfied with their classroom reported higher levels of depression than other students. On the one hand, the relation between increased depression with lowered classroom satisfaction in students may be explained by a common symptom associated with depression, which is anhedonia, or a lack of pleasure for activities or events that once were pleasurable (APA, 2000). On the other hand, negative classroom events may lower classroom satisfaction and exacerbate depressive symptoms in students over time. Students who perceived the schoolwork to be difficult were likely to report high levels of depression. Symptoms of depression, such as fatigue or lack of self-worth, may be influencing students to view schoolwork to be more difficult than students without these symptoms (APA, 2000). However, if students perceive their schoolwork to be too difficult to cope with, it may overwhelm them and cause symptoms of depression to appear.

Similar to research findings by Somersalo et al. (2002) where a lack of psychopathology was found in students who perceived a positive school climate, many classroom climate variables were found to be correlated with each of the five students’ life satisfaction domains. For example, students’ family satisfaction was correlated with their perceptions of classroom satisfaction, classroom friction, and classroom difficulty. As expected, students who reported high levels of classroom satisfaction also reported high levels of family satisfaction. This finding lends support to the notion that positive family characteristics increase students’ experiences at school and vice versa (Fortin et al., 2006). Students who perceived friction with their classmates reported being less
satisfied with their families. It is conceivable that students who experience conflicts
during school hours become sensitive to minor conflicts in the family interactions, which,
in turn, decreases their enjoyment of spending time with their families. It may be,
however, that family conflicts are internalized by students and negatively influence their
mood when at school increasing the likelihood of conflicts between classmates. High
levels of classwork difficulty were found to be related to students’ low family
satisfaction. Students who experience difficulty at school may have difficulty with
homework that requires assistance from family members. This may increase the
occurrence of conflicts at home, thereby reducing their satisfaction with their family (e.g.,
Forsberg, 2007). At the same time, conflicts with family members may cause distractions
to students at school, which increases the difficulty of their work.

Students’ satisfaction with friends was found to be correlated with their
perceptions of classroom competitiveness, difficulty, and cohesiveness. As expected,
students who perceived high levels of competition between classmates and who reported
schoolwork to be difficult were less satisfied with their friends. Also, students who
reported their classrooms to be a cohesive group were likely to report high levels of
friends satisfaction. Upon closer examination of the My Class Inventory-Short Form
items, classroom competitiveness and cohesiveness are two variables that are influenced
by students’ peers’ behaviours. Therefore, it is not difficult to imagine how these
variables are correlated with students’ friends satisfaction. It is likely that students who
are competitive are not likely to be accepted by their peers while those who value being
cohesive with the group are likely to be friends with many classmates. The relation
between classroom difficulty and friends satisfaction is not as readily apparent. One
possible explanation may be that students who have difficulty with schoolwork are sensitive to other students who do not experience difficulty and may alienate themselves from others due to this sensitivity, thereby reducing their satisfaction of their relationships with them. It is also conceivable that students who are not satisfied with their friendships are less likely to seek help for difficult schoolwork from peers, which may increase the difficulty of the work.

Correlations between school satisfaction and classroom climate revealed many significant findings. Not surprisingly, factors in students’ classrooms are related with their satisfaction with school in general. These findings are consistent with Verkuyten & Thijs’ (2002) study where school satisfaction was found to be dependent on classroom variables. Classroom satisfaction and cohesiveness were positively correlated with school satisfaction while classroom friction and difficulty were negatively correlated. The lack of a relation between classroom competitiveness and school satisfaction is an interesting finding. Although competitiveness in the classroom was found to be negatively related with friends satisfaction, it does not appear to influence students’ ratings of satisfaction with school. Competitiveness may be more influenced by peer relationships than other school staff and personnel relationships with students in early adolescence.

Students’ satisfaction of their neighborhood was also found to be related to all classroom climate variables except competitiveness. Again, adolescents who reported high levels of classroom satisfaction and cohesiveness and low levels of classroom friction and difficulty were likely to report high levels of satisfaction with their living environment. The relations between these variables suggest that positive or negative perceptions of classrooms may generalize to more distal environments, such as their
neighborhood. Attending school may be emotionally draining for students who do not enjoy being in their classrooms, do not get along with their classmates, and have difficulty with the classwork (e.g., McGraw, Moore, Fuller, & Bates, 2008). Upon returning home from school for seven to eight hours a day, these students may not have the mental energy to spend in their neighborhood, likely causing their satisfaction of their living environment to be low. It may be, however, that the neighborhoods students are exposed to when not at school have an impact on their perceptions of their classrooms. For example, if students live in a dangerous neighborhood where they have learned not to trust adults, these views may decrease their overall satisfaction, including their classroom satisfaction, and may impair their ability to work in a prosocial manner with other students, increasing friction in the class. Also, students who do not enjoy their neighborhood and have difficulty concentrating on homework while outside the school environment may perceive classwork to be difficult.

Self satisfaction, a measure of self-worth, was correlated with all classroom climate variables with the exception of classroom difficulty. Students who reported high levels of classroom satisfaction and cohesiveness and low levels of classroom friction and competitiveness tended to reported higher self satisfaction ratings than others. Researchers have highlighted the importance of quality of friendships in relation to adolescents’ psychological adjustment (e.g., Hussong, 2000). In past research, adolescents who reported positive friendship qualities, such as self-disclosure, companionship, loyalty, and affection, were found to possess higher positive affect (one dimension of subjective well-being) than others (Hussong, 2000). In the present study, classroom variables that describe peer behaviour (e.g., classroom friction, cohesiveness,
competitiveness), in addition to classroom satisfaction, were related to students’ self-satisfaction. These findings further demonstrate the importance of peer relations on early adolescents’ self perception, especially in the school setting.

Significant correlations, in the expected directions, were found between optimism/pessimism and all emotional well-being variables. Optimism was found to be related with optimal emotional outcomes while pessimism was associated with detrimental outcomes. That is, students were less likely to report high levels of depression and more likely to report high levels of life satisfaction if they characterized themselves as highly optimistic or minimally pessimistic. Ey et al. (2005) found that highly optimistic children were more likely to have low levels of depression than other children. However, contrary to the current study, pessimism was not found to be related to depression. Ey et al.’s sample size was smaller than the sample in the current study which may account for the differences in the results.

Not surprisingly, adolescents’ outcome expectations of future events appear to be strongly related to their likelihood of developing depressive symptoms. These relations have been documented in the literature on Beck’s (1967) conceptualization of depression. A prominent aspect of Beck’s theory is the cognitive triad that explains why depressed individuals often hold negative views of the future, self, and the world. Individuals with negative views of the future, in this theory, tend to expect negative outcomes for future events; that is, they are often perceived as highly pessimistic and/or lacking in optimism.

The current study also extends the literature relating to dispositional optimism and life satisfaction with the findings of optimism being positively correlated, and pessimism being negatively correlated, with all life satisfaction variables. Bailey et al.
(2007) reported similar results in adults. These results suggest that dispositional optimism may be well developed in early adolescence and may have an impact on their emotional well-being.

As hypothesized, students’ total hope was positively correlated with classroom satisfaction and classroom cohesiveness and negatively correlated with the classroom friction and classroom difficulty subscales. Furthermore, consistent with Ey et al. (2005), total hope was positively correlated with students’ optimism and negatively correlated with pessimism. The negative correlation between hope and depression found in the present study replicates similar findings in Snyder et al.’s (1997) study of the development of the CHS. Similar to the present study, Valle et al. (2006) found that high hope levels correlated positively with life satisfaction outcomes in students. The combination of these results suggest hope to be a positive influence on early adolescents’ emotional and cognitive development.

*Classroom Climate, Optimism/Pessimism, Hope, & Emotional Well-Being*

To date, there has been a lack of research examining the role of hope to promote psychological well-being in relation to classroom variables and trait-like cognitive constructs, such as dispositional optimism, in early adolescent students. In one study, Valle et al. (2006) found hope to be a psychological strength as it buffered junior and senior high school students against stressful life events to increase their life satisfaction levels in addition to decreasing their internalizing problem behaviours. In the present study, hope was found to be a psychological strength in the relations between classroom climate/dispositional optimism and emotional well-being variables in early adolescent students, with the exception of one case discussed below.
Hope. A significant interaction was found between classroom satisfaction and hope in the prediction of depression. For students with low hope levels, classroom satisfaction was negatively related with depression. That is, students who reported low hope levels and who were not satisfied with their classroom were likely to report higher depression levels than students with high hope and low classroom satisfaction. However, classroom satisfaction did not predict depression for students who reported high levels of hope. From these results, we can speculate that hope acts as a protective factor against perceptions of unfriendliness that students hold regarding their classrooms to prevent the development of depression. It is conceivable that students who do not enjoy being in the classroom may be at-risk of developing symptoms of depression. This may be due to feelings of hopelessness or feeling trapped in an unwanted situation for an extended period of the day which becomes problematic. However, students who are able to formulate strategies to cope with negative classroom environments, and who have the motivation to act on their plans, may be able to prevent depressive symptoms from developing.

An interaction between pessimism and hope in the prediction of depression was also found to be significant. As expected, the relation between pessimism and depression was significant and positive for students with low hope levels. Interestingly, a similar relation between pessimism and depression was found for students with high hope. However, the regression slope was higher for students with low hope than those with high hope. That is, when separating hope into high and low levels, students with low hope were more likely to endorse higher depression levels than students with high hope. As noted by Sheirer and Carver (1993), pessimism represents one aspect of an
individual’s personality, which suggests that it is a relatively stable trait. The impact of hopeful thinking may be less pronounced on improving the detrimental effects of highly pessimistic internal attitudes held by students than on external factors, such as classroom climate variables.

To arrive at a clearer understanding of the interaction between pessimism and hope in the prediction of depression, hope was separated into high, medium, and low levels. For all groups of hope, pessimism continued to positively predicted depression. However, the strength of the prediction was stronger for students who reported low and high hope than for students who reported medium hope, indicating that highly pessimistic students were more likely to report lower levels of depression if they reported moderate hope levels instead of hope levels that were high or low. This finding proved to be difficult to grasp.

As Snyder (2002) described, hope does not discriminate between socially desirable and undesirable goals. At the same time, personal goals differ between individuals based on their levels of optimism and pessimism (e.g., Jackson, Weiss, Lundquist, & Soderlind, 2002). As discussed by Sheirer et al. (1994), dispositional optimism is founded in expectancy-value theory which explains whether individuals will pursue certain goals based on their optimistic or pessimistic dispositions. Individuals who expect a positive outcome of a future event or goal are likely to be motivated to reach that goal. Individuals who expect negative outcomes are less likely to attempt reaching their goals. Adding hope to this conceptualization of goal attainment, it is conceivable to expect students who are pessimistic and hopeless to experience elevated levels of depression. The finding of highly pessimistic and highly hopeful students to be likely to
report high levels of depression is less obvious. It may be that pessimistic students have
developed a tendency to make negative goals from a long history of constantly expecting
negative outcomes. Since hope, as defined by Snyder (2002), can be associated with
socially desirable or undesirable goals, pessimistic students who hold high levels of hope
may achieve socially undesirable goals. In turn, these students may be perceived as
highly oppositional or disliked by others, which may lead to increases in depression.
Given the limited research with these variables, these findings should be received with
cautions and explored further in future research.

*Friends satisfaction.* When predicting students’ satisfaction with their friends,
three significant interactions were found. First, classroom friction and hope were found to
interact in the prediction of friends satisfaction. Students with low hope reported low
friends satisfaction when associated with high friction levels in their classroom.
Classroom friction did not predict friends satisfaction for students with elevated hope
levels. A second interaction was found between classroom competitiveness and hope in
the prediction of friends satisfaction. Again, students with low hope reported lower
friends satisfaction in highly competitive classroom than students with high hope. In fact,
classroom competitiveness did not predict friends satisfaction for highly hopeful students.
From these findings we can speculate that hope buffers students against classrooms
where classmates are competitive and do not get along with each other. However, it is
important to note that high hope levels did not reverse the predictive effects of classroom
friction and competitiveness to predict higher satisfaction with friends. Instead, the
negative relations between classroom friction/competitiveness and friends satisfaction
were no longer significant. Hope’s role in relation to friends satisfaction and friction and
competitiveness in the classroom is one of preventing students from developing negative views of their peers.

A third interaction was found between pessimism and hope in the prediction of friends satisfaction. Similar to the interaction found between pessimism and hope to predict depression, pessimism was found to be a significant predictor of friends satisfaction for students with both high and low levels of hope. However, the differences in predictive power between high and low hope was more apparent in the present case than in the case of depression. High levels of pessimism were found to be associated with low levels of friends satisfaction and, as expected, students characterized as highly hopeful were likely to be more satisfied with their friends than students with low hope. As discussed previously, pessimism is thought to be a well developed trait in adulthood (Sheirer & Carver, 1993) and possibly in early adolescence as well. Therefore, it is not surprising that hope does not fully prevent pessimism from negatively predicting students’ satisfaction with friends. It is noteworthy to mention, however, that building pessimistic adolescents’ hope levels may result in changes in their enjoyment of friendships.

School satisfaction. When examining school satisfaction, four significant interactions were found. The first interaction found was between classroom satisfaction and hope. For students with low and high hope, classroom satisfaction predicted school satisfaction. However, the predictive power of classroom satisfaction in relation to school satisfaction was higher for students with low hope than students with high hope. From these results, we could expect that students with low hope who report low classroom satisfaction to report lower overall school satisfaction than students with high hope with
similar classroom satisfaction levels. Highly hopeful students who perceive their classroom to be hostile may be able to set and achieve appropriate goals, such as separating classwork or classroom peer interactions, which increase their likelihood of tolerating classes while maintaining their overall enjoyment of school. Students with low hope, however, may be more likely than others to generalize their negative perceptions of their classroom to the entire school experience.

The second interaction was found between classroom difficulty and hope. As expected, students with low hope levels were more likely to report being unsatisfied with school than students with high hope levels, especially when coupled with high classroom difficulty. Although no previous studies have been conducted between these variables, this finding is consistent with Snyder’s (2002) and Valle et al.’s (2006) conceptualizations of hope as a psychological strength. Whereas we would expect students who have difficulty with classwork to develop negative feelings towards school in general, we would also expect students who are able to formulate pathways to reach goals (e.g., successfully completing an assignment) and to put their pathways in motion to be more satisfied with school than others despite struggling with the work. Consistent with previously mentioned findings, for students with high hope, classroom difficulty did not significantly predict school satisfaction indicating that hope may play the role of prevention of school dissatisfaction for students. In this sense, hope may be a coping mechanism for students having difficulty with classwork.

The third and fourth interactions found were between optimism/pessimism and hope. In the case of optimism and hope, optimism significantly and positively predicted school satisfaction for students with low hope while the relation between optimism and
school satisfaction was nullified for students with high hope. This finding is also consistent with the idea of hope as a psychological strength as proposed by other researchers (Snyder, 2002; Valle et al., 2006). Students’ school satisfaction would be expected to vary according to their optimistic disposition when associated with low hope levels. That is, for students with low hope, being optimistic would likely increase their enjoyment of school while students with low optimism would likely be unsatisfied with school, a finding consistent with Ey et al. (2005) where optimism was found to be a protective factor against negative perceptions and emotional states. However, for students with high hope, school satisfaction is not dependent on their optimism level, an indication that hope protects students against the influence of low optimism. Bryant and Cvengros (2004) argued that hope is related to attainment of immediate goals while optimism is likely to predict general outcomes. School satisfaction can be conceptualized as a general emotional outcome which may justify the significant relation that it has with optimism for students with low hope. School satisfaction for students with high hope, however, may be more influenced by successfully attaining specific goals and less by general outcomes (i.e., optimism).

The interaction between pessimism and hope, consistent with expectations, revealed a negative relation between pessimism and school satisfaction for students with low hope. The relation between pessimism and enjoyment of school was found to be insignificant in the high hope group of students. From this, we can speculate that hope protects students from the negative impact that pessimism may have on their perceptions and enjoyment of school. It is also interesting to note the similar relation hope has with optimism and pessimism in students. In both cases, low hope was associated with higher
optimism or pessimism while high hope was not related to these variables. Accordingly, it appears that hope buffers the effects of dispositional optimism for students in relation to their overall perceptions of their school experiences. That is, in relation to satisfaction with school, optimism and pessimism (i.e., perceptions about general or long-term goals/events) did not have a strong impact for students who are highly hopeful about achieving short term goals. We know that optimism and pessimism are not on a continuum (Ey et al., 2005; Fischer & Leitenberg, 1986). Rather, they are separate constructs and individuals can have characteristics of both. It may be that hope inhibits the effects of optimism and pessimism in a similar fashion in the school environment by diminishing the emphasis students may place on future-oriented goals they may want to reach (e.g., how to successfully pass grade six) and replacing them with present, and more attainable, goals (e.g., how to complete a science project). Rather than being focused solely on distant outcomes, which may interfere with students’ functioning in the present, students with high hope may be better able to inhibit thinking about these future goals and focus on day-to-day goals that may improve their school functioning and satisfaction. This view is consistent with the literature on adolescent decision-making abilities (e.g., Reyes & Farley, 2006). According to decision-making research, adolescents often have difficulty with delay of gratification, behavioural inhibition, and planning for future outcomes, which may negatively impact their school satisfaction. Adolescents with high hope levels may be less affected by these cognitive skills than others, which may account for their lack of a relation between optimism/pessimism and satisfaction with school.
Self satisfaction. When predicting self satisfaction, a measure of self-worth, two interactions were found to be significant, both that included classroom variables. First, a significant interaction was found between classroom competitiveness and hope. More specifically, students with low hope were likely to report low self satisfaction in relation to high classroom competitiveness. No relation was found between classroom competitiveness and self satisfaction for students with high hope. These results are consistent with expectations. Hope plays the role of a buffer against the negative effects of competition between classmates on students’ self-worth. Roeser and Eccles (1998) reported that middle school students tend to have better emotional outcomes in classrooms that focus on effort from all students, rather than on comparisons and competition between students. It may be that hopeful students are more self reliant than less hopeful students and, therefore, they may be more likely to work at their own pace and effort rather than compete with classmates. Conversely, it may be that hopeful students are more likely to finish their work earlier than others and less hopeful students may have difficulty to keep up, increasing less hopeful students’ negative views of themselves.

The second interaction found in the prediction of self satisfaction was between classroom cohesiveness and hope. A positive relation between classroom cohesiveness and self satisfaction was found for students with low hope while the relation between these variables was insignificant for students with hope. High hope levels in students act as a protective factor against classrooms where classmates do not get along to prevent decreases of their self worth. Students low in hope may be more directly affected by relationships with peers in the classroom in terms of their self-worth. The importance of
peers during adolescence is well documented in the literature (e.g., East, Hess, & Lerner, 1987). East et al. (1987) suggested that peer-rejected adolescents lack in social skills, which contributes to their difficulty in acquiring new friends and social support. Adding to this, the present results suggest another individual characteristic, namely, hope, that may be influential in adolescents’ emotional well-being. It may be that students high in hope who are in classrooms with peer difficulties are better able than other students to find social support outside of the classroom when needed. In relation to early adolescents’ self-worth, hope represents a psychological buffer, especially against difficulties with peers in the classroom.

*Implications*

Results from the present research are applicable to psychological and educational practice. School psychologists, especially, may benefit from assessing hope when working with early adolescent students who suffer from depression or have low life satisfaction since hope can be quickly measured. Also, perceptions regarding aspects of their classrooms and future expectations should also be considered. From a psychologist’s standpoint, students who hold negative views of their classrooms, along with perceptions that they are not as competent as others to reach their goals, would likely benefit from intervention on improving their goal setting, planning, and attainment abilities. According to the findings of the present study, improving hope will likely protect such students from increases in depression and/or decreases in life satisfaction. This approach would be more efficient for school psychologists than attempting to change aspects of the classroom. However, students who are low in optimism and/or high in pessimism may be more resistant to changes in hope. It is not clear how adolescents
with depressive symptoms who are highly pessimistic would benefit from increases in hope. Students with low satisfaction and low optimism and/or high pessimism would likely be better candidates for intervention on hope.

The present study also raises awareness in the field of education. Not only has this research shown that students in grades six, seven, and eight differ in emotional well-being, but also that hope acts as a buffer against negative perceptions of classroom environments and personality traits to prevent emotional disturbances. Given that students spend a large majority of their time in the school environment, educators are in a position to screen students for emotional difficulties. For example, a teacher may notice a student’s grades declining quickly, which may indicate an emotional problem. From a small private discussion with the student, the teacher may discover that the student feels the classroom to be very competitive and, as a result, does not enjoy coming to school. One approach to improve this situation would be to intervene by increasing the student’s hopeful thinking. That is, improving the student’s ability to set proper goals and increasing motivation to reach them. For adolescents who are experiencing severe forms of emotional difficulties and/or have extremely low levels of hope, teachers could seek services from a mental health professional, such as school psychologists.

Caveats and Future Research

The current study presents limitations that require further examination and clarification. First, we need to be cognizant of the explanations and conclusions that be drawn from correlational research. The most prevalent issue with correlational data is that we cannot be certain of causality or direction of effects. It is not difficult to imagine that high hope in students causes lower levels of depression when coupled with an
unsatisfactory classroom. With the design of the current research, however, this cannot be conclusively determined. It may be that low levels of depression cause high levels of hope, which protects students from a negatively perceived classroom. Causality and direction of effects could be more easily established with experimental or longitudinal research methods.

The use of self-report measures also presents a limitation. There are advantages of using questionnaires, including time efficiency and convenience of accessibility. However, participants often respond to items in socially desirable ways (Morlan & Tan, 1998). For example, the actual mean depression score across participants may be higher than what was reported in the current research. Other methods of collecting data, such as observational techniques or interviews, may compliment the present results by contrasting participants’ perceptions of their classrooms, cognitions, and emotional states, with actual classroom events or the researcher’s clinical judgment of emotion well-being. Also, collecting data from other individuals, such as parents and teachers, would add to the current research to acquire diverse perspectives on students’ behavioural, cognitive, and emotional functioning, which may yield different results.

Given the age cohort of the present study, conducting a similar study with younger children would add further to our knowledge of the role of hope in relation to emotional well-being. To date, it is not well understood at what age hope becomes developed well enough to act as a psychological strength in children. Also, other variables removed from the school should be examined, such as parenting and other family interactions.
Lastly, although hope can be split into two subtests, namely agency and pathways thinking, it was examined in its unified form in the present study. It would be informative to explore how agency and pathways thinking interact with classroom climate or personality variables to predict emotional well-being. It may be that agency and pathways thinking interact in differing ways with the variables mentioned. For example, in the prediction of depression, it may be that pathways thinking buffers against perceptions of a negative classroom environment while agency thinking does not. Additional research in this area would provide clearer information on what skills tend to be associated with different emotions, which, in turn, may allow for more interventions centered in hope to be more specific.

Conclusions

The current research was designed to examine the relations between classroom climate, dispositional optimism, hope, depression, and life satisfaction of students in grades six, seven, and eight. Specifically, it was examined whether classroom climate and dispositional optimism interacted with hope to predict depression and life satisfaction. Correlational analyses revealed relations in the expected direction between all variables. Positive classroom climate, optimism, hope, and life satisfaction were positively intercorrelated and negative related with negative classroom climate, pessimism, and depression while the latter were positively intercorrelated.

Interactions between classroom climate, dispositional optimism, and hope were explored using multiple regression analyses. A total of eleven interactions were found to be significant in the prediction of emotional well-being. Of the eleven interactions, all but one found hope to be a psychological buffer against classroom climate and dispositional
optimism to protect students from emotional difficulties. For the interactions, hope was divided into two groups (i.e., high and low) to explore how classroom climate or dispositional optimism differed in each group when predicting depression or life satisfaction. The interaction between pessimism and hope in the prediction of depression was best understood by separating hope into three groups (i.e., high, medium, and low). In this case, medium hope was found to be a better buffer against pessimism. However, the prediction between pessimism and depression was significant and positive for all groups. Future research is needed to continue to unravel the complex role of hope in adolescents as a psychological strength.
References


Reyes, V. F. & Farley, F. (2006). Risk and rationality in adolescent decision making:
Implications for theory, practice, and public policy. Psychological Science in the
Public Interest, 7, 1-44.

Relation to longitudinal changes in academic and psychological adjustment.
Journal of Research on Adolescence, 8, 123-158.

Scheier, M. F. & Carver, C. S. (1985). Optimism, coping, and health: Assessment and

Scheier, M. F. & Carver, C. S. (1987). Dispositional optimism and physical well-being:
The influence of generalized outcome expectancies on health. Journal of
Personality, 55, 169-210.

well-being: Theoretical overview and empirical update. Cognitive Therapy and
Research, 16, 201-228.

being optimistic. Current Directions in Psychological Science, 2, 26-30.

neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of


Appendix A

Demographic Questionnaire

1. I am a _______ boy / _______ girl.

2. I am _______ years old.

3. I am in Grade _______.
Appendix B

*My Classroom Inventory – Short Form (MCI-SF)*

**DIRECTIONS**

This is not a test. The questions inside are to find out what your class is *actually like*.

Each sentence is meant to describe what your actual classroom is like. Draw a circle around

<table>
<thead>
<tr>
<th>Yes</th>
<th>if you AGREE with the sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>if you DON’T AGREE with the sentence</td>
</tr>
</tbody>
</table>

**EXAMPLE**

27. Most children in our class are good friends.

If you *agree* that most children in the class actually are good friends, circle the *Yes* like this:

Yes               No

If you *don’t agree* that most children in the class actually are good friends, circle the *No* like this:

Yes               No

Please answer all questions. If you change your mind about an answer, just cross it out and circle the new answer.
Remember you are describing your actual classroom.

1. The pupils enjoy their schoolwork in my class.
   - Yes
   - No

2. Children are always fighting with each other.
   - Yes
   - No

3. Children often race to see who can finish first.
   - Yes
   - No

4. In our class the work is hard to do.
   - Yes
   - No

5. In my class everybody is my friend.
   - Yes
   - No

6. Some pupils are not happy in class.
   - Yes
   - No

7. Some of the children in our class are mean.
   - Yes
   - No

8. Most children want their work to be better than their friend’s work.
   - Yes
   - No

9. Most children can do their schoolwork without help.
   - Yes
   - No

10. Some people in my class are not my friends.
    - Yes
    - No
Remember you are describing your actual classroom.

11. Children seem to like the class.
   Yes  No

12. Many children in our class like to fight.
   Yes  No

13. Some pupils feel bad when they don’t do as well as the others.
   Yes  No

14. Only the smart pupils can do their work.
   Yes  No

15. All pupils in my class are close friends.
   Yes  No

16. Some of the pupils don’t like the class.
   Yes  No

17. Certain pupils always want to have their own way.
   Yes  No

18. Some pupils always try to do their work better than the others.
   Yes  No

19. Schoolwork is hard to do.
   Yes  No

20. All of the pupils in my class like one another.
   Yes  No
Remember you are describing your actual classroom.

21. The class is fun.
   Yes    No

22. Children in our class fight a lot.
   Yes    No

23. A few children in my class want to be first all of the time.
   Yes    No

24. Most of the pupils in my class know how to do their work.
   Yes    No

25. Children in our class like each other as friends.
   Yes    No
Appendix C

*The Youth Life Orientation Test (YLOT)*

The 12 sentences below describe how children think about their expectations of something good or bad happening. Read each sentence carefully. For each sentence, please think about how you are in most situations. Place a check inside the circle that describes YOU the best. For example, place a check (✓) in the circle (O) next to “**True for me**,” if this describes you. Or, if “**Not true for me**” best describes you, check this circle. Please answer every question by putting a check in one of the circles. There are no right or wrong answers.

1. Things usually go wrong for me.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

2. When I am not sure what will happen next, I usually expect it to be something good.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

3. Usually, I don’t expect something good to happen to me.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

4. I am a lucky person.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

5. If something nice happens, chances are it won’t be to me.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

6. Each day I look forward to having a lot of fun.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me

7. When things are good, I expect something to go wrong.
   O – True for me    O – Sort of true for me    O – Sort of not true for me    O – Not true for me
8. I usually expect to have a good day.

O – True for me   O – Sort of true for me   O – Sort of not true for me   O – Not true for me

9. No matter what I try, I do not believe anything is going to work.

O – True for me   O – Sort of true for me   O – Sort of not true for me   O – Not true for me

10. Overall, I expect more good things to happen to me than bad things.

O – True for me   O – Sort of true for me   O – Sort of not true for me   O – Not true for me

11. Each day I expect bad things to happen.

O – True for me   O – Sort of true for me   O – Sort of not true for me   O – Not true for me

12. When things are bad, I expect them to get better.

O – True for me   O – Sort of true for me   O – Sort of not true for me   O – Not true for me
Appendix D

*Children’s Depression Inventory (CDI)*
Appendix E

Multidimensional Students’ Life Satisfaction Scale (MSLSS)

The sentences below describe how children think about themselves, their friends, their family, their school, and their home. Read each sentence carefully. For each sentence, please think about how you are in most of the time. Circle the answer that describes YOU the best. For example, circle 4 – almost always if this answer describes you or 1 – never if this describes you best. Please answer every question by circling one of the answers. There are no right or wrong answers.

1. I enjoy being at home with my family.
   4 – almost always 3 – often 2 – sometimes 1 – never

2. My family gets along well together.
   4 – almost always 3 – often 2 – sometimes 1 – never

3. I like spending time with my parents.
   4 – almost always 3 – often 2 – sometimes 1 – never

4. My parents and I do fun things together.
   4 – almost always 3 – often 2 – sometimes 1 – never

5. My family is better than most.
   4 – almost always 3 – often 2 – sometimes 1 – never

6. Members of my family talk nicely to one another.
   4 – almost always 3 – often 2 – sometimes 1 – never

7. My parents treat me fairly.
   4 – almost always 3 – often 2 – sometimes 1 – never
8. There are lots of fun things to do where I live.
   4 – almost always   3 – often   2 – sometimes   1 – never

9. My friends treat me well.
   4 – almost always   3 – often   2 – sometimes   1 – never

10. My friends are nice to me.
    4 – almost always   3 – often   2 – sometimes   1 – never

11. I wish I had different friends.
    4 – almost always   3 – often   2 – sometimes   1 – never

12. My friends are mean to me.
    4 – almost always   3 – often   2 – sometimes   1 – never

13. My friends are great.
    4 – almost always   3 – often   2 – sometimes   1 – never

14. I have a bad time with my friends.
    4 – almost always   3 – often   2 – sometimes   1 – never

15. I have a lot of fun with my friends.
    4 – almost always   3 – often   2 – sometimes   1 – never

16. I have enough friends.
    4 – almost always   3 – often   2 – sometimes   1 – never

17. My friends will help me if I need it.
    4 – almost always   3 – often   2 – sometimes   1 – never
18. I look forward to going to school.
   4 – almost always  3 – often  2 – sometimes  1 – never

19. I like being in school.
   4 – almost always  3 – often  2 – sometimes  1 – never

20. School is interesting.
   4 – almost always  3 – often  2 – sometimes  1 – never

21. I wish I didn’t have to go to school.
   4 – almost always  3 – often  2 – sometimes  1 – never

22. There are many things about school I don’t like.
   4 – almost always  3 – often  2 – sometimes  1 – never

23. I enjoy school activities.
   4 – almost always  3 – often  2 – sometimes  1 – never

24. I learn a lot at school.
   4 – almost always  3 – often  2 – sometimes  1 – never

25. I feel bad at school.
   4 – almost always  3 – often  2 – sometimes  1 – never

26. I like where I live.
   4 – almost always  3 – often  2 – sometimes  1 – never

27. I wish there were different people in my neighborhood.
   4 – almost always  3 – often  2 – sometimes  1 – never
28. I wish I lived in a different house.
   4 – almost always  3 – often  2 – sometimes  1 – never

29. I wish I lived somewhere else.
   4 – almost always  3 – often  2 – sometimes  1 – never

30. I like my neighborhood.
   4 – almost always  3 – often  2 – sometimes  1 – never

31. I like my neighbors.
   4 – almost always  3 – often  2 – sometimes  1 – never

32. This town is filled with mean people.
   4 – almost always  3 – often  2 – sometimes  1 – never

33. My family’s house is nice.
   4 – almost always  3 – often  2 – sometimes  1 – never

34. I think I am good looking.
   4 – almost always  3 – often  2 – sometimes  1 – never

35. I am fun to be around.
   4 – almost always  3 – often  2 – sometimes  1 – never

36. I am a nice person.
   4 – almost always  3 – often  2 – sometimes  1 – never

37. Most people like me.
   4 – almost always  3 – often  2 – sometimes  1 – never
38. There are lots of things I can do well.
   4 – almost always   3 – often   2 – sometimes   1 – never

39. I like to try new things.
   4 – almost always   3 – often   2 – sometimes   1 – never

40. I like myself.
   4 – almost always   3 – often   2 – sometimes   1 – never


Appendix F

Children’s Hope Scale (CHS)

Questions about Your Goals (Children’s Hope Scale)

The six sentences below describe how children think about themselves and how they do things in general. Read each sentence carefully. For each sentence, please think about how you are in most situations. Place a check inside the circle that describes YOU the best. For example, place a check (✓) in the circle (O) next to “None of the time,” if this describes you. Or, if you are this way “All the time,” check this circle. Please answer every question by putting a check in one of the circles. There are no right or wrong answers.

1. I think I am doing pretty well.
   O None of the time
   O A little of the time
   O Some of the time
   O A lot of the time
   O Most of the time
   O All of the time

2. I can think of many ways to get the things in life that are most important to me.
   O None of the time
   O A little of the time
   O Some of the time
   O A lot of the time
   O Most of the time
   O All of the time
3. *I am doing just as well as other kids my age.*

- O None of the time
- O A little of the time
- O Some of the time
- O A lot of the time
- O Most of the time
- O All of the time

4. *When I have a problem, I can come up with lots of ways to solve it.*

- O None of the time
- O A little of the time
- O Some of the time
- O A lot of the time
- O Most of the time
- O All of the time

5. *I think the things I have done in the past will help me in the future.*

- O None of the time
- O A little of the time
- O Some of the time
- O A lot of the time
- O Most of the time
- O All of the time
6. *Even when others want to quit, I know that I can find ways to solve the problem.*

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All of the time</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1

*Correlations between Classroom Climate, Optimism/Pessimism, and Hope*

<table>
<thead>
<tr>
<th>Classroom Perceptions</th>
<th>Hope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>.29**</td>
</tr>
<tr>
<td>Friction</td>
<td>-.24*</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>.00</td>
</tr>
<tr>
<td>Difficulty</td>
<td>-.37***</td>
</tr>
<tr>
<td>Cohesiveness</td>
<td>.29**</td>
</tr>
<tr>
<td>Optimism</td>
<td>.65***</td>
</tr>
<tr>
<td>Pessimism</td>
<td>-.56***</td>
</tr>
</tbody>
</table>

* * p < .05  
** ** p < .01  
*** *** p < .001
Table 2

*Correlations between Emotional Well-Being and Hope*

<table>
<thead>
<tr>
<th>Emotional Well-Being</th>
<th>Hope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>-.70***</td>
</tr>
<tr>
<td>Family Satisfaction</td>
<td>.67***</td>
</tr>
<tr>
<td>Friends Satisfaction</td>
<td>.51***</td>
</tr>
<tr>
<td>School Satisfaction</td>
<td>.58***</td>
</tr>
<tr>
<td>Living Environment Satisfaction</td>
<td>.53***</td>
</tr>
<tr>
<td>Self Satisfaction</td>
<td>.67***</td>
</tr>
</tbody>
</table>

*** $p < .001$
Table 3

*Correlations between Classroom Perceptions, Optimism/Pessimism, and Depression*

<table>
<thead>
<tr>
<th>Classroom Perceptions</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>-.34†</td>
</tr>
<tr>
<td>Friction</td>
<td>.21</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>.12</td>
</tr>
<tr>
<td>Difficulty</td>
<td>.32**</td>
</tr>
<tr>
<td>Cohesiveness</td>
<td>-.19</td>
</tr>
<tr>
<td>Optimism</td>
<td>-.72***</td>
</tr>
<tr>
<td>Pessimism</td>
<td>.74***</td>
</tr>
</tbody>
</table>

**$p < .01$**

***$p < .001$***

† $p = .001$
Table 4

Correlations between Classroom Climate, Optimism/Pessimism, and Life Satisfaction

<table>
<thead>
<tr>
<th>Classroom Climate</th>
<th>Family</th>
<th>Friends</th>
<th>School</th>
<th>Living Environment</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>.25*</td>
<td>.20</td>
<td>.58***</td>
<td>.40***</td>
<td>.30**</td>
</tr>
<tr>
<td>Friction</td>
<td>-.27**</td>
<td>-.20</td>
<td>-.24*</td>
<td>-.29**</td>
<td>-.21*</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>-.09</td>
<td>-.32**</td>
<td>.02</td>
<td>-.20</td>
<td>-.20*</td>
</tr>
<tr>
<td>Difficulty</td>
<td>-.23*</td>
<td>-.27**</td>
<td>-.35***</td>
<td>-.32**</td>
<td>-.20</td>
</tr>
<tr>
<td>Cohesiveness</td>
<td>.18</td>
<td>.27**</td>
<td>.27**</td>
<td>.22*</td>
<td>.26†</td>
</tr>
<tr>
<td>Optimism</td>
<td>.55***</td>
<td>.47***</td>
<td>.59***</td>
<td>.47***</td>
<td>.64***</td>
</tr>
<tr>
<td>Pessimism</td>
<td>-.52***</td>
<td>-.54***</td>
<td>-.52***</td>
<td>-.40***</td>
<td>-.62***</td>
</tr>
</tbody>
</table>

* p < .05
† p = .01
** p < .01
*** p < .001
Table 5

*Prediction of Depression from Classroom Satisfaction and Hope*

<table>
<thead>
<tr>
<th>Dependent Variable: Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects (β)</td>
</tr>
<tr>
<td>Steps 1 &amp; 2</td>
</tr>
<tr>
<td>Classroom Satisfaction</td>
</tr>
<tr>
<td>Hope</td>
</tr>
<tr>
<td>Step 3</td>
</tr>
<tr>
<td>Classroom Satisfaction x Hope</td>
</tr>
</tbody>
</table>

*p < .05
***p < .001
Table 6

*Prediction of Depression from Pessimism and Hope*

<table>
<thead>
<tr>
<th>Dependent Variable: Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects (β)</td>
</tr>
</tbody>
</table>

Steps 1 & 2

<table>
<thead>
<tr>
<th>Pessimism</th>
<th>-.51***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>-.42***</td>
</tr>
</tbody>
</table>

Step 3

| Pessimism x Hope        | .03**   |

**p < .01  
***p < .001
Table 7

*Prediction of Satisfaction with Friends from Classroom Friction and Hope*

<table>
<thead>
<tr>
<th>Main effects (β)</th>
<th>Interaction term (ΔR²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steps 1 &amp; 2</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom Friction</td>
<td>-.11</td>
</tr>
<tr>
<td>Hope</td>
<td>.49***</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom Friction x Hope</td>
<td>.08***</td>
</tr>
</tbody>
</table>

* *p < .05  
*** p = .001
Table 8

*Prediction of Satisfaction with Friends from Classroom Competitiveness and Hope*

<table>
<thead>
<tr>
<th>Main effects ($\beta$)</th>
<th>Interaction term ($\Delta R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steps 1 &amp; 2</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom Competitiveness</td>
<td>-.33***</td>
</tr>
<tr>
<td>Hope</td>
<td>.51***</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom Competitiveness x Hope</td>
<td>.06**</td>
</tr>
</tbody>
</table>

*** $p < .001$
Table 9

*Prediction of Satisfaction with Friends from Pessimism and Hope*

<table>
<thead>
<tr>
<th>Dependent Variable: Satisfaction with Friends</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Main effects ($\beta$)</th>
<th>Interaction term ($\Delta R^2$)</th>
</tr>
</thead>
</table>

Steps 1 & 2

<table>
<thead>
<tr>
<th>Pessimism</th>
<th>-.36***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.31**</td>
</tr>
</tbody>
</table>

Step 3

| Pessimism x Hope | .06** |

** $p < .01$

*** $p < .001$
Table 10

*Prediction of Satisfaction with School from Classroom Satisfaction and Hope*

<table>
<thead>
<tr>
<th>Main effects (β)</th>
<th>Interaction term (ΔR²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steps 1 &amp; 2</td>
<td></td>
</tr>
<tr>
<td>Classroom Satisfaction</td>
<td>.46***</td>
</tr>
<tr>
<td>Hope</td>
<td>.44***</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
</tr>
<tr>
<td>Classroom Satisfaction x Hope</td>
<td>.02*</td>
</tr>
</tbody>
</table>

* p < .05
*** p < .001
**Table 11**

*Prediction of Satisfaction with School from Classroom Difficulty and Hope*

<table>
<thead>
<tr>
<th></th>
<th>Main effects ($\beta$)</th>
<th>Interaction term ($\Delta R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steps 1 &amp; 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Difficulty</td>
<td>-.16</td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.52***</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom Difficulty x Hope</td>
<td>.03*</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$
*** $p < .001$
Table 12

*Prediction of Satisfaction with School from Optimism and Hope*

<table>
<thead>
<tr>
<th>Dependent Variable: Satisfaction with School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects ($\beta$)</td>
</tr>
</tbody>
</table>

**Steps 1 & 2**

- **Optimism**: .37***
- **Hope**: .34**

**Step 3**

- **Optimism x Hope**: .04*

---

* $p < .05$
** $p < .01$
*** $p = .001$
Table 13

*Prediction of Satisfaction with School from Pessimism and Hope*

<table>
<thead>
<tr>
<th></th>
<th>Main effects ($\beta$)</th>
<th>Interaction term ($\Delta R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steps 1 &amp; 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pessimism</td>
<td>-.30**</td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>-.41***</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pessimism x Hope</td>
<td></td>
<td>.04†</td>
</tr>
</tbody>
</table>

† $p = .01$

** $p < .01$

*** $p = .001$
### Table 14

**Prediction of Satisfaction with Self from Classroom Competitiveness and Hope**

<table>
<thead>
<tr>
<th>Dependent Variable: Satisfaction with Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects ($\beta$)</td>
</tr>
</tbody>
</table>

#### Steps 1 & 2

<table>
<thead>
<tr>
<th>Classroom Competitiveness</th>
<th>-.21**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.67***</td>
</tr>
</tbody>
</table>

#### Step 3

| Classroom Competitiveness x Hope | .02* |

* * $p < .05$
** ** $p < .01$
*** *** $p < .001$
Table 15

*Prediction of Satisfaction with Self from Classroom Cohesiveness and Hope*

<table>
<thead>
<tr>
<th>Main effects (β)</th>
<th>Interaction term (ΔR²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Cohesiveness</td>
<td>.10</td>
</tr>
<tr>
<td>Hope</td>
<td>.64***</td>
</tr>
<tr>
<td>Classroom Cohesiveness x Hope</td>
<td>.04**</td>
</tr>
</tbody>
</table>

**p < .01  
***p < .001
Figure 1

*Moderated Relation between Classroom Satisfaction and Hope to Predict Depression*

- .43*
- .04

*High Hope*

*Low Hope*

*p < .05*
Figure 2
*Moderated Relation between Pessimism and Hope to Predict Depression*

![Diagram showing the relationship between Pessimism, Hope, and Depression](image)

**.71***

---

***p < .001***
Figure 3

*Moderated Relation between Classroom Friction and Hope to Predict Satisfaction with Friends*

- **.13**
- **-.38**

**p < .01**
Figure 4

*Moderated Relation between Classroom Competitiveness and Hope to Predict Satisfaction with Friends*

![Diagram showing the relationship between Classroom Competitiveness and Satisfaction with Friends, moderated by Hope. The diagram includes arrows indicating the strength of the relationships: -0.15 and -0.61***. High Hope is represented by solid lines, and Low Hope by dashed lines.]

***p < .001
Figure 5

*Moderated Relation between Pessimism and Hope to Predict Satisfaction with Friends*

- Pessimism
- Satisfaction with Friends
  - High Hope
  - Low Hope

\[ \text{Pessimism} \rightarrow \text{Satisfaction with Friends} \]

\[ -.31^* \]

\[ -.54^{***} \]

\[ ^* p < .05 \]
\[ ^{***} p < .001 \]
Figure 6

*Moderated Relation between Classroom Satisfaction and Hope to Predict Satisfaction with School*

![Diagram showing the relationship between Classroom Satisfaction and Satisfaction with School, with arrows indicating the strength of the relationship and the significance level. The diagram includes notes for High Hope and Low Hope groups.]

***p < .001
Figure 7

*Moderated Relation between Classroom Difficulty and Hope to Predict Satisfaction with School*

- Classroom Difficulty → Satisfaction with School
  - -.11
  - -.37**

**High Hope**

**Low Hope**

**p < .01**
Figure 8

*Moderated Relation between Optimism and Hope to Predict Satisfaction with School*

![Diagram showing the relationship between Optimism and Satisfaction with School, with High Hope and Low Hope pathways, and correlation coefficients of 0.68*** and 0.23.]

*** $p < .001$
Figure 9

Moderated Relation between Pessimism and Hope to Predict Satisfaction with School

*** $p < .001$
Figure 10

*Moderated Relation between Classroom Competitiveness and Hope to Predict Satisfaction with Self*

```
Classroom Competitiveness → Satisfaction with Self

-.17

-.48***

--- High Hope
----- Low Hope

*** p = .001
```
Figure 11

*Moderated Relation between Classroom Cohesiveness and Hope to Predict Satisfaction with Self*

Classroom Cohesiveness → Satisfaction with Self

- .49***
- .13

High Hope

Low Hope

***p < .001