Parent-Adolescent Relationships: Anticipations and Dyadic Interactions During the Transition to High School

by

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ABSTRACT

PARENT-adolescent relationships: anticipations and dyadic interactions during the transition to high school

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The purpose of this thesis was to examine parent-adolescent relationships during the transition to high school. Fourteen parent-adolescent dyads from two Canadian cities completed the study. At pre-transition (Time 1) and post-transition (Time 2) to high school, each dyad was video-recorded engaging in a conversation together about various topics related to the school transition. Content analysis was conducted to explore parents’ and adolescents’ pre-transition anticipations of how their relationship would be in high school. State space grid analysis was used to investigate whether there were changes in the structure or emotional content of parent-adolescent dyadic interactions between pre-transition and post-transition to high school. Results showed that parents and adolescents expressed relationship anticipations of stability, change, or uncertainty. Additionally, no statistically significant differences were found in the structure or emotional content of parent-adolescent interactions, suggesting that the high school transition does not appear to disrupt how parents and adolescents interact together.
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# Table of Contents

Acknowledgements........................................................................................................ iii  
Table of Contents........................................................................................................ iv  
List of Tables................................................................................................................ v  
List of Figures................................................................................................................ vi  
List of Appendices........................................................................................................ vii  
Introduction.................................................................................................................... 1  
  Change in Social Context: Transition to High School........................................... 3  
  Social Changes: Relation to Parent-Adolescent Relationships.............................. 5  
  Parent-Adolescent Relationships: Change and Continuity................................. 8  
Theoretical Framework.................................................................................................. 15  
  Ecological Systems Theory..................................................................................... 15  
  Interactional Model of Close Relationships.......................................................... 16  
  Dyadic Interactions.................................................................................................. 18  
Research Questions...................................................................................................... 21  
Method.......................................................................................................................... 22  
  Participants................................................................................................................ 22  
  Procedure................................................................................................................... 24  
    Time 1: Pre-transition to High School................................................................. 26  
    Time 2: Post-transition to High School............................................................... 28  
Materials....................................................................................................................... 29  
Coding Procedures...................................................................................................... 30  
  Content Analysis..................................................................................................... 30  
  Specific Affect Coding System.............................................................................. 32  
State Space Grid Analysis............................................................................................ 35  
  Structure Analysis.................................................................................................. 36  
  Emotional Content Analysis............................................................................... 37  
Results........................................................................................................................... 38  
  Content Analysis..................................................................................................... 38  
  State Space Grid Analysis..................................................................................... 44  
    Structure Analysis............................................................................................... 44  
    Emotional Content Analysis............................................................................. 45  
    Dyadic States of Mutual Engagement............................................................ 45  
    Dyadic States of Non-mutual Engagement....................................................... 53  
Discussion....................................................................................................................... 57  
  Anticipations of the Parent-Adolescent Relationship in High School................ 58  
  Structure of Parent-Adolescent Interactions......................................................... 65  
  Emotional Content of Parent-Adolescent Interactions........................................ 67  
Study Limitations.......................................................................................................... 71  
General Conclusions and Directions for Future Research..................................... 73  
References..................................................................................................................... 76  
Appendices..................................................................................................................... 87
List of Tables

Table 1. Numbers of Dyads that Displayed an Increase, Decrease, and No Change in the Percentage of Time in the States of Mutual Engagement and Disengagement from Time 1 to Time 2.................................................. 47

Table 2. Numbers of Dyads that Displayed an Increase, Decrease, and No Change in the Percentage of Time in the States of Non-Mutual Engagement and Disengagement from Time 1 to Time 2.................................................. 55
List of Figures

Figure 1. Two State Space Grids Displaying a Decrease in the Percentage of Time Spent in the Dyadic State of Mutual Overall Negative from Time 1 to Time 2 49

Figure 2. Two State Space Grids Displaying an Increase in the Percentage of Time Spent in the Dyadic State of Mutual Overall Positive from Time 1 to Time 2 50

Figure 3. Two State Space Grids Displaying an Increase in the Percentage of Time Spent in the Dyadic State of Mutual Neutral from Time 1 to Time 2 51

Figure 4. Two State Space Grids Displaying a Decrease in the Percentage of Time Spent in the Dyadic State of Parent Negative Engagement, Adolescent Negative Disengagement from Time 1 to Time 2 56
List of Appendices

Appendix A: Application to Involve Human Participants in Research ......................... 87
Appendix B: Certification of Ethical Acceptability of Research ................................. 98
Appendix C: Information Letter .................................................................................. 100
Appendix D: Initial Telephone Interview ...................................................................... 103
Appendix E: Consent Form – Parent ............................................................................ 105
Appendix F: Consent Form – Adolescent ...................................................................... 110
Appendix G: Time 1 Protocol Guidelines ...................................................................... 115
Appendix H: Time 2 Protocol Guidelines ...................................................................... 117
Appendix I: Interview Guide ......................................................................................... 119
Appendix J: Extracurricular Activities Sheet .................................................................. 124
Appendix K: Acknowledgement of Receipt of Payment ............................................... 125
Appendix L: Specific Affect Coding System and State Space Grid Categories ............ 126
Introduction

No other time in human development, save infancy and toddlerhood, involves such significant change as that which occurs in adolescence (Steinberg & Silk, 2002), a period ranging from approximately 10 to 20 years of age (Lerner & Steinberg, 2004). In particular, there is extensive empirical literature demonstrating changes in parent-child relationships and peer relationships during adolescence (e.g., Berndt & Perry, 1990; Bradford, 2004; Collins, 1990; Collins, 1997; Collins & Laursen, 2004a; Larson, Richards, Moneta, Holmbeck, & Duckett, 1996; Laursen, Coy, & Collins, 1998; Raffaelli & Duckett, 1989). An increasing number of researchers have investigated the social changes (e.g., changes in friendships) associated with the transition to high school, a period of transformation in adolescents’ social context (Barber & Olsen, 2004; Benner & Graham, 2009; Blyth, Simmons, & Carlton-Ford, 1983; Cantin & Boivin, 2004; Hardy, Bukowski, & Sippola, 2002; Seidman, Aber, Allen, & French, 1996). Interestingly, however, researchers have neglected to explore whether this school transition may influence, or is related to changes in, parent-adolescent relationships.

This lack of empirical literature investigating parent-adolescent relationships during the transition to high school is unexpected given the considerable bodies of research examining close relationships as adolescents experience various social changes, such as the expansion of their social networks and a greater emphasis on peer relations (Collins, 1997; Eccles et al., 1993; Larson & Richards, 1991; Larson et al., 1996). Recognizing that social changes experienced by one relationship partner can influence the dyadic functioning of a relationship (Collins, 1997), it was of interest in this study to
examine the dyadic interactions of parent-adolescent dyads as adolescents entered high school and encountered change in their social contexts.

Despite the multiple changes occurring in parent-adolescent relationships during adolescence, there is also a degree of continuity coexisting in close relationships over time (Collins, 1997). In general, parents and adolescents continue to feel positive toward, and maintain positive perceptions of, each other across adolescence (Collins, 1990). At the same time, minor conflicts and disagreements about mundane issues are a common feature in parent-adolescent relationships (Collins; Montemayor, 1986). Acknowledging the coexistence of continuity and change in parent-adolescent relationships, as well as the co-occurrence of positive and negative styles of interaction, it was of importance to study the patterns of interaction between parents and adolescents during the transition from elementary school to high school.

To gain insight into their dyadic interactions, it was necessary to consider how parents and adolescents behaved together in each other’s presence, as it is the interactions between two individuals over time, and their perceptions and anticipations of these interactions, which constitute close relationships (Hinde & Stevenson-Hinde, 1987; Lollis, 2003). Moreover, given the need for research on parent-adolescent relationships to shift from the individual to the dyadic level of analysis (Collins & Laursen, 2004a; Lollis, 2003; Lollis & Kuczynski, 1997; Marshall, Young, & Tilton-Weaver, 2008), it was of utmost importance to focus on the dyadic interactions in parent-adolescent relationships. Additionally, rooted in the belief that “relationships [may] change as environments change” (Laursen & Bukowski, 1997, p. 748), this thesis sought to explore whether the transition to high school would influence parents’ and adolescents’ interactions together.
Therefore, the purpose of this study was to examine whether there would be change or stability in the patterns of interaction within parent-adolescent dyads as adolescents made the transition to high school.

**Change in Social Context: Transition to High School**

School transitions represent normative, yet significant, occasions in the lives of many young adolescents in North America. Research indicates that school transitions are related to some positive changes, such as increases in peer engagement, decreases in daily hassles with peers (Seidman et al., 1996), increases in social support from school friends (Cantin & Boivin, 2004), and the formation of new friendships (Akos & Galassi, 2004; Hardy et al., 2002). At the same time, school transitions can be disruptive and difficult for students on multiple levels, including academic, personal, and social functioning (Barber & Olsen, 2004; Benner & Graham, 2009; Blyth et al., 1983; Seidman, Allen, Aber, Mitchell, & Feinman, 1994). With the transition to high school, students may struggle with greater academic demands and more challenging coursework (Baker et al., 2001; Benner & Graham, 2009; Isakson & Jarvis, 1999). The transition to high school has been found to be associated with several negative outcomes, including declines in students’ grade point averages and school attendance (Barone, Aguirre-Deandreis, & Trickett, 1991; Benner & Graham, 2009; Blyth et al., 1983; Gillock & Reyes, 1996; Isakson & Jarvis, 1999). In addition, relative to levels in elementary school, students entering high school have reported higher levels of anxiety, loneliness (Benner & Graham, 2009), and perceived anonymity (Blyth et al., 1983). Nevertheless, it is important to note that not all adolescents experience such decreases in academic and psychological functioning during the transition to high school (Barone et al., 1991).
Research demonstrates that adolescents’ peer relationships and social networks also undergo change upon entry into high school. Given that schools help to shape students’ peer networks (Falbo, Lein, & Amador, 2001), the systematic variations in the classroom and school environments between elementary and high school (Eccles et al., 1993) contribute to changes in peer groups and the development of peer crowds (Bradford, 2004). Contrary to elementary schools, which are characterized by smaller student bodies and one-teacher classroom environments (Barber & Olsen, 2004), high schools have larger, more heterogeneous student populations (Blyth et al., 1983; Gillock & Reyes, 1996), with classroom changes and different peers enrolled in each course (Hardy et al., 2002). As such, students in high school have greater opportunities to meet new individuals and substantially larger peer groups as compared to when they were in elementary school (Bradford, 2004).

On the other hand, some researchers (e.g., Hardy et al., 2002) argue that the increased school size associated with the move from smaller elementary schools to larger secondary schools may actually reduce the number of possible occasions to interact with other students, resulting in the disruption of peer relationships and the end to some friendships. In a study examining peer relationships during the transition from grade 6, in elementary school, to grade 7, in a middle-school comprised of students in grades 7 to 12, Hardy et al. found that in the fall semester of grade 7, both male and female students lost previously reciprocated friendships, but also developed new reciprocated friendships with formerly unknown peers. These findings provide empirical support for the assertion that the transition from a smaller elementary school to a larger secondary school is indeed associated with changes to friendships and peer relationships.
Although the high school transition literature incorporating parent measures typically focuses on parents’ roles and perceptions of the transition process, this body of research is itself limited (Akos & Galassi, 2004). To extend this area of research, Akos and Galassi compared both parents’ and adolescents’ perceptions about the transition to high school. Early in the first semester of high school, adolescents and parents were asked to identify their transition concerns, positive anticipations, and the degree of difficulty experienced during the transition. Findings revealed that parents and adolescents shared some perceptions, such that 70% of adolescents and 57% of parents identified “amount of homework” as the greatest transition concern, while 72% of adolescents and 74% of parents indicated “making new friends” as a primary positive anticipation of the transition. The latter finding is especially interesting as it suggests that parents are aware that friends and peer relationships play an increasingly important role in the lives of adolescents. However, there were also some discrepancies in their perceptions. For example, parents did not perceive “more freedom” as a top anticipation for their adolescents, but an overwhelming 80% of adolescents identified it as their primary positive anticipation of the transition to high school.

**Social Changes: Relation to Parent-Adolescent Relationships**

Adolescence is a period associated with changes in friendships and peer relations. Relative to younger children, adolescents spend more time with their friends and less time with family (Larson & Richards, 1991; Larson et al., 1996). Adolescence is also related to a decrease in intimate self-disclosure to parents, but an increase in self-disclosure to peers (Buhrmester & Furman, 1987), such that friendships become more intense, intimate, and emotionally supportive as compared to friendships in childhood.
(Berndt & Perry, 1990; Bradford, 2004; Gottman & Mettetal, 1986). With friends playing a more prominent role in adolescence as compared to childhood, it may be challenging for parents to become accustomed to and accepting of their changing roles in the development of their adolescents (Steinberg & Silk, 2002).

Relative to individuals in other periods of the lifespan, adolescents in North America have the greatest amount of ‘free’ time (i.e., time spent watching television, talking, participating in sports and other leisure activities; Larson & Verma, 1999), such that it represents more time than that which is spent in both school and work-related activities (Larson, 2000). Given this greater amount of free time, adolescents encounter more opportunities and activities to engage with peers without parental or adult supervision (Larson et al., 1996). During adolescence, parents and adolescents must renegotiate their roles to determine the appropriate balance between adolescents’ striving for independence and parents’ desire for involvement or control in adolescents’ activities (Collins & Laursen, 2004b).

Empirical research also indicates that changes occur to the quantity and quality of time adolescents spend with their family. For example, Larson and colleagues (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996) investigated age-related changes in the amount of time and contexts of adolescents’ daily interactions with family, as well as adolescents’ perceptions of these interactions. Data were collected when the participants were in grades 5 to 8 (ages 10 to 14 years) and again in grades 9 to 12 (ages 13 to 18 years). Findings showed that the amount of time spent with family significantly decreased each year from grades 5 to 12. Although this decline in time spent with family was apparent across the whole week, the greatest reductions were on Friday and Saturday
nights, followed by weekday afternoons and evenings. During high school, the decrease in amount of time spent with family was associated with influences external to the family, such as adolescents spending more time with friends outside of the home. Time spent with family in leisure activities (e.g., TV viewing and active leisure) decreased with age; however, the time that was spent with family actually included greater dyadic and upfront interaction with parents. Although adolescents disengage from daily family interactions with age, their interactions with parents are transformed to preserve a sense of connectedness (Larson et al.).

Changes in communication and conversations with family and friends have also been documented in the adolescent development literature. For example, Csikszentmihalyi and Larson (1984) reported that adolescents in high school talk more frequently with their friends (as much as three times more often) than with their families. However, Larson et al. (1996) demonstrated that the quantity of time spent in conversations with family members, particularly mothers, did not significantly decrease across adolescence. These researchers also found that for girls, the amount of time in discussion about interpersonal issues actually increased with age.

In one study examining patterns of communication, Raffaelli and Duckett (1989) were interested in determining whether the amount of time spent talking, who is talked to, topics of conversation, and perceptions of these conversations would change as a function of age in a sample of early adolescents (grades 5 to 9). Raffaelli and Duckett found that among other gender differences, girls talked significantly more to both friends and parents than did boys. However, for both genders, talking to friends became increasingly important with age; by grade 9, girls and boys reportedly spent an average of 9 and 4
hours per week, respectively, talking to friends, making it the most frequent social activity. Although the quantity of time spent talking to friends greatly increased over time, adolescents retained a low, but stable, level of communication with their parents. These researchers suggested that during adolescence, talking to friends does not replace communication with parents, but more precisely, it signifies a new and significant feature of peer relations.

**Parent-Adolescent Relationships: Change and Continuity**

Over the past few decades, the study of close relationships in the family has been the most widely researched area in the field of adolescent development (Steinberg, 2001). Although there are changes in the parent-child relationship between childhood and adolescence (Collins & Luebker, 1994), the occurrence of these adjustments is gradual as opposed to abrupt (Collins, 1990; Collins, 1995). The focus of the parent-adolescent relationship is one of transformation, which involves the renegotiation of roles and expectations within the relationship so as to establish a new equilibrium in adolescent independence and parental involvement (Collins & Laursen, 2004b; Steinberg & Silk, 2002). Transformation is also characterized by the preservation of emotional bonds during a time of shifting interactional patterns to accommodate the developing perspectives of adolescents (Collins & Luebker, 1994).

However, despite the numerous changes during this period of development, there is also an element of continuity in the parent-child relationship from childhood to adolescence. Indeed, Collins (1990; 1995; 1997; Collins & Laursen, 1992; Collins & Laursen, 2004b; Shulman & Collins, 1995) argues that both continuity and change are present and coexist in close relationships over time. For example, some research
documents that in general, adolescents preserve an affectionate bond with their parents, as well as continue to feel positive toward, and maintain positive perceptions of, their parents across adolescence (e.g., Collins, 1990; Collins & Laursen, 1992; Larson et al., 1996; Smetana, 1995). Johnson and Collins (1988; as cited in Collins, 1995), and Schoenleber and Collins (1988; as cited in Collins, 1995) examined whether adolescents’ and parents’ perceptions of each other would change as a function of age. In these studies, the sample consisted of parents and their adolescents who were 11, 14, and 17 years of age (in grades 5, 8, and 11). Comparisons across age showed substantial similarity in the amount of positive affect demonstrated by adolescents toward their parents. Furthermore, both adolescents and parents continued to hold relatively positive perceptions of each other across adolescence.

Contrary to popular belief, most parent-adolescent relationships are not characterized by severe conflict and emotional turbulence. In fact, research suggests that most adolescents actually report pleasant family relationships (Montemayor, 1983). Furthermore, the majority of the approximately 20% of adolescents who report serious family difficulties tend to have a history of these problems, which likely originated in childhood from maladaptive family systems (Montemayor; Offer, Ostrov, & Howard, 1981). Nonetheless, disagreements, bickering, and minor conflicts about daily, mundane hassles (e.g., doing chores, doing homework, appropriate dress) are ordinary occurrences between parents and adolescents (Collins, 1990; Montemayor, 1986).

Conflict – an event between two individuals who display overt behavioural opposition (Shantz, 1987) – is a well-researched area in the field of parent-adolescent relationships. Researchers have been particularly interested in understanding the
developmental course of conflict throughout adolescence (Laursen et al., 1998). Laursen et al. conducted a meta-analysis on 37 studies to determine whether and how parent-adolescent conflict changes during this period. For analysis purposes, adolescent participants in the sample were categorized into one of three phases: early adolescence (10 to 12 years of age; grades 5 to 7), mid-adolescence (13 to 16 years of age; grades 8 to 10), and late adolescence (17 to 22 years of age; grade 11 to university undergraduate). Results demonstrated that conflict rate (frequency or number of disagreements) and total conflict (rate and affect combined) decreased from early adolescence to mid-adolescence, and again from mid-adolescence to late adolescence. Simultaneously, conflict affect (emotional intensity of disagreements) increased from early adolescence to mid-adolescence. These findings are noteworthy as they do not uphold the belief that rate of conflict occurs as a curvilinear function (i.e., parent-adolescent conflict increases and subsequently declines across adolescence). On the contrary, parent-adolescent conflict appears to reflect linear functions, whereby the rate of conflict decreases across adolescence, and conflict affect increases during this period.

Although there is an extensive body of literature documenting the occurrence of parent-adolescent conflict, Caughlin and Malis (2004a) have argued that more studies should be directed toward understanding how conflict is enacted between parents and adolescents in their interactions. For example, the demand/withdraw pattern of conflict, which has usually been examined in marital couples (Caughlin & Huston, 2002; Gottman, 1993; Gottman & Levenson, 2000), entails one individual criticizing, complaining, or nagging, while the other individual attempts to avoid the issue. Despite there being literature to suggest that some parent-adolescent dyads exhibit the
demand/withdraw pattern of communication, there is a paucity of research focusing on this phenomenon in parent-adolescent interactions (Caughlin & Malis, 2004a; 2004b). To address this particular shortcoming in the literature, Caughlin and Malis investigated demand/withdraw in parent-adolescent dyads who engaged in audio-recorded conversations. Recurrent demand/withdraw was related to low relational satisfaction and low self-esteem for both adolescents and parents. However, as indicated by these researchers, a limitation in their study was that the audio-recordings of the interactions did not capture the important nonverbal cues associated with withdrawal (e.g., looking away from the speaker). Video-recordings of the conversations would enable a more detailed analysis of the demand/withdraw pattern of conflict in that the nonverbal behaviour and affect of parents and adolescents could be observed and incorporated. Moreover, future studies should examine the pattern of adolescent-demand/parent-withdraw, in addition to parent-demand/adolescent-withdraw, given that it is constructive for parents to listen to (as opposed to withdraw from) their adolescents, even when adolescents are demanding or criticizing (Caughlin & Malis, 2004b).

As explained by Smetana (1995), parent-adolescent relationships are multifaceted in nature in that conflict and positive modes of interaction coexist within the relationship. Specifically, the affection, warmth, support, and emotional closeness shared by parents and adolescents are commonly intertwined with their disagreements, conflicts, and distance. Even though disagreements and emotional closeness are both typical of the parent-adolescent relationship, much of the research has not adequately examined or described this complexity (Smetana). Indeed, many researchers concerned with parent-adolescent relationships have neglected to investigate simultaneous changes across
numerous domains; researchers have often concentrated on the more negative features (e.g., disagreements, conflict) of the parent-adolescent relationship, while overlooking the more positive qualities of the relationship (Smetana).

Since Smetana (1995) highlighted this gap in the literature, more recent research endeavours have been directed toward examining both negative and positive features in the parent-adolescent relationship over time. For example, Conger and Ge (1999) conducted a longitudinal study to investigate whether conflict/hostility (defined as observed expressions of negative emotion) and warmth/cohesion (defined as observed expressions of positive emotion) increased, decreased, or remained stable in parent-adolescent interactions when adolescents were in grades 7 to 9 (12 to 14 years of age). Trained observers rated parents’ and adolescents’ negative affect and positive affect from the video-recorded parent-adolescent interactions for each time point. Negative emotional expression was indicated by behaviours that were angry, critical, disapproving, rejecting, defiant, insensitive, hostile, threatening, or blaming in nature. Positive emotional expression was signified by verbal and nonverbal expressions of a caring, affectionate, supportive, cooperative, helpful, or sensitive nature, as well as expressions showing interest in, attention to, acknowledgement of, or validation of the other individual’s statement or perception. Results showed that negative emotion expressed by both adolescents and parents increased across the three-year period. Conversely, positive emotion expressed by both adolescents and parents decreased over time. Although results indicated that positive emotional expression declined with age, Conger and Ge noted that parents and adolescents who were rated high on warmth when adolescents were in grade 7 actually displayed comparative increases in emotional closeness in grades 8 and 9. On
the other hand, parent-adolescent dyads that were rated low on warmth when adolescents were in grade 7 had a greater likelihood of displaying relative decreases of warmth across this period. McGue, Elkins, Walden, and Iacono (2005) reported comparable findings in a sample of adolescents, who recorded their perceptions of the quality of the parent-adolescent relationship at 11 years of age and then again at 14 years of age. McGue et al. found that conflict with parents increased, while warmth with parents declined with age.

Findings reported by Conger and Ge (1999) also imply that previous parent-adolescent interactions characterized by conflict and hostility may result in relative increases in comparable behaviours across this period of time. For example, adolescents’ levels of hostility in grade 7 predicted their expressions of hostility in both grades 8 and 9. Moreover, adolescents’ expressions of hostility in grades 7 and 8 were related to parents’ levels of hostility when adolescents were in grades 8 and 9, respectively. Parents’ expressions of hostility in earlier grades were similarly related to their adolescents’ levels of hostility in later grades. As described by Conger and Ge, parents and adolescents who were rated high on conflict/hostility when adolescents were in grade 7 were more likely to display relative increases in negative emotional expression in subsequent years. Similar findings were found by Kim, Conger, Lorenz, and Elder (2001), who investigated parent-adolescent reciprocity in negative emotion when adolescents were in grades 7 to 12. Results from this study likewise suggest that parents’ and adolescents’ expressions of negative affect are mutually reinforcing and reciprocated across this period of development.

Many researchers interested in the development of parent-adolescent relationships have also explored the role of parents’ and adolescents’ perceptions and expectations in
their relationships over time (e.g., Buchanan, 2003; Collins, 1990; Collins & Luebker, 1994; De Goede, Branje, & Meeus, 2009; Deković, Noom, & Meeus, 1997; Shearer, Crouter, & McHale, 2005). Shearer et al. (2005) examined parents’ retrospective perceptions of parent-child relationship changes during the transition to adolescence. Parents described undergoing a moderate degree of change in the relationships with their adolescents. In addition, major themes of parents’ perceptions of relationship change included: change in general relationship quality and/or closeness (many parents reported relationships became closer); change in communication (some parents reported communication became less common, whereas others felt the quality of conversation became more open); and changes in conflict (some parents reported that conflict became more frequent and the topic of conflict changed).

Although these findings are unique in that they provide new insights into parents’ perspectives on changes in the parent-adolescent relationship, as described in their own words (Shearer et al., 2005), it may be valuable for future research endeavours to similarly incorporate adolescents’ perceptions of relationship change. Furthermore, it may be interesting to consider whether discrepancies in parents’ and adolescents’ perceptions influence the dynamics of the relationship. It should also be acknowledged that the findings from the above study were based on parents’ perceptions in retrospect; conducting a prospective study may yield novel perspectives on change or continuity in the parent-adolescent relationship. Specifically, do parents and adolescents anticipate that their relationship will change or continue to be the same in the future? If change is anticipated, what is the nature of these expected changes?
Interestingly, research suggests that parents’ expectations for, and perceptions about, the transition to adolescence are intertwined and complex. For example, generalized ideas about adolescence have been shown to predict mothers’ expectations for their children’s experiences during this time; mothers who believed that adolescents are prosocial predicted greater expectations for a closer parent-adolescent relationship (Buchanan, 2003). Parents’ beliefs regarding their children’s development have been found to affect their anticipations about how their children will behave in adolescence (Goodnow & Collins, 1990). Discrepancies in expectations and perceptions also appear to have implications for the parent-adolescent relationship. Deković and colleagues (Deković, Noom, & Meeus, 1997) found that parents and adolescents differed in their age-related expectations about behaviours and development in adolescence. The largest discrepancies in perceptions related to adolescents’ personal relationships (i.e., having a boyfriend/girlfriend) and unsupervised activities. Additionally, discrepancies in developmental expectations were associated with more conflict in mother-daughter, father-daughter, and father-son dyads.

**Theoretical Framework**

**Ecological Systems Theory**

School transitions are associated with significant changes to the social environment (Blyth et al., 1983; Eccles et al., 1993). In particular, individuals entering the first year of high school encounter a new school environment with different academic and social challenges (Isakson & Jarvis, 1999). Therefore, it is only natural to consider the school setting as representing a broader context in which to examine influences on parent-adolescent relationships during the transition to high school. According to the
ecological systems theory (Bronfenbrenner, 1979), individuals are embedded in and interact with environmental settings that influence their development. These environmental systems occur at multiple levels, including the microsystem and mesosystem. The microsystem refers to the interactions and relationships that occur within the individual’s immediate environmental contexts, such as the family, peer groups, and school. The mesosystem is identified as the connections between Microsystems, such as the interrelationship between family and school (Bronfenbrenner).

Although the parent-child relationship is the primary context in which human development occurs (Bronfenbrenner, 1986), the school environment also plays a role in the development and adjustment of adolescents (e.g., Baker et al., 2001; Dornbusch, Erickson, Laird, & Wong, 2001; Stone & Han, 2005). However, it is important to recognize that these contexts do not function independently from each other; rather, the impacts of one environmental context on an individual can be either amplified or buffered by other contexts (Bronfenbrenner, 1986). Therefore, by adopting this theoretical perspective, it can be suggested that changes to the school microsystem (i.e., school environment and social context) during the transition to high school, in turn, may influence the microsystem of the parent-adolescent relationship.

**Interactional Model of Close Relationships**

The interactional model of close relationships (Lollis, 2003) is a valuable theoretical framework to utilize in the examination of parent-adolescent relationships during the transition to high school, as it places particular emphasis on the interactions in close relationships over time. Building on the interactional model of relationships (Hinde & Stevenson-Hinde, 1987), this perspective highlights the significant role of time,
arguing that the parent-child relationship develops from interactions over time. These interactions represent the “building blocks” (Lollis, 2003, p. 68) upon which the close relationship is created, which in turn, provides a context for the interactions.

According to Hinde and Stevenson-Hinde (1987), an interpersonal relationship between two individuals develops through interactions over successive occasions, involves contributions from both individuals, and is distinctive from other relationships. In keeping with these original principles, the interactional model of close relationships (Lollis, 2003) also asserts that parent-child relationships are based on both previous interactions and expectations for future interactions. Specifically, perceptions of past experiences and future anticipations influence the present interactions between parents and children. In fact, the ways in which individuals behave together in the relationship are influenced by their feelings, perceptions, and predictions about the relationship. Conversely, the very nature and quality of the relationship, as well as the individuals’ expectations and feelings toward it, are based on the dynamics of the interactions (Hinde & Stevenson-Hinde, 1987; Lollis, 2003).

Assuming the interactional model of close relationships (Lollis, 2003) as a theoretical lens to investigate parent-adolescent relationships during the transition to high school offered the opportunity to examine how parents and adolescents interact together, as a dyad, in the present moment. Furthermore, it presented a suitable framework in which to incorporate and explore the role of adolescents’ and parents’ perceptions of their relationship, how they anticipate their relationship will be in high school, and whether their expectations do, in fact, influence the nature of the dyadic interactions.
Dyadic Interactions

Research focusing on parent-adolescent relationships needs to shift from the individual to the dyadic level of analysis (Lollis, 2003; Lollis & Kuczynski, 1997; Marshall et al., 2008). In particular, the examination of dyadic interactions provides greater insight into how parents and adolescents behave together in each other’s presence. Furthermore, although change in close relationships over time is a fundamental concern in the study of human development, there is a paucity of research employing longitudinal dyadic data so as to address relationship continuity and change (Laursen, 2005).

However, in undertaking this research endeavour, a central question becomes one of feasibility with respect to the method of analysis: Is it practicable to analyze the dyadic interactions of parents and adolescents? Can dyadic interactions be evaluated for stability or change over time? And if so, what is the most appropriate method for such analysis?

Founded upon dynamic systems principles, the method of state space grids was developed by Lewis, Lamey, and Douglas (1999) as a means to visually describe, quantify, and analyze event sequences (e.g., behavioural or emotional states) from observational data. Dynamic systems are open, adaptive, and complex “systems of elements that change over time” (Thelen & Smith, 1998, p. 563). A central characteristic of dynamic systems is that they have a broad scope of states (e.g., behavioural or emotional), which can potentially be displayed; yet, there is a propensity for the systems to stabilize in a restricted range of these possible states (Granic & Hollenstein, 2003). These stable and recurring states, known as ‘attractors,’ ‘pull’ the system from other feasible states. The state space represents the entire range of all potential states and is arranged by the presence of attractors, which emerge into stabilized patterns over time.
(Granic & Hollenstein). The behaviour or affective states proceed in a trajectory across the state space, moving in the direction of the attractors in real time.

Lewis et al. (1999) originally developed state space grid analysis to examine the intra-individual socioemotional development of infants; however, the method has since been adapted and applied to the study of dyadic behaviour in parent-child and parent-adolescent interactions (e.g., Granic & Hollenstein, 2003; Granic, Hollenstein, Dishion, & Patterson, 2003; Granic & Lamey, 2002; Hollenstein, Granic, Stoolmiller, & Snyder, 2004). The behavioural trajectory (i.e., the sequence of dyadic events) is mapped, as it occurs in real time, onto a two-dimensional grid, which includes all potential behavioural dyadic combinations. The parent’s and the adolescent’s coded behaviour are charted on the x-axis and y-axis of the grid, respectively. Each point on the grid represents a state of dyadic behaviour, and the size of the point relates to the interval of time for that particular dyadic state. When there is a change in either the parent’s or adolescent’s behaviour, a new point is mapped onto the grid, signifying a new state, and a line is constructed between the two points to display the change in the behavioural state of the dyad. The parent’s and adolescent’s move from one state to another are indicated by horizontal and vertical lines, respectively (Granic & Hollenstein, 2003).

A key advantage to using the method of state space grids is that longitudinal observational data can be assessed and changes in dyadic interactions can be detected over time. In particular, this method can visually depict structural changes in the relative flexibility or rigidity of dyadic interactions over time. For example, Granic and colleagues (Granic, Hollenstein, Dishion, & Patterson, 2003) examined changes in the structure of parent-adolescent interactions across five waves of data collection (at ages 9-
10, 11-12, 13-14, 15-16, and 17-18). For each period of data collection, parent-son dyads were videotaped as they engaged in a problem-solving discussion. Parents’ and adolescents’ behaviours were coded and classified into one of four categories: hostile, negative, neutral, or positive. State space grids were constructed to analyze the behavioural trajectories for each dyad across the five longitudinal waves. Granic et al. were interested in the behavioural variability of the dyadic states, that is, the relative flexibility versus rigidity of the interactions. It was of particular interest to determine whether there were changes in the structure of the interactions when the adolescent participants were 13 to 14 years of age. As predicted, there was greater variability (i.e., flexibility) in the structure of the interactions at this time as compared to other periods. The researchers explained this finding as being possibly related to the developmental transition in early adolescence, when adolescents undergo changes in multiple domains (e.g., hormonal, physical, cognitive, social, and family). It is critical that future research endeavours examining parent-adolescent interactions during developmental transitions determine whether similar structural changes occur in various interaction contexts (Granic et al.).

State space grid analysis can also be used to examine changes in the content of dyadic interactions over time. For example, Granic, O’Hara, Pepler, and Lewis (2007) investigated the emotional content (mutual positivity, parent attack, mutual hostility, and permissiveness) of the interactions between parents and their aggressive children both prior to and following treatment. Specifically, it was of interest to determine whether the duration of the time spent in the above regions of the grids would change as a function of the treatment. Pre-treatment and post-treatment group comparisons of the emotional
content of parent-child interactions were made between those children who did and did not demonstrate clinically significant improvements following the treatment. Granic et al. found that for both groups of children, there were no changes between pre- and post-treatment in the amount of time spent in the negative regions of the state space grids. For the group of children who showed clinical improvements, the duration of time spent in the mutual positivity region increased between pre- and post-treatment. However, for the group of children who did not show clinical improvements, the amount of time spent in the mutual positivity region decreased between pre- and post-treatment. This study is worth mentioning as it highlights the useful role of state space grids in investigating changes in the content of parent-child interactions over time. Similarly, it can be suggested that state space grid analysis represents a valuable tool to examine whether there are changes in the emotional content of parent-adolescent conversations prior to and following the transition to high school.

**Research Questions**

Given the various research findings discussed here, the purpose of this study was to investigate parent-adolescent relationships as adolescents make the transition to high school. Specific objectives were (a) to examine parents’ and adolescents’ anticipations of how their relationship would be in high school, and (b) to examine whether there was change or stability in the patterns of interaction within parent-adolescent dyads. In consideration of these goals, the study addressed the following research questions:

1. (a) Prior to the transition to high school, do parents and adolescents discuss how their relationship will be when adolescents are in high school?

   If there is discussion pertaining to anticipations of their relationship:
(b) Do parents and adolescents anticipate change or stability in their relationship when adolescents are in high school?
(c) If change is anticipated in the parent-adolescent relationship, what is the nature of this change?
(d) Do parents and adolescents agree or disagree in their anticipations of their relationship?

2. Are there changes in the structure of the parent-adolescent dyadic interactions between pre-transition and post-transition to high school?

3. Are there changes in the emotional content of the parent-adolescent dyadic interactions between pre-transition and post-transition to high school?

Method

Participants

Recruited participants were male and female adolescents and parents who met the following inclusion criteria: (a) constituted a parent-adolescent dyad with an adolescent who had completed elementary school and would be making, or had recently made, the transition to high school at Time 1 of the study, (b) had not been diagnosed with any serious cognitive impairments or mental health problems, and (c) provided written consent to participate in the study. Parent-adolescent dyads were the unit of analysis and parent-adolescent dyads with adolescents who were making the transition to high school represented the target population. Participants were recruited through non-probability, convenience sampling, as well as through acquaintances and contacts.

Fourteen parent-adolescent dyads participated in this study. There was variability in the gender composition of the dyads (seven mother-daughter dyads, four mother-son
dyads, two father-daughter dyads, and one father-son dyad). The sample included nine female adolescents, who ranged in age from 12 to 14 years of age at Time 1 \((M \text{ age } = 13.44, SD = 0.88)\) and from 13 to 15 years of age at Time 2 \((M \text{ age } = 14.00, SD = 0.71)\). There were five male adolescents, who ranged in age from 12 to 14 years of age at Time 1 \((M \text{ age } = 13.60, SD = 0.89)\) and from 13 to 14 years of age at Time 2 \((M \text{ age } = 13.80, SD = 0.45)\). The sample was also comprised of eleven female parents, who ranged in age from 39 to 49 years of age at Time 1 \((M \text{ age } = 43.91, SD = 3.27)\) and from 39 to 50 years of age at Time 2 \((M \text{ age } = 44.45, SD = 3.56)\). In addition, there were three male parents, who ranged in age from 41 to 51 years of age at Time 1 \((M \text{ age } = 46.00, SD = 5.00)\) and from 42 to 52 years of age at Time 2 \((M \text{ age } = 46.67, SD = 5.03)\). Regarding the primary language spoken in the home, 85.71\% of the dyads \((n = 12)\) spoke English, 7.14\% of the dyads \((n = 1)\) spoke Spanish, and 7.14\% of the dyads \((n = 1)\) spoke Mandarin.

With respect to the highest level of education attained by parents, 21.43\% of parents \((n = 3)\) had completed a Master’s degree, 28.57\% of parents \((n = 4)\) had obtained a Bachelor’s degree, 14.29\% of parents \((n = 2)\) had completed university at an unspecified level, 14.29\% of parents \((n = 2)\) had attained a diploma at the college level, and 21.43\% of parents \((n = 3)\) had completed high school. Regarding the employment status of the parents, 7.14\% of parents \((n = 1)\) were not working and 92.86\% of parents \((n = 13)\) were working, such that work hours ranged from 30 to 60 hours per week \((M \text{ hours } = 40.85, SD = 8.30)\).

Participants were recruited through acquaintances and contacts, as well as through school boards from a large community in British Columbia and a mid-sized community in Southwestern Ontario. Students making the transition to high school were entering
grade 8 and grade 9 in British Columbia and Ontario, respectively. For recruitment purposes, letters providing a description of the study and contact information were distributed to grade 7 (British Columbia) and grade 8 (Ontario) students at the end of the elementary school year. Individuals who were interested in participating in the study returned completed consent forms (consent to be contacted) to school principals and were later contacted by a research assistant. Each participant received an honorarium of $20 for participation at each meeting (total of $60 for adolescents and $60 for parents).

**Procedure**

This observational study employed a two-site 10-month longitudinal design, which permitted the examination of parent-adolescent interactions prior to and following the transition to high school. The study received research ethics approval from the school boards, as well as from the research ethics boards at the two universities in Ontario and British Columbia where data collection occurred (see Appendices A and B). The ethics approval was in accordance with standard ethical guidelines for conducting research studies with human participants (Interagency advisory panel on research ethics, 2009).

The timeframe for recruitment was from June to October, as adolescent participants completed elementary school, and were anticipating, or in the process of making, the transition to high school. Recruitment of participants occurred from June to October, 2009, and then again from June to July, 2010. At the end of the elementary school year in June, homeroom teachers distributed letters (see Appendix C), providing a description of the study and contact information to grade 7 (British Columbia) and grade 8 (Ontario) students to review with their parents. The letter explained the purpose of the study and the process of participation, including initial contact with the researchers and
procedures in the laboratory. In addition, some parents were notified about the study through acquaintances or friends and subsequently telephoned the research assistant to participate in the study.

The research assistant telephoned potential participants and conducted an initial screening interview to determine their eligibility for participation (see Appendix D). Demographic information about the adolescent and parent was collected, including sex, age, ethnicity, living situation, and the marital status, field of employment, and educational background of the parent, as well as the sex, age, and number of other members in the immediate family. Upon completion of the screening process, the research assistant scheduled a time for the parent and adolescent to come into the laboratory for Time 1 of the study.

Data collection occurred over two years, from June 2009 to April 2011. It is important to note that the data collected for the study were part of a larger, ongoing Social Sciences and Humanities Research Council (SSHRC)-funded research project, which involved parent-adolescent dyads participating in a total of three meetings and ten follow-up telephone conversations over a 10-month period: Meeting 1 was conducted sometime in the summer or early fall months (June to October); Meeting 2 occurred approximately one month following Meeting 1; Telephone monitoring, which began in early September (for those dyads who completed Meeting 1 in the summer) or two weeks after Meeting 2 (for those dyads who completed Meeting 1 in early fall), took approximately six months to complete; Meeting 3 occurred approximately one to two months after the end of the telephone monitoring period (January to May). However, given the objectives and research questions addressed in the present study, only data
collected in Meetings 1 and 3 were useful for analysis purposes. Consequently, only the
procedural steps in Meetings 1 and 3 will be reviewed. Furthermore, for the sake of
simplicity and coherence, Meeting 1 and Meeting 3 from the larger, ongoing research
project will be referred to as Time 1 and Time 2, respectively, in this thesis.

**Time 1: Pre-transition to high school.** Upon arriving at the laboratory (on either
of the two university campuses), participants were greeted by the research assistants and
briefly shown the equipment to be used and the rooms in which the research was to be
conducted. Once the parent and adolescent were seated in the main room to be used for
videotaping purposes, the research assistants reviewed the purpose and procedure of the
study, as well as informed consent. The informed consent to participate specified that
their data and identities would remain confidential, participation was voluntary, and they
had the right to withdraw from the study at any time (see Appendices E and F).

The primary purpose of Time 1 was for the adolescent and parent to engage in a
joint conversation (JC) about the adolescent’s upcoming or current transition to high
school. The research assistants engaged in a ‘warm-up’ session with the parent and
adolescent to help generate topics that could be discussed during their conversation. This
process involved the research assistants asking the adolescent to identify and record
activities or interests outside of school (e.g., sports, hanging out with friends,
extracurricular activities), along with friends (only first names) who participate in these
activities, and to indicate any anticipations or plans for the upcoming school year (e.g.,
with friends and activities). The adolescent was then asked several questions regarding
the transition to high school, including “Could you tell me about your feelings about the
transition from grade 8 to high school?” “Do you think anything will change with peers
or activities as a result of the transition?”, and “Do you think that your relationship with your mother/father will change from the transition to high school?”

The parent was then asked various questions about the upcoming transition to high school, as well as his/her involvement in the adolescent’s extracurricular activities (e.g., organizing, scheduling, and transportation to activities). The parent was asked such questions as “What do you think your role will be in your adolescent’s plans for structured and unstructured activities with peers?”, “Do you have any specific worries about your adolescent for his/her transition from grade 8 to high school?”, and “Do you think that your relationship with your adolescent will change from the transition to high school?” Participants were then told that their conversation would be audio and video-recorded, that it would be self-generated, and should be approximately 10 minutes in length. The research assistants instructed the participants to notify them in the other room when they felt that their conversation had come to a natural end. After answering any questions, the research assistants exited the room.

The parent-adolescent dyad engaged in an audio and video-recorded, self-generated, and self-directed conversation about expectations and plans for structured and unstructured activities with peers and friends over the upcoming school year. Participants notified the research assistants when they had completed their conversation.

Following the conversation, the adolescent and parent were taken into separate rooms for the final phase of Time 1, which involved a face-to-face, semi-structured interview with open-ended questions. Participants viewed a playback of the video-recorded conversation. The research assistant stopped the video-recording after each minute of play and asked the participant to recall, “What were you thinking during that
segment of the conversation?” followed by, “What were you feeling during that segment of the conversation?” The video-recall interviews were conducted simultaneously in two separate rooms (see Appendix G for Time 1 protocol guidelines).

**Time 2: Post-transition to high school.** Approximately eight months after Time 1, the research assistant telephoned the participants to schedule a time for the parent and adolescent to come into the laboratory for the last phase of the study. Time 2 occurred about nine months after Time 1 and the procedure followed at Time 2 was similar to the protocol from Time 1. Once the participants had arrived at the laboratory and were seated in the main recording room, the research assistants again reviewed the procedure of the meeting. Specifically, the adolescent and parent were asked to engage in a conversation together about the adolescent’s time thus far in high school, how their relationship was going, and possible upcoming plans for the adolescent. The research assistants helped to generate ideas about what the parent and adolescent could discuss in their conversation by asking the adolescent to identify and record activities or interests outside of school (e.g., sports, hanging out with friends, extracurricular activities), along with friends (only first names) who participate in these activities, and to indicate how these activities with friends are organized. The parent was then asked about his/her role and involvement in the adolescent’s plans and extracurricular activities, including how he/she helps in the planning and organizing of such activities. The research assistants reminded the participants that the conversation would be audio and video-recorded and that it should be about 10 minutes in length.

The parent-adolescent dyad then engaged in another audio and video-recorded conversation together about the adolescent’s time thus far in high school, how their
relationship was going, and possible upcoming plans for the adolescent. Following the conversation, each participant independently viewed a playback of the video-recorded conversation and was asked to recall, “What were you thinking during that segment of the conversation?” followed by, “What were you feeling during that segment of the conversation?” After the completion of the video-recall interviews, the research assistants provided debriefing for the study and answered any follow-up questions asked by the participants (see Appendix H for Time 2 protocol guidelines and Appendix I for interview guide).

**Materials**

The following equipment listed was used at both Time 1 and Time 2. Two audio-recorders were used to record the parent-adolescent conversation and the participants’ video-recall interviews. At the university in Ontario, the main video-recording system installed in the laboratory (operating from Noldus program software) recorded the parent-adolescent conversation and the parent’s video-recall interview. One video-camcorder was used to record the adolescent’s video-recall interview. For the video-recall interviews, the playback of the parent-adolescent conversation was viewed from a computer by the adolescent and on a television (from a videocassette tape) by the parent. In the laboratory at the university in British Columbia, two portable video-recorders were used to record the parent-adolescent conversation, as well as the participants’ video-recall interviews. For the video-recall interviews, participants viewed the playback of the parent-adolescent conversation from laptop computers. Other materials that were used in the study included the initial telephone contact sheet used during the telephone screening interview to collect demographic information (see Appendix D), the form for the
adolescent to list friends, interests, and activities outside of school (see Appendix J), and the form completed by participants to acknowledge receipt of payment (see Appendix K).

**Coding Procedures**

Taking into consideration the goals and research questions of this study, the paradigm of Postpositivism (Popper, 1959) was adopted for analysis purposes.

**Content analysis.** The method of content analysis (Krippendorff, 2004) was used to examine parents’ and adolescents’ anticipations of how their relationship would be in high school. The warm-up sessions and parent-adolescent conversations from Time 1 were transcribed verbatim. All of the transcripts were then thoroughly read. Four components comprised the analysis: (1) sampling, (2) unitizing, (3) recording/coding, and (4) reducing and summarizing data to manageable representations.

During the first phase of the analysis, the technique of relevance sampling (Krippendorff, 2004) was applied to select the transcripts that would be helpful in addressing the research questions regarding parents’ and adolescents’ anticipations of their relationship, namely whether they anticipated change or stability. Specifically, it was the transcripts of those parent-adolescent dyads who discussed their anticipations that were of use and consequently selected for further analysis.

The next step was characterized by unitizing, which is the methodical process of differentiating pieces of text that are of importance to an analysis (Krippendorff, 2004). Recording/coding units, “the specific segment of content that is characterized by placing it in a given category” (Holsti, 1969, p. 116, as cited in Krippendorff, 2004), were used as the type of unit to unitize the data. Categorical distinctions were utilized to identify the coding units. As described by Krippendorff, “categorical distinctions define units by their
membership in a class or category – by their having something in common” (p. 105). The coding units were differentiated on various levels of inclusion to construct an inclusion hierarchy in order to address the following research questions:

1. (a) Prior to the transition to high school, do parents and adolescents discuss how their relationship will be when adolescents are in high school? From the transcripts of the warm-up sessions and parent-adolescent conversations at Time 1, one set of categories was developed to determine whether parents and adolescents discussed how their relationship would be in high school (categories: Yes and No).

1. (b) Do parents and adolescents anticipate change or stability in their relationship when adolescents are in high school? From the transcripts of the parent-adolescent dyads who were classified in the ‘Yes’ category from 1 (a), a second set of categories was created to determine whether parents and adolescents anticipated change or stability in their relationship (categories: Anticipation of Stability, Anticipation of Change, and Uncertain of Nature of Anticipation).

1. (c) If change is anticipated in the parent-adolescent relationship, what is the nature of this change? From the transcripts of the parents and/or adolescents who were classified in the Change category from 1 (b), a third set of categories concerning the nature of the anticipated change in the relationship emerged from the analysis (categories: adolescent becoming more independent or wanting more freedom; change in the quality of communication between parents and adolescents).

1. (d) Do parents and adolescents agree or disagree in their anticipations of their relationship? From the transcripts of the parent-adolescent dyads who were classified in the ‘Yes’ category from 1 (a), along with the incorporation of the anticipation
categories (Stability, Change, and Uncertainty) from 1 (b), a fourth set of categories was created to determine whether parents and adolescents agreed or disagreed in their anticipations (categories: Agree and Disagree).

The purpose of the recording/coding phase was to transform the units of text into categorical representations that could be analyzed and compared (Krippendorff, 2004). This process involved re-reading the transcripts, and classifying, recording, and interpreting the unitized segments of data into meaningful categories. The final step consisted of simplifying and summarizing the data in such a way as to represent the results of the analysis. As part of this process, the technique of tabulation was employed to assemble same or similar coding units in categories and to provide counts of how many cases occurred in each category. It was also important to give examples from the transcripts for each category so as to represent and describe patterns across the data.

**Specific affect coding system.** The observational data from the video-recordings of the parent-adolescent conversations at Time 1 and Time 2 were coded using the Specific Affect Coding System (SPAFF; Coan & Gottman, 2007; see Appendix L). The SPAFF is used to systematically analyze the affective behaviour of individuals interacting with each other in real-time event sequences. Although the coding system was originally created for the examination of couples in marital interactions (Gottman & Krokoff, 1989), the SPAFF has been increasingly used to study parent-child and parent-adolescent interactions (e.g., Granic et al., 2007; Hollenstein, 2005; Hollenstein et al., 2004; Hollenstein & Lewis, 2006). The SPAFF is comprised of 18 mutually exclusive codes: Contempt, Criticism, Belligerence, Anger, Domineering, Disgust, Threats, Defensiveness, Stonewalling, Fear/Tension, Sadness, Whining, Neutral, Interest,
Validation, Affection, Humour, and Enthusiasm. Each code is derived from various indicators and physical cues, including verbal content, voice tone and volume, speech rate, facial expression, gestures, and posture, so as to represent the overall affective tone of behaviour. Codes were recorded separately for each participant second-by-second in real time, which produced two corresponding sets of continuous data.

For the purpose of the state space grid analysis, the 18 SPAFF codes were grouped together based on comparable social functions, which resulted in five distinct categories: Negative Engagement, Negative Disengagement, Neutral, Genuine Positive Engagement, and Joyful Positive Engagement. These groupings were based on the category system outlined by Hollenstein et al. (2004). The following descriptions identify the SPAFF codes that constitute each category, as well as the underlying social function for each grouping: (1) Negative Engagement (active social engagement of negative affective behaviour; comprised of Contempt, Criticism, Belligerence, Anger, Domineering, Disgust, and Threats); (2) Negative Disengagement (withdrawn or disengaged types of negative affective behaviour; comprised of Defensiveness, Stonewalling, Fear/Tension, Sadness, and Whining); (3) Neutral (the absence of any other discernable affect; comprised of Neutral); (4) Genuine Positive Engagement (sincere and supportive positive affective behaviour; comprised of Interest, Validation, and Affection); and (5) Joyful Positive Engagement (joyful, excited positive affective behaviour; comprised of Humour and Enthusiasm). In addition to Hollenstein et al.’s four-category system, which included one category for positive engagement, a fifth category was incorporated to make two distinct categories of positive engagement. Specifically, it was thought that it would be important to make note of the occasions in
which Humour was coded in the parent-adolescent interactions, as humour has been shown to play a functional role of facilitating affiliation and enhancing relationships with individuals during adolescence (Cameron, Fox, Anderson, & Cameron, 2010; Erickson & Feldstein, 2007).

For the purpose of calculating interobserver agreement (Bakeman & Gottman, 1997), a second coder was trained over four sessions, equaling approximately twenty hours of training in total. Based on two parent-adolescent dyads that were randomly selected, the second coder coded four conversations (conversations from both Time 1 and Time 2 for the two dyads). These four conversations represented about 15% of the total data (in conversation length) and approximately the same amount of data was coded for Time 1 and Time 2. Cohen’s kappa was calculated separately for parents and adolescents at both Time 1 and Time 2. The five state space grid categories (Negative Engagement, Negative Disengagement, Neutral, Genuine Positive Engagement, and Joyful Positive Engagement) were entered into matrices (creating matrices of five cells by five cells) to calculate the kappa values for parents and adolescents at Time 1 and Time 2. The kappa values for parents at Time 1 and Time 2 incorporated the data from the two parents of the randomly selected dyads. Similarly, the kappa values for adolescents at Time 1 and Time 2 included the data from the two adolescents of the same dyads. The kappa values for parents were calculated to be .78 and .83 for Time 1 and Time 2, respectively. The kappa values for adolescents were found to be .92 and .90 for Time 1 and Time 2, respectively. Genuine Positive Engagement (49% agreement) and Negative Disengagement (54% agreement) were the categories with the lowest levels of agreement for parents at Time 1 and Time 2, respectively. By contrast, Joyful Positive Engagement was the
category most often not agreed upon for adolescents at both Time 1 (59% agreement) and Time 2 (56% agreement). It appears that the lowest levels of agreement did not concern the same categories across parents and adolescents. Neutral (83% agreement) and Negative Engagement (84% agreement) were the categories with the highest levels of agreement for parents at Time 1 and Time 2, respectively. Conversely, Negative Disengagement (92% agreement) and Genuine Positive Engagement (94% agreement) were the categories most frequently agreed upon for adolescents at Time 1 and Time 2, respectively. Similarly, the highest levels of agreement were not for the same categories across parents and adolescents. It is also interesting to note that both coders recorded Negative Engagement and Neutral as the two most frequently occurring categories for parents at both Time 1 and Time 2. Similarly, both coders documented Negative Disengagement as the most commonly occurring category for adolescents at Time 1.

Taken together, these observations suggest that levels of agreement between coders may be related to the frequency in which categories occur for both parents and adolescents. In addition, it may be that some categories are more difficult to accurately identify depending on whose affective behaviour is being coded (i.e., parents or adolescents).

State Space Grid Analysis

As successful projects employing the state space grid method have not used more than five categories (Granic et al., 2003; Granic & Lamey, 2002; Hollenstein et al., 2004), the 18 SPAFF codes were collapsed into five categories to enable a more parsimonious analysis. Based on the five categories generated from the coding of the parent-adolescent conversations, two state space grids were constructed for each dyad (one at Time 1 and one at Time 2). The coded affective behaviour of the parent and
adolescent were charted on the x-axis and y-axis of the grids, respectively. Each point on the grid signifies a state of dyadic behaviour, with the size of the point relating to the period of time for that particular state. When there was change in either the parent’s or adolescent’s behaviour, a new point was mapped onto the grid to represent the new state, and a line was constructed between the two points to display the change in the behavioural state of the dyad. The state space grids were created and analyzed using GridWare (Lamey, Hollenstein, Lewis, & Granic, 2004), a computer software program especially designed for this purpose.

**Structure analysis.** State space grid analyses were first conducted to examine whether there was change in the structure of the parent-adolescent interactions between pre-transition and post-transition to high school. The following descriptions explain three useful state space grid indices for the assessment of rigidity/flexibility:

1. **Cells:** a count of the number of unique cells visited on the grid. Lower cell counts indicated a restricted range of behavioural states and therefore a great degree of rigidity.
2. **Transitions (TRANS):** a count of the number of movements between cells on the grid. A lower value on this measure indicated less frequent changes of dyadic behavioural states and therefore more rigidity.
3. **Average mean duration (AMD):** Each cell’s mean duration was calculated by dividing the total duration in that cell by the number of different times the dyad occupied that cell. The average of these [25] values across the whole grid was the AMD value. This variable was designed as an index of the overall degree of ‘stickiness’ of dyadic behaviour. High AMD values indicated a more rigid dyad that tended to remain in each state for an extended period of time. Low AMD values indicated more flexible behaviour (Hollenstein et al., 2004, p. 600).

Given the variation in length of conversations (in seconds) at both Time 1 ($M$ length = 643.29, $SD$ = 210.35, ranging from 304 to 1046) and Time 2 ($M$ length = 663.07,
$SD = 226.35$, ranging from 349 to 1048), the values from the above indices were transformed into proportions with the duration of the conversation (in seconds) for each dyad as the denominator. The following proportions were used as measures to calculate the relative rigidity/flexibility (i.e., the layout of the dyadic coordinates on the grids) of each dyad at both Time 1 and Time 2: (1) the proportion of the number of cells visited on the grid to the duration of the conversation, (2) the proportion of the number of transitions between cells on the grid to the duration of the conversation, and (3) the average of each cell’s mean duration to the duration of the conversation.

**Emotional content analysis.** State space grid analyses were then performed to determine whether there were changes in the emotional content of the parent-adolescent interactions between pre-transition and post-transition to high school. In examining whether there were changes in the content of the interactions, it was necessary to analyze the percentage of time spent in the particular regions of interest, as there was variability in the length of conversations at Time 1 and Time 2.

The percentages of time spent in the following dyadic states of mutual engagement (or disengagement) were of particular importance: (1) parent negative engagement, adolescent negative engagement; (2) parent negative disengagement, adolescent negative disengagement; (3) parent neutral, adolescent neutral; (4) parent genuine positive engagement, adolescent genuine positive engagement; (5) parent joyful positive engagement, adolescent joyful positive engagement; (6) mutual overall positive (parent genuine positive engagement and parent joyful positive engagement, adolescent genuine positive engagement and adolescent joyful positive engagement); (7) mutual overall negative (parent negative engagement and parent negative disengagement,
adolescent negative engagement and adolescent negative disengagement); and (8) the ratio of mutual overall positive to mutual overall negative. In addition, the percentages of time spent in the following dyadic states of non-mutual engagement were of interest: (1) parent negative engagement, adolescent negative disengagement; and (2) parent negative disengagement, adolescent negative engagement.

**Results**

**Content Analysis**

Content analysis was conducted on the warm-up sessions and parent-adolescent conversations from Time 1 to examine parents’ and adolescents’ anticipations of their relationship in high school. Results indicated that 50% of the dyads ($n = 7$) were classified in the ‘Yes’ category, as having discussed how their relationship would be in high school. Conversely, the other 50% of the dyads ($n = 7$) were categorized in the ‘No’ grouping, given that there was no discussion pertaining to their anticipations of their relationship.

The transcripts of the parent-adolescent dyads identified as having talked about their relationship anticipations were further analyzed to determine whether parents and adolescents anticipated that their relationship would change (Anticipation of Change) or remain the same (Anticipation of Stability) in high school. In addition, a third category, Uncertain of Nature of Anticipation, emerged from the analysis. The relationship anticipations of six parents were categorized in the grouping of Anticipation of Change, as they appeared to predict that their relationship with their adolescent would change in high school. For example, in the conversation of one parent-adolescent dyad, the adolescent asked her parent how she thought high school may affect their relationship,
“How do you think it will make our relationship?” (G908, JC A: 54). The parent responded by anticipating, “I think it will make our relationship stronger” (G908, JC P: 46). In contrast, the anticipation of only one parent was classified in the Anticipation of Stability category. When asked by the research assistant whether she thought that her relationship with her adolescent would change with the transition to high school, the parent expressed, “I don’t think so” (G911, JC P: 37).

With respect to the adolescents’ relationship anticipations, two adolescents appeared to be somewhat ambivalent as to how their relationship would be in high school and subsequently, their anticipations were classified in the Uncertain of Nature of Anticipation category. In one case, the adolescent seemed to believe that her relationship with her parent would change in high school; yet, she remained undecided as to how it would change:

P41: Um, so how do you think high school might affect our relationship?
A50: Ah, I hope it will be bringing it stronger, but I don’t know.
P42: What’s your worry?
A51: That it, it will bring it the opposite of stronger.
P43: What makes you think it would do that?
A52: I don’t know. It’s just like … because you judge everything I tell you.
P44: I’m not supposed to do that. I forgot. I’m, I’m your mother. I’m a judge, that’s my job.
A53: Yeah, but I told you, if you keep judging, I won’t tell you anything (G908, JC).

Another adolescent similarly appeared to be undecided as to how her relationship would be in high school. In particular, the adolescent initially expressed her belief that their relationship would stay the same, but soon came to agree with her parent’s perception that she would challenge boundaries within the relationship:
A77: Our relationship: I think that will stay the same because it’s already very strong [laughs].
P75: You find that funny?
A78: Yeah
P76: I’m sure it will have ups and downs ‘cause I’m sure you’ll challenge it and
A79: Probably
P77: And challenge boundaries … you don’t think so?
A80: No, I think so.
P78: ‘Cause you’ll probably always want that little bit more, to do a little bit more
A81: Yeah
P79: As you meet different people and do different things with them … that’s what I would think.
A82: Yeah (G901, JC).

The relationship anticipations of two adolescents were classified in the category of Anticipation of Stability. For example, when asked by the research assistant whether she believed that her relationship with her parent would change as a result of the transition to high school, the adolescent reported, “Not really, no” (G912, JC A: 34). The adolescent continued by explaining the reasoning for her perception, “Just ‘cause … we have a close relationship and not really anything to change it” (G912, JC A: 35).

Alternatively, three adolescents seemed to foresee that there would be change in their relationship with their parents in high school. As such, their anticipations were categorized in the Anticipation of Change grouping. The following exchange between a parent and adolescent illustrates one adolescent’s anticipation of change:

P35: How d’you think you, how d’you think high school’s gonna change our relationship?
A28: Our relationship? Um … I think I will get away more.
P36: ‘Cause you want more freedom.
A29: Yeah, so I can like be away from the house a lot more, I hope.
P37: Okay
A30: ‘Cause our house isn’t that big and it’s not that fun (G904, JC).
It was important to further examine the nature of change in the anticipations of those parents and adolescents who predicted change in their relationship in high school. The categories for the nature of change emerged from the analysis. In general, it appeared that parents’ and adolescents’ anticipations of change were characterized by expectations that the relationship would become “stronger” (G908, JC P: 46), “more tight-knitted” (G910, JC A: 130), or that the relationship would entail greater distance between parents and adolescents, whether that be through “having ups and downs” (G901, JC P: 76), “kind of rebelling” (G909, JC A: 47), “getting away more” (G904, JC A: 28), or being “the opposite of stronger” (G908, JC A: 51). However, more specifically, the nature of change in parents’ and adolescents’ anticipations seemed to relate to expectations that the adolescent would become more independent and that there would be change in the quality of communication between parents and adolescents.

When talking about their anticipations of change in the parent-adolescent relationship, five parents seemed to foresee the adolescent becoming more independent or wanting more freedom in high school. For example, one parent reported, “That’s the major transition I, I foresee and, and I mean that happens pretty quick, even in grade nine you know, ‘cause high school really is the beginning of autonomy, about making your way in the world” (G910, JC P: 79-80). Another parent talked about the adolescent developing a greater sense of independence in the decision-making process:

I74: So do you think that your relationship will, with [adolescent] will change as a result of her transition to grade nine?
P35: Of course [laughs], it should.
I75: Yeah
P36: As she becomes more independent.
I76: Okay and you anticipate her becoming more independent?
P37: Yeah
And you kind of having less of a kind of authority figure telling her what to do then or?

I’m not really much of a “what to do mother,” am I? [Laughs] So um yes, I think I’ll enjoy watching her, even now she’ll ask me, “What should I do? What should I do?” And I’m saying, “Mmm I think you should decide” [laughs].

Right, right

So more of that, more of trusting her own feelings and instincts about what she wants to do (G912, JC).

In addition, two adolescents appeared to anticipate becoming more independent in high school. For example, one adolescent talked about having more freedom and how this could influence his relationship with his parent:

What about your relationship with your mom, do you think that might change?

That might change, yeah.

How do you think it might change?

Uh in high school there’s bigger problems to deal with, and like well, don’t know how to explain it, you’ve heard the stereotypes about high school, like y’know everybody’s, there’s parties with underage drinking and stuff like that.

Okay

She’s probably gonna be the overprotective mom and I’m gonna kind of rebel and [laughs]

Okay, so you’re acknowledging that you may rebel?

Yeah (G909, JC).

Anticipation of change in the quality of communication between parents and adolescents was another category related to the nature of change in the relationship. Specifically, three parents seemed to predict that communication with their adolescent would change in high school. In one case, the parent anticipated change in the quality of the discussions with her adolescent, and that their roles within these discussions would likewise change: “So yeah, the relationship’s going to change … I think that our discussions are gonna be more from, y’know, me talking as a parent to a child to y’know, the two of us talking as almost, not peers, but y’know, grownups who respect each other
and sort of negotiate through things” (G909, JC P: 80-81). Interestingly, another parent also anticipated change in communication in tandem with changing roles in the relationship: “That transition from parent as uh manager to parent as consultant is probably the big transition. I’m kind of where she’ll see me more and more as somebody who she can trust, who she can talk to, but not who’s going to do it for her” (G910, JC P: 78).

Two adolescents also seemed to think that communication with their parents could change upon entering high school. For example, one adolescent anticipated having more in common to talk about with her parent and wanting to ask him more for advice:

I69: So you said you wanted the relationship with your dad to strengthen and how could you um possibly see it being strengthened? What ways?

A74: Um I dunno, maybe just having more to talk about in common. Like he works um with students and they come to talk to him a lot so maybe I, I could ask him more for advice and listen to the advice. Sometimes I’ll ask him for the advice but I don’t always listen to the advice.

I70: Okay

A75: Which is a problem with most teens today [laughs]. They always, they sometimes will ask for advice and they hear the advice and they say, “Uh, I don’t really wanna do that; I wanna do my thing.” So probably need to listen to his advice more and admit that I’m wrong. That’s another thing. And apparently dad has told me that I have a hard time admitting that I’m wrong, which I agree with [laughs] (G910, JC).

Interestingly, this adolescent’s anticipation of change in communication appeared to co-exist with an anticipation that there would also continue to be a degree of stability in her communication with her parent in high school:

P90: You are gonna have so much fun [in high school].

A115: Yeah, I know I am. I’m excited. I hope that we s- I still talk to you.

P91: What do you think?

A116: [Laughs] Pretty sure that I will. I can’t not talk to you. I’m such an open person.

P92: Yeah (G910, JC).
Conversely, the other adolescent, who anticipated a possible change in communication, expressed that she may become more closed-off in communicating with her parent in high school:

P42: What’s your worry?
A51: That [high school], it will bring it the opposite of stronger.
P43: What makes you think it would do that?
A52: I don’t know. It’s just like … because you judge everything I tell you.
P44: I’m not supposed to do that. I forgot. I’m, I’m your mother. I’m a judge, that’s my job.
A53: Yeah, but I told you, if you keep judging, I won’t tell you anything.
P45: Yeah, that’s true. Yeah, I don’t blame you (G908, JC).

Regarding the final question addressed in the content analysis, there appears to be variability as to whether parents and adolescents agreed or disagreed in their anticipations of how their relationship would be in high school. The parents and adolescents from four dyads agreed on their anticipations, such that three dyads anticipated change, while one dyad anticipated stability. On the other hand, the parents and adolescents from three dyads disagreed on their anticipations. In one dyad, the parent anticipated change, whereas the adolescent anticipated stability in the relationship. Furthermore, in two dyads, the parents anticipated change, while the adolescents seemed to be uncertain as to the nature of their anticipations.

State Space Grid Analysis

Structure analysis. The Shapiro-Wilk test was conducted to determine whether the difference scores on the three rigidity indices between Time 1 and Time 2 were normally distributed. The Shapiro-Wilk test statistics for (1) the proportion of the number of cells visited on the grid to the duration of the conversation ($W(14) = 0.971, p = .894$) and (2) the proportion of the number of transitions between cells on the grid to the
duration of the conversation ($W(14) = 0.951, p = .570$) were not statistically significant (at $p < .05$), indicating that the difference scores were approximately normally distributed. However, the Shapiro-Wilk test statistic for the third rigidity measure, the average of each cell’s mean duration to the duration of the conversation ($W(14) = 0.770, p = .002$), was statistically significant, which suggests that the difference scores for this index were not normally distributed.

Paired-samples $t$-tests were conducted to establish whether there were structural changes in the rigidity/flexibility of the dyadic interactions between Time 1 and Time 2.

1. A paired-samples $t$-test showed that there was no statistically significant mean difference in the number of cells visited on the grid to the duration of the conversation between Time 1 ($M = 0.0192, SD = 0.0086$) and Time 2 ($M = 0.0208, SD = 0.0087$), $t(13) = -0.56, p = .586$ (two-tailed).

2. A paired-samples $t$-test demonstrated that there was no statistically significant mean difference in the number of transitions between cells on the grid to the duration of the conversation between Time 1 ($M = 0.1384, SD = 0.0408$) and Time 2 ($M = 0.1584, SD = 0.0386$), $t(13) = -1.46, p = .167$ (two-tailed).

3. A paired-samples $t$-test found that there was no statistically significant mean difference in the average of each cell’s mean duration to the duration of the conversation between Time 1 ($M = 0.0047, SD = 0.0017$) and Time 2 ($M = 0.0047, SD = 0.0028$), $t(13) = 0.002, p = .998$ (two-tailed).

**Emotional content analysis.**

**Dyadic states of mutual engagement.** The Shapiro-Wilk test was performed to assess whether the difference scores of the percentage of time spent in each dyadic state
of mutual engagement (or disengagement) between Time 1 and Time 2 were normally distributed. The Shapiro-Wilk test statistics for (1) parent negative engagement, adolescent negative engagement ($W(14) = 0.901, p = .115$); (2) parent negative disengagement, adolescent negative disengagement ($W(14) = 0.939, p = .402$); (3) parent neutral, adolescent neutral ($W(14) = 0.964, p = .794$); (4) parent genuine positive engagement, adolescent genuine positive engagement ($W(14) = 0.904, p = .131$); (5) parent joyful positive engagement, adolescent joyful positive engagement ($W(14) = 0.981, p = .981$); (6) mutual overall positive ($W(14) = 0.929, p = .300$); and (7) mutual overall negative ($W(14) = 0.937, p = .386$) were not statistically significant (at $p < .05$), signifying that the difference scores were approximately normally distributed in these dyadic states. However, the Shapiro-Wilk test statistic for the ratio of mutual overall positive to mutual overall negative ($W(14) = 0.595, p = .001$) was statistically significant, which suggests that the difference scores for this ratio were not normally distributed.

The difference scores for the percentage of time spent in the dyadic states of mutual engagement (or disengagement) were examined for each dyad on an individual basis. The values in Table 1 indicate how many parent-adolescent dyads showed an increase, decrease, or no change in the percentages of time spent in the dyadic states of mutual engagement between Time 1 and Time 2. Nine dyads showed a decrease in the percentage of time spent in the state of mutual overall negative from Time 1 to Time 2 (see Figure 1). Interestingly, the majority of dyads also demonstrated an increase in the percentage of time spent in the state of mutual overall positive ($n = 9$; see Figure 2), as well as an increase in the percentage of time spent in the state of parent genuine positive engagement, adolescent genuine positive engagement ($n = 9$) between Time 1 to Time 2.
Table 1

Numbers of Dyads that Displayed an Increase, Decrease, and No Change in the Percentage of Time in the States of Mutual Engagement (Eng) and Disengagement (Dis) from Time 1 to Time 2

<table>
<thead>
<tr>
<th>Parent-Adolescent Dyads</th>
<th>Percentage of Time in States from Time 1 to Time 2</th>
<th>Mutuall Overall Negative (n)</th>
<th>Mutual Negative Eng (n)</th>
<th>Mutual Negative Dis (n)</th>
<th>Mutual Neutral (n)</th>
<th>Mutual Genuine Positive Eng (n)</th>
<th>Mutual Joyful Positive Eng (n)</th>
<th>Mutual Overall Positive (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Decrease</td>
<td>9</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>No Change</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Note. The increases and decreases are not statistically significant.

Eight parent-adolescent dyads also displayed an increase in the ratio of mutual overall positive to mutual overall negative in their dyadic interactions from Time 1 to Time 2.

Furthermore, most parent-adolescent dyads exhibited an increase in the percentage of time spent parent neutral, adolescent neutral (n = 10) from Time 1 to Time 2 (see Figure 3). Regarding the state of parent joyful positive engagement, adolescent joyful positive engagement, there appears to be variability as to whether dyads showed an increase, decrease, or no change in the percentage of time spent in this dyadic state between Time 1 and Time 2. There is likewise variability as to whether parents and adolescents displayed an increase, decrease, or no change in the percentage of time spent together in the states of both parent negative engagement, adolescent negative engagement and
parent negative disengagement, adolescent negative disengagement. However, despite these observations, it is essential to underscore that these reported increases and decreases in the percentage of time spent in the dyadic states of mutual engagement do not represent statistically significant differences between Time 1 and Time 2.
Figure 1. Two state space grids displaying a decrease in the percentage of time spent in the dyadic state of mutual overall negative from Time 1 (pre-transition; grid on left) to Time 2 (post-transition; grid on right). The parent’s behaviour is charted on the x-axis and the adolescent’s behaviour is charted on the y-axis. The highlighted boxes indicate the state of mutual overall negative. The grid on the left illustrates relatively more time spent in the state of mutual overall negative at Time 1 and the grid on the right shows relatively less time spent in the state of mutual overall negative at Time 2. Affective states are represented by the following numbers: (1) negative engagement, (2) negative disengagement, (3) neutral, (4) genuine positive engagement, and (5) joyful positive engagement.
Figure 2. Two state space grids displaying an increase in the percentage of time spent in the dyadic state of mutual overall positive from Time 1 (pre-transition; grid on left) and Time 2 (post-transition; grid on right). The parent’s behaviour is charted on the x-axis and the adolescent’s behaviour is charted on the y-axis. The highlighted boxes indicate the state of mutual overall positive. The grid on the left illustrates relatively less time spent in the state of mutual overall positive at Time 1 and the grid on the right shows relatively more time spent in the state of mutual overall positive at Time 2. Affective states are represented by the following numbers: (1) negative engagement, (2) negative disengagement, (3) neutral, (4) genuine positive engagement, and (5) joyful positive engagement.
Figure 3. Two state space grids displaying an increase in the percentage of time spent in the dyadic state of parent neutral, adolescent neutral from Time 1 (pre-transition; grid on left) to Time 2 (post-transition; grid on right). The parent’s behaviour is charted on the x-axis and the adolescent’s behaviour is charted on the y-axis. The highlighted boxes indicate the state of parent neutral, adolescent neutral. The grid on the left illustrates relatively less time spent in the state of parent neutral, adolescent neutral at Time 1 and the grid on the right shows relatively more time spent in the state of parent neutral, adolescent neutral at Time 2. Affective states are represented by the following numbers: (1) negative engagement, (2) negative disengagement, (3) neutral, (4) genuine positive engagement, and (5) joyful positive engagement.

The following results are from the series of paired-samples t-tests performed to address whether there were statistically significant changes in the dyadic states of mutual
engagement (or disengagement) of the parent-adolescent interactions between Time 1 and Time 2:

1. A paired-samples \( t \)-test showed that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent negative engagement, adolescent negative engagement between Time 1 (\( M = 4.88, SD = 5.38 \)) and Time 2 (\( M = 5.82, SD = 7.17 \)), \( t(13) = -0.48, p = .637 \) (two-tailed).

2. A paired-samples \( t \)-test demonstrated that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent negative disengagement, adolescent negative disengagement between Time 1 (\( M = 7.45, SD = 8.32 \)) and Time 2 (\( M = 8.54, SD = 7.40 \)), \( t(13) = -0.39, p = .701 \) (two-tailed).

3. A paired-samples \( t \)-test found that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent neutral, adolescent neutral between Time 1 (\( M = 10.00, SD = 8.87 \)) and Time 2 (\( M = 11.60, SD = 11.38 \)), \( t(13) = -0.52, p = .615 \) (two-tailed).

4. A paired-samples \( t \)-test showed that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent genuine positive engagement, adolescent genuine positive engagement between Time 1 (\( M = 11.69, SD = 18.39 \)) and Time 2 (\( M = 17.06, SD = 19.34 \)), \( t(13) = -1.28, p = .225 \) (two-tailed).

5. A paired-samples \( t \)-test demonstrated that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent joyful positive engagement, adolescent joyful positive engagement between Time 1
6. A paired-samples $t$-test showed that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of mutual overall positive between Time 1 ($M = 14.09, SD = 21.02$) and Time 2 ($M = 18.82, SD = 20.53$), $t(13) = -1.01, p = .333$ (two-tailed).

7. A paired-samples $t$-test found that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of mutual overall negative between Time 1 ($M = 29.79, SD = 29.29$) and Time 2 ($M = 26.51, SD = 24.78$), $t(13) = 0.43, p = .672$ (two-tailed).

8. A paired-samples $t$-test demonstrated that there was no statistically significant mean difference in the ratio of mutual overall positive to mutual overall negative between Time 1 ($M = 5.21, SD = 10.42$) and Time 2 ($M = 7.17, SD = 21.78$), $t(13) = -0.47, p = .649$ (two-tailed).

**Dyadic states of non-mutual engagement.** The Shapiro-Wilk test was conducted to determine whether the difference scores of the percentages of time spent in specific dyadic states of non-mutual engagement (or disengagement) between Time 1 and Time 2 were normally distributed. The Shapiro-Wilk test statistics for (1) parent negative engagement, adolescent negative disengagement ($W(14) = 0.907, p = .143$) and (2) parent negative disengagement, adolescent negative engagement ($W(14) = 0.889, p = .078$) were not statistically significant, indicating that the difference scores were approximately normally distributed in these dyadic states.
The difference scores for the percentage of time spent in the dyadic states of non-mutual engagement (or disengagement) were examined for each dyad on an individual basis. The values in Table 2 specify how many parent-adolescent dyads exhibited an increase, decrease, or no change in the percentages of time spent in the dyadic states of parent negative engagement, adolescent negative disengagement and parent negative disengagement, adolescent negative engagement between Time 1 and Time 2. Most parent-adolescent dyads displayed a decrease in the percentage of time spent in the state of parent negative engagement, adolescent negative disengagement ($n = 10$) from Time 1 to Time 2 (see Figure 4). On the other hand, there was greater variability concerning the state of parent negative disengagement, adolescent negative engagement, such that an equal number of dyads showed an increase, decrease, or no change in the percentage of time spent in this particular dyadic state between Time 1 and Time 2. However, it is important to emphasize that these reported increases and decreases in the percentage of time spent in the dyadic states of non-mutual engagement do not signify statistically significant differences between Time 1 and Time 2.
Table 2

Numbers of Dyads that Displayed an Increase, Decrease, and No Change in the Percentage of Time in the States of Non-Mutual Engagement (Eng) and Disengagement (Dis) from Time 1 to Time 2

<table>
<thead>
<tr>
<th>Percentage of Time in States from Time 1 to Time 2</th>
<th>Parent Negative Eng, Adolescent Negative Dis (n)</th>
<th>Parent Negative Dis, Adolescent Negative Eng (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Decrease</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>No Change</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Note. The increases and decreases are not statistically significant.
Figure 4. Two state space grids displaying a decrease in the percentage of time spent in the dyadic state of parent negative engagement, adolescent negative disengagement from Time 1 (pre-transition; grid on left) to Time 2 (post-transition; grid on right). The parent’s behaviour is charted on the x-axis and the adolescent’s behaviour is charted on the y-axis. The highlighted boxes indicate the state of parent negative engagement, adolescent negative disengagement. The grid on the left illustrates relatively more time spent in the state of parent negative engagement, adolescent negative disengagement at Time 1 and the grid on the right shows relatively less time spent in the state of parent negative engagement, adolescent negative disengagement at Time 2. Affective states are represented by the following numbers: (1) negative engagement, (2) negative disengagement, (3) neutral, (4) genuine positive engagement, and (5) joyful positive engagement.
The following results are from the paired-samples t-tests performed to address whether there were statistically significant changes in particular dyadic states of non-mutual engagement (or disengagement) of the parent-adolescent interactions between Time 1 and Time 2:

1. A paired-samples t-test found that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent negative engagement, adolescent negative disengagement between Time 1 \((M = 14.93, SD = 16.38)\) and Time 2 \((M = 10.16, SD = 13.51)\), \(t(13) = 1.12, p = .285\) (two-tailed).

2. A paired-samples t-test showed that there was no statistically significant mean difference in the percentage of time spent in the dyadic state of parent negative disengagement, adolescent negative engagement between Time 1 \((M = 2.51, SD = 4.12)\) and Time 2 \((M = 1.99, SD = 2.41)\), \(t(13) = 0.46, p = .654\) (two-tailed).

**Discussion**

One objective of this thesis was to explore parents’ and adolescents’ pre-transition anticipations of how their relationship would be in high school. In particular, the current study examined whether parents and adolescents expected their relationship to remain the same or change with the transition to high school. The nature of change was further analyzed for those parents and adolescents who predicted change in their relationship. Another purpose of this thesis was to investigate whether there would be change or stability in the patterns of parent-adolescent interactions as adolescents made the transition to high school. Using state space grid analysis (Lewis et al., 1999), parent-adolescent conversations were assessed to determine whether there were changes in the
relative rigidity/flexibility and emotional content of the dyadic interactions between pre-transition and post-transition to high school. Findings from the present study will be discussed with respect to relationship anticipations, and the structure and emotional content of the parent-adolescent interactions. In addition, study limitations and suggestions for future research will be described.

**Anticipations of the Parent-Adolescent Relationship in High School**

Results from the content analysis showed that only 50% of the parent-adolescent dyads talked about their relationship anticipations. Of the seven dyads who discussed their anticipations, many participants (six parents and three adolescents) expected that their relationship would change as a result of the school transition. Conversely, only three participants (one parent and two adolescents) predicted that their relationship would remain the same in high school. In addition, two adolescents appeared to be uncertain of the nature of their anticipations. One of these adolescents seemed to be ambivalent as to whether the relationship would stay the same or change in high school. Alternatively, the second adolescent acknowledged that she expected the relationship to change in high school, but she remained uncertain as to the nature of the change.

It is interesting to note that relative to adolescents’ anticipations, parents appeared to show greater consensus amongst each other as to the nature of their anticipations; six parents expected that their relationship would change as a result of the school transition, with only one parent predicting that it would stay the same. In contrast to this general agreement among parents, there seems to be greater variation between adolescents as to the nature of their anticipations. Specifically, three adolescents believed that their relationship would change; two adolescents predicted that it would stay the same; and
two adolescents seemed uncertain as to how their relationship would be in high school. Taken together, these observations suggest that collectively, parents appeared to be aware – more often than not – of the possibility that the relationship with their adolescents could change with the transition to high school. However, as a group, adolescents seemed to agree less often about the anticipated nature of their relationship, such that nearly the same number of adolescents expressed anticipation of change, stability, and uncertainty.

To my knowledge, no previous study has examined parents’ and adolescents’ anticipations or perceptions about their relationship during the transition to high school. As a result, the findings from the present study, albeit preliminary, are noteworthy as they suggest possible differences between parents and adolescents in their tendencies to foresee change or stability in the parent-adolescent relationship during high school.

The interactional model of close relationships (Lollis, 2003) may be a valuable theoretical framework to help explain why there appears to be greater variation in the nature of anticipations between adolescents, but a possible trend among parents to anticipate change in the relationship. From this perspective, the dimension of time is fundamental to understanding parent-adolescent interactions within the context of their relationship. Individuals’ perceptions of past experiences and future anticipations influence their interactions together in the present moment. In this case, it may be that parents were drawing from previous experiences to inform their expectations of how the parent-adolescent relationship would be high school. Parents may have been using their own high school experiences as adolescents, or the experiences encountered by their older children (i.e., the adolescents’ older siblings) during the school transition, to anticipate how their relationship would be in high school. For example, one parent
expected that the relationship would change in high school because she believed that the adolescent would challenge it and challenge the boundaries in their relationship. The parent explained the rationale for her anticipation by suggesting that she is more aware of what to expect in high school, as compared to the adolescent, given that she has already experienced her older children make the transition to high school:

| P76: | I’m sure it will have ups and downs ‘cause I’m sure you’ll challenge it and |
| A79: | Probably |
| P77: | And challenge boundaries … you don’t think so? |
| A80: | No, I think so |
| P78: | ‘Cause you’ll probably always want that little bit more, to do a little bit more |
| A81: | Yeah |
| P79: | As you meet different people and do different things with them … that’s what I would think |
| A82: | Yeah |
| P80: | It probably is a little bit different ‘cause you’re not the first one going to high school so myself, I understand a little bit more how, how it works (G901, JC). |

By comparison, high school may have represented more of an unknown for the adolescents, as they had yet to personally experience the new school environment, along with the various academic and social changes associated with the transition. This element of unfamiliarity may help to explain the variety of relationship anticipations expressed by adolescents. Prior to the school transition, the adolescents did not have the first-hand experience of high school, which may have been useful for the parents, to reflect on in considering how their relationship could be influenced, if at all, by the new school environment. For example, when asked to explain why she anticipated that her relationship with her parent would stay the same in high school, one adolescent expressed, “Just ‘cause we have a close relationship and not really anything to change it” (G912, JC A: 35). However, with that being said, it is important to remember that
although there was variation in the nature of anticipations, three adolescents did indeed anticipate that their relationship would change in high school.

Two categories of change emerged from the analysis of parents’ and adolescents’ anticipations of change in the relationship. The relationship anticipations of five parents and two adolescents were classified in the category of anticipating that the adolescent would become more independent or want more freedom in high school. For example, in the following conversation excerpt, the adolescent anticipated that her desire for more freedom would change the parent-adolescent relationship in high school:

P35: How d’you think you, how d’you think high school’s gonna change our relationship?
A28: Our relationship? Um … I think I will get away more.
P36: ‘Cause you want more freedom.
A29: Yeah, so I can like be away from the house a lo
P37: Okay
A30: ‘Cause our house isn’t that big and it’s not that fun (G904, JC).

Akos and Galassi (2004) reported somewhat comparable findings in their study on adolescents’ and parents’ anticipations and concerns related to the transition to high school. Although parents did not perceive “more freedom” as a top anticipation for their adolescents, 80% of the adolescents entering high school endorsed it as a positive anticipation of the transition to high school. In fact, 30% of the adolescents identified “more freedom” as the “best” aspect of high school.

Shearer et al. (2005) likewise found this category to be a prominent theme in parents’ retrospective perceptions of changes in the parent-adolescent relationship in the transition from childhood to adolescence. In responding to questions about their perceptions of relationship change, parents were asked to reflect on their relationship
when their children were 10 years of age and compare it to their current relationship with their 16 year-old adolescents. Nineteen percent of mothers and 16% of fathers reported that their adolescents became more independent over time. As reported by Shearer et al., “A father described his son as ‘more independent. He doesn’t need me as much and can make (his) own decisions’” (p. 670). It is interesting to note that some of the parents’ retrospective perceptions of relationship change (Shearer et al.) are similar in nature to some parents’ prospective anticipations in the current study. For example, the former quotation of a father, who commented on his son’s greater independence and ability to make decisions, is comparable to the following anticipation made by a parent:

I74: So do you think that your relationship will, with [adolescent] will change as a result of her transition to grade nine?
P35: Of course [laughs], it should.
I75: Yeah
P36: As she becomes more independent.
I76: Okay and you anticipate her becoming more independent?
P37: Yeah
I77: And you kind um of having less of a kind of authority figure telling her what to do then or?
P38: I’m not really much of a “what to do mother,” am I? [Laughs] So um yes, I think I’ll enjoy watching her, even now she’ll ask me, “What should I do? What should I do?” And I’m saying, “Mmm I think you should decide” [laughs].
I78: Right, right
P39: So more of that, more of trusting her own feelings and instincts about what she wants to do (G912, JC).

The relationship anticipations of three parents and two adolescents were classified in the category of anticipating change in the quality of communication between parents and adolescents. None of the parents or adolescents who predicted change in communication discussed whether they believed there would be change in the amount of time spent in conversation together. This observation is interesting given that previous
research on parent-adolescent communication has demonstrated that although the quantity of time spent with family decreases with age, the amount of time spent in conversations with parents remains stable across adolescence (Larson et al., 1996; Raffaelli & Duckett, 1989).

With respect to changes in the quality and the degree of openness in communication, one parent-adolescent dyad talked about the possibility of the adolescent becoming closed-off in her communication with the parent. When asked by the parent why she thought their relationship could become “the opposite of stronger” (G908, JC A: 51), the following exchange occurred:

A52: I don’t know. It’s just like ….because you judge everything I tell you.
P44: I’m not supposed to do that. I forgot. .. I’m, I’m your mother. I’m a judge, that’s my job.
A53: Yeah, but I told you if you keep judging, I won’t tell you anything.
P45: Yeah, that’s true. Yeah, I don’t blame you
A54: How do you think it will make our relationship?
P46: I think it will make our relationship stronger. If, as long as we, as long as I don’t judge you, so you keep talking to me! Heehee! That’s a very good point you made, yes, heehee (G908, JC).

Alternatively, another parent-adolescent dyad anticipated that the adolescent would seek out and listen to the parent’s advice more often and that they would have “more to talk about in common” (G910, JC A: 74). This adolescent also anticipated that she would continue to be open in communicating with the parent: “I hope that we s- I still talk to you [in high school]. Pretty sure that I will. I can’t not talk to you. I’m such an open person” (G910, JC A: 115-116). Parents’ and adolescents’ anticipations of change in communication were similar in nature to the findings reported by Shearer et al. (2005). In their study on parents’ retrospective perceptions of changes in the parent-adolescent
relationship, these researchers found that 36% of mothers and 22% of fathers recalled that there were changes in communication during the transition to adolescence. Parents’ perceptions of change in communication were mixed in nature; 17% of mothers and 6% of fathers indicated that there was greater openness in communication in the parent-adolescent relationship, as compared to the relationship when their children were 10 years of age. In contrast, 7% of mothers and 4% of fathers reported that openness of communication actually decreased with age.

Findings from the content analysis also revealed that there was variability as to whether parents and adolescents agreed or disagreed in their anticipations of how the relationship would be in high school. Specifically, four parent-adolescent dyads agreed on their anticipations, while three parent-adolescent dyads disagreed on their anticipations. Much research has investigated the role of parents’ and adolescents’ perceptions and expectations in the parent-adolescent relationship over time. For example, parent-adolescent discrepancies in developmental expectations about behaviour were shown to relate to more conflict in mother-daughter, father-daughter, and father-son dyads in early and middle adolescence (Deković et al., 1997). Given that individuals’ expectations and perceptions of the relationship influence the dynamics of their interactions (Hinde & Stevenson-Hinde, 1987; Lollis, 2003), it may be valuable to investigate whether agreements or discrepancies in parents’ and adolescents’ anticipations of their relationship play a role in how they interact together during the transition to high school. However, due to the limited sample size in the current study, it is difficult to speculate how these agreements or discrepancies in perceptions may influence, if at all, the parent-adolescent relationship.
As indicated earlier, research investigating parents’ and adolescents’ anticipations about the parent-adolescent relationship during the transition to high school could not be located. Two existing bodies of literature independently examine perceptions of the high school transition and perceptions of changes in the parent-adolescent relationship. For that reason, the findings from the present study are important as they not only bridge the two areas of research, but also suggest that previously documented changes in the parent-adolescent relationship (i.e., changes in parent-adolescent communication and adolescents becoming more independent, wanting more freedom) may be occurring, or at the very least, were anticipated to take place, in the context of the transition to high school. Finally, it should be highlighted that the current examination of parents’ and adolescents’ anticipations is exploratory in nature and yields preliminary findings. With such a small sample size of dyads who anticipated how their relationship would be in high school ($n = 7$), one must be cautious in drawing concrete conclusions about the parent-adolescent relationship during the transition to high school.

**Structure of Parent-Adolescent Interactions**

Results from the state space grid analysis found that there were no statistically significant mean differences in the relative rigidity/flexibility of parent-adolescent interactions between pre-transition and post-transition to high school. In an effort to explain these findings, it may be that the interval between the two points of data collection was too short in time, making it difficult to capture the occurrence of gradual structural changes (as opposed to changes of an abrupt nature), if such changes did truly occur in the parent-adolescent interactions during the high school transition. It can also be suggested that it would be advantageous to have additional time points for data collection.
(both prior to and following the school transition) to measure the rigidity/flexibility of parent-adolescent interactions. It is possible that comparing parent-adolescent interactions across more than two points in time would present a more complete picture of the structure of parent-adolescent interactions during this period, subsequently providing a better opportunity to detect structural changes in the interactions over time. For example, Granic et al. (2003) collected data on parent-son interactions across five waves (at ages 9-10, 11-12, 13-14, 15-16, and 17-18) to investigate changes in the structure of interactions during the developmental transition in early adolescence. As hypothesized, Granic et al. found that there was greater flexibility in the structure of the interactions when the sons were 13 to 14 years of age. However, given that the transition to high school was the period of interest in the current study, it would not have been feasible, or even necessary for that matter, to have collected data on parent-adolescent interactions over such an extended period of time. Nonetheless, the structure analysis of parent-adolescent interactions during the high school transition may have benefitted from having more than two points of data collection so as to offer a more detailed portrayal of interactions across several occasions during this transitional period.

It is also possible that even if data had been collected across more than two time points, the results may have continued to demonstrate no statistically significant changes in the structure of the parent-adolescent interactions. For example, Hollenstein (2005; as cited in Hollenstein, 2007) investigated whether there were structural changes in mother-daughter conflict discussions as the girls made the transition into adolescence. There were four time points of data collection, which were timed around the daughters’ period of transition into middle school (grade 7). The data collection of mother-daughter
interactions occurred in the spring of grade 6, the fall of grade 7, the spring of grade 7, and the fall of grade 8. Similar to the findings from the current study, there were no structural changes in mother-daughter interactions across the school transition period (Hollenstein, 2005; as cited in Hollenstein, 2007). Consequently, it is also important to consider that the findings presented in this thesis may imply that there is indeed stability in the structure of parent-adolescent interactions during the transition to high school.

Finally, the lack of significant results related to the rigidity/flexibility of parent-adolescent interactions may be due to the relatively small sample size in the current study. Even if there were, in fact, changes in the structure of the parent-adolescent interactions, it is likely that the small sample size limited the power of the statistical tests to be able to accurately identify such changes.

**Emotional Content of Parent-Adolescent Interactions**

Results from the state space grid analysis showed that there were no statistically significant mean differences in the emotional content of parent-adolescent interactions between pre-transition and post-transition to high school. In considering the implications of these findings, it may be that there is a degree of stability in the ways in which parents and adolescents spend their time together (e.g., both negatively engaged or both positively engaged) as adolescents enter high school. By adopting this perspective of relationship stability, the findings from the present study could indicate that the transition to high school does not appear to influence or facilitate changes in the dyadic affective behaviour of parents and adolescents in their interactions together.

Even so, the fairly small sample size in the current study represents an alternative and more likely explanation to account for the lack of significant results. To be sure, even
if there truly were changes in the emotional content of the dyadic interactions, the small sample size significantly reduced the ability for statistical tests to detect such changes. Other researchers who have found changes in parent-child and parent-adolescent interactions with state space grid analysis have used considerably larger sample sizes (ranging from 38 to 240 dyads) for data analysis (Granic et al., 2007; Granic et al., 2003; Hollenstein & Lewis, 2006; Hollenstein et al., 2004).

Inspection of the difference scores for the percentage of time spent in various dyadic states revealed evidence to suggest possible patterns of change in the emotional content of the parent-adolescent interactions. It appeared that possible patterns of change included decreases in the percentage of time spent in the dyadic states of mutual overall negative and parent negative engagement, adolescent negative disengagement, as well as increases in the percentage of time spent in the dyadic states of mutual overall positive, parent genuine positive engagement, adolescent genuine positive engagement, and parent neutral, adolescent neutral. Taken together, these possible patterns of change may reflect parents and adolescents becoming more positively engaged and less negatively engaged with each other during the high school transition. When examining each parent-adolescent dyad on an individual basis, 57% of the dyads ($n = 8$) exhibited an increase in mutual overall positive to mutual overall negative in their interactions between pre-transition and post-transition to high school. Despite these interesting observations, it is necessary to reiterate that no statistically significant differences were found in the emotional content of the parent-adolescent interactions.

To date, no study has investigated changes in the positive and negative affective behaviour of parent-adolescent relationships as adolescents make the transition to high
school. However, there is some existing literature (Conger & Ge, 1999; McGue et al., 2005), which documents concurrent changes in conflict and warmth in parent-adolescent relationships when adolescents are of the same age/in the same grade as those adolescents who participated in the current study. For example, in their longitudinal study on parent-adolescent interactions when adolescents were in grades 7, 8, and 9, Conger and Ge (1999) showed that the expression of positive emotion (i.e., warmth/cohesion) decreased, while the expression of negative emotion (i.e., conflict/hostility) increased for both adolescents and parents each year over this three-year period. Similarly, McGue et al. (2005) found that 14 year-old adolescents perceived there to be more conflict and less warmth with their parents, as compared to when the same adolescents were 11 years of age. Contrary to the findings reported by Conger and Ge (1999) and McGue et al. (2005), the possible trends observed in the present study suggest a decrease in negative engagement and an increase in positive engagement between parents and adolescents during the transition from elementary to high school.

The method of analysis is an especially important issue to consider in the context of discussing and comparing the findings from the current study to previous research findings on parent-adolescent relationships. In the present study, the coding of affective behaviour in the parent-adolescent interactions was based on the method of observation. In contrast, most of the existing parent-adolescent literature, which was located and discussed in this thesis, relied on the method of ratings. As described by Cairns and Green (1979), the methods of ratings and observations have different underlying assumptions and objectives for the assessment of social patterns. For example, in contrast to rating procedures, which “take advantage of the ability of human beings to take into
account multiple sources of information and to abstract and integrate relevant bits … [so as] to focus on the ‘enduring’ properties of the person” (Cairns & Green, p. 213), observational techniques rely on “the ability to recognize and record accurately the relevant actions in the behavioural stream as they occur” (p. 214) so as to identify “how actual behaviours are elicited, maintained, and organized” (p. 222).

In an effort to make sense of and integrate the findings from the current study into our present understanding of parent-adolescent relationships, it may be useful to keep in mind that the methods of observation and ratings can vary in their measurement goals, outcomes, and levels of analysis. Similar to much of the research on parents’ and adolescents’ perceptions and expectations of their relationship over time (e.g., Buchanan, 2003; De Goede et al., 2009; Deković et al., 1997; Larson et al., 1996; Raffaelli & Duckett, 1989; Shearer et al., 2005), which has been dependent on the use of ratings, the current examination of parents’ and adolescents’ relationship anticipations relied upon participants to express their perceptions of how their relationship would be in high school. As a result, the comparison of these findings (e.g., anticipations that parent-adolescent communication may change and that adolescents may become more independent, want more freedom in high school) to previous research findings has been practical and meaningful given the similar techniques used (i.e., ratings of perceptions). On the other hand, the methods of observation and state space grid analysis, which were employed in this thesis to examine the structure and emotional content of parent-adolescent interactions during the transition to high school, have not been used elsewhere in the high school transition literature, and have rarely been used in studies on the development of parent-adolescent relationships. In fact, the few studies, which were
found to likewise investigate affect in parent-adolescent interactions over time (Conger & Ge, 1999; Kim et al., 2001), continued to rely on the use of Likert-type rating scales to rate the expression of positive and negative emotion in parent-adolescent interactions. Consequently, it is particularly challenging to make meaningful comparisons between the findings presented in this thesis and those documented in the literature given the varying methods and levels of analysis.

Alternatively, the use of both behavioural observations and state space grid analysis in the examination of parent-adolescent relationships makes the scope and findings of this thesis unique. This longitudinal investigation of parent-adolescent interactions at the dyadic level of analysis also adds to our understanding of parent-adolescent relationships by providing new insights into this close relationship at a time when adolescents are making the transition to high school and experiencing change in their social context. Collectively, findings from the current study suggest that the transition to high school does not appear to disrupt how parents and adolescents interact together. To be sure, this unique focus on parent-adolescent interactions during the high school transition helps to bridge these two areas of research, which have typically been investigated independently from each other.

**Study Limitations**

There are several limitations that need to be addressed with respect to this study. Perhaps the most apparent limitation in this study was the rather small sample size, which subsequently reduced the ability for statistical tests to detect possible changes in the structure or emotional content of parent-adolescent interactions between pre-transition and post-transition to high school. It would have been advantageous for the sample to
have consisted of more parent-adolescent dyads, as a larger sample would increase the power to correctly identify whether such changes did truly occur with the transition to high school. Similarly, a larger sample would have been useful in the examination of parents’ and adolescents’ anticipations of how their relationship would be in high school. In particular, it would have been interesting to have explored whether the nature of parents’ and adolescents’ anticipations (i.e., stability or change) did indeed influence their dyadic interactions throughout the transition to high school. A larger sample size would potentially allow for such a question to be addressed.

Although all possible combinations of parent-adolescent dyads were included in the sample (i.e., mother-daughter, mother-son, father-daughter, and father-son), it would have been valuable to have had more father-son and father-daughter dyads so as to increase the variability in gender composition of the parent-adolescent dyads. Having a considerably larger sample size, in addition to greater variability in the gender composition of the dyads, would have possibly made it feasible to pursue cross-gender comparisons of parent-adolescent interactions as the adolescents entered high school.

Another possible limitation to this study was that parent-adolescent conversations were video-recorded at only two time points during the high school transition. Although not feasible or practical for this thesis, it may have been beneficial to have collected observational data on parent-adolescent interactions across numerous occasions throughout the transition process. As opposed to comparing their dyadic interactions on two occasions, having multiple snapshots of parents and adolescents engaging in conversation together could have potentially yielded a more complete and detailed account of their patterns of interaction across this period of transition.
General Conclusions and Directions for Future Research

This study revealed that parents and adolescents reported a variety of pre-transition anticipations about how their relationship would be in high school. In particular, the parents and adolescents who predicted that their relationship would change as a result of the school transition anticipated that the quality of communication between each other would change and that the adolescent would become more independent or want more freedom in high school. Although the examination of relationship anticipations was exploratory in nature, the findings are noteworthy as they not only reflect previous research demonstrating changes in parent-adolescent relationships, but also extend the literature by revealing that these documented changes were anticipated to occur in the context of the transition to high school. Although the transition to high school represents a normative occurrence for many North American adolescents, there continues to be a paucity of research investigating how this period of transition may influence adolescents’ relationships with their parents. As such, it is suggested that future research endeavours further explore parents’ and adolescents’ perceptions about both change and continuity in parent-adolescent relationships during the transition from elementary to high school. Furthermore, it would be interesting for future studies to investigate whether agreements or discrepancies concerning the nature of parents’ and adolescents’ relationship anticipations relate to whether there is stability or change in their interactions during the high school transition. Gaining greater insight into how parents and adolescents expect their relationship to be in high school may help to facilitate a smooth transition for parent-adolescent dyads.
The current study makes a valuable contribution to the parent-adolescent literature by offering evidence to suggest that the dyadic interactions between parents and adolescents do not appear to significantly change in structure or affect during the high school transition. Nevertheless, future research should continue to examine whether parents and adolescents do, in fact, undergo changes in the ways in which they interact together as adolescents shift to this new school environment. In particular, it would be important to determine whether the findings presented here are replicated in studies with larger samples, which are characterized by greater variability in the gender composition of parent-adolescent dyads. In addition, as opposed to being limited to a pre- and post-transition comparison, it would be interesting for similar research projects to collect observational data across multiple occasions throughout the transition process so as to provide a more complete representation of dyads’ patterns of interaction over this period of time. By doing so, researchers may gain a better understanding of what parent-adolescent interactions are like well in advance of the school transition, as well as beyond the phase of actually transitioning to the new school environment. Future research investigations that seek to integrate these suggestions could further add to our knowledge of parent-adolescent relationships during the transition to high school, as additional questions could be addressed and a greater variety of data analyses could be pursued.

In summary, this study offers new insight into the anticipations and dyadic interactions of parent-adolescent dyads as adolescents make the transition to high school. Of particular importance is its unique examination of longitudinal observational data of parent-adolescent interactions at the dyadic level of analysis. Future research may enhance our understanding of both the changes and continuities in the parent-adolescent
relationship by similarly using state space grid analysis in the study of parents’ and adolescents’ dyadic interactions over time. Finally, as demonstrated in previous research, the findings from this study likewise underscore that both positive and negative affect co-exist in parent-adolescent relationships. Future research endeavours should continue to focus on investigating the concurrent changes in the expression of positive and negative emotions in parent-adolescent interactions over time.
References


environment fit on young adolescents’ experiences in schools and in families.


(Eds.), *Conversations with friends: Speculations on affective development* (pp. 192-237). New York, NY: Cambridge University Press.


Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect


Appendix A: Application to Involve Human Participants in Research

University of Guelph Research Ethics Board (REB)

FACULTY AND GRADUATE
Application to Involve Human Participants in Research

Please refer to the University of Guelph Research Ethics Guidelines, found at http://www.uoguelph.ca/research/forms_policies_procedures/human_participants.shtml before completing and submitting this application. If you have questions about this form, please contact the Research Ethics Coordinator, Sandra Auld at ext. 56606, or reb@uoguelph.ca.

Send this form and all accompanying material by email, as attachments, to reb@uoguelph.ca. One hard copy of the signed signature page should be forwarded to the Research Ethics Coordinator, Office of Research, University of Guelph, 437 University Centre, Guelph, ON, N1G 2W1.

If you want to change a previously approved protocol, please complete the “Change Request” form, available at http://www.uoguelph.ca/research/forms_policies_procedures/human_participants.shtml.

Date: 2009-04-08 (yyyy-mm-dd)  (For OR use only) Protocol#:

SECTION A – GENERAL INFORMATION

1. Title of the Research Project: “Parents’ and adolescents’ joint goal-directed actions regarding extracurricular structured and unstructured activities with peers”

2. Investigator Information

<table>
<thead>
<tr>
<th>Faculty with Principal Responsibility*</th>
<th>Name &amp; position</th>
<th>Dept/Address</th>
<th>Phone No.</th>
<th>E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty: Co-Investigator(s)</td>
<td>Dr. Susan Lollis</td>
<td>FRAN</td>
<td>519-824-4120 Ext. 53003</td>
<td><a href="mailto:slollis@uoguelph.ca">slollis@uoguelph.ca</a></td>
</tr>
<tr>
<td>Student: Investigator(s)</td>
<td>Agnes Wozniak</td>
<td>FRAN</td>
<td>519-824-4120 Ext. 56987</td>
<td><a href="mailto:awozniak@uoguelph.ca">awozniak@uoguelph.ca</a> <a href="mailto:ekear@uoguelph.ca">ekear@uoguelph.ca</a></td>
</tr>
<tr>
<td>Other: Investigator(s)</td>
<td>Please see item 24 – “Additional Information”</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

* must be advisor of any student investigators.
3. **Proposed Date**
   a) of commencement: 2009/05/01
   b) of completion: 2012/04/30

Note: The commencement date should be the date the researcher expects to actually begin interacting with human participants (including recruitment). The completion date should be the date that the researcher expects that interaction with human participants, including any feedback or follow-up, will be complete.

4. **Indicate the location(s) where the research will be conducted:**
   University of Guelph  X
   Other (please specify site): University of British Columbia, School of Social Work

5. **Other Research Ethics Board Approval**
   a) Is this a multi-centred study?  ☒  ☐
   b) Has any other institutional Ethics Board approved this project?  ☒  ☐
   c) If Yes, please provide the following information:
      - Title of the project: “Parents’ and adolescents’ joint goal-directed actions regarding extracurricular structured and unstructured activities with peers”
      - Name of the Other Institution: Wellington Catholic District School Board (WCDSB)
      - Name of the Other Board: Ethics Committee
      - Date of the Decision: **WCDSB process after I receive REB approval**
      - A contact name and phone number for the other Board: Eileen Clinton (519) 821–4640 X 241
   d) Will any other Research Ethics Board be asked for approval?  ☒  ☐
      If Yes, please specify:
      - Name of the Other Institution: University of British Columbia
      - Name of the Other Board: Behavioural Ethics Review Board (BREB)
      - Title of the project: “Parents’ and adolescents’ joint goal-directed actions regarding extracurricular structured and unstructured activities with peers”
      - Date of the Decision: **UBC is presently processing the ethics approval for this study**
      - A contact name and phone number for the other Board: Shirley Thompson, Manager, BREB, 604-827-5112
      OR
      A copy of the clearance certificate / approval
      I will provide this when UBC has also approved this research also

6. **Level of the Project**
   - Faculty Research  ☒
   - PhD Thesis  ☐
   - Masters Thesis  ☒
   - Honours Thesis  ☐
   - Class Project  ☐
   - Internship  ☐
   - Practicum  ☐
   - Other (please specify):
7. **Funding of the Project**

   a) Is this project currently funded?  
      - Yes  
      - No  

   b) Period of Funding: From May 1, 2009 To: April 30, 2012

   b) Agency or Sponsor (funded or applied for)
      - CIHR: 
      - NSERC: 
      - SSHRC: Funded - Strategic Grant

   “Parents’ and adolescents’ joint goal-directed actions regarding extracurricular structured and unstructured activities with peers”

   Other (please specify):

   Note: Please specify the complete title of the funding source.

   **NOTE:** If the funding source changes, or if a previously unfunded project receives funding, you must submit a Change Form to the Research Ethics Coordinator.

8. **Conflict of Interest**

   a) Will the researcher(s), members of the research team, and/or their partners or immediate family members:

      i) Receive any personal benefits (for example a financial benefit such as remuneration, intellectual property rights, rights of employment, consultancies, board membership, share ownership, stock options etc.) as a result of or connected to this study?  
         - Yes ☒  
         - No ☐

      ii) If Yes, please describe the benefits below. (Do not include conference and travel expense coverage, possible academic promotion, or other benefits which are integral to the general conduct of research.)

         Graduate students will receive funding in their role of research assistants.

   b) Describe any restrictions regarding access to or disclosure of information (during or at the end of the study) that the sponsor has placed on the investigator(s).

         None

   c) Discuss the possibility of commercialization of the research findings.

         N/A

**SECTION B – SUMMARY OF THE PROPOSED RESEARCH**

9. **Rationale**

   Describe the purpose and background rationale for the proposed project, as well as the hypotheses(is)/research questions to be examined.
In the current study we will examine ways in which parents and adolescents act together with regards to the time that adolescents spend in structured and unstructured activities with their peers, as the adolescent is making the transition to high school. The main objective of this research is to unite two broad areas of research that have been previously studied separately, parent management of adolescents’ peer relationships and adolescents’ management of their own peer activities. The second objective of this research project is to examine whether information about relationship dynamics successfully assists families in guiding adolescents’ peer relations. The following research questions will be investigated:

1) What are the joint goal-directed actions, over time, of parents and adolescents pertaining to adolescents’ time spent with peers in structured and unstructured activities?
2) How are past experiences and future anticipations expressed in the goals and actions of parents and adolescents pertaining to the adolescents’ time spent in structured and unstructured peer activities?
3) How are boundaries between parents and adolescents jointly constructed, coordinated, or dissolved through their goal-directed actions pertaining to adolescents’ involvement in structured and unstructured activities with peers?
4) Does information about relationship dynamics, generated through the study of joint goal-directed actions, assist families in anticipating and guiding the adolescent’s time expenditure with peers?

These findings have both theoretical and applied implications. More specifically, the theoretical implications of this current study will result in building a bridge between two areas of research that have been previously studied separately; parent management of adolescents’ peer relationships and adolescents’ management of information about peers and activities. The applied implications of this current study will be useful to professionals who work with parents and adolescents, as they will be able to enrich their understanding of how parents anticipate change or stability in adolescents’ peer relationships, react to changes in adolescent’s peer relationships, and create and manage family boundaries.

10. Methodology

Describe sequentially, and in detail, all procedures in which the research participants will be involved (e.g., paper and pencil tasks, interviews, surveys, questionnaires, physical assessments, physiological tests, time requirements etc.)

Note: Attach a copy of all questionnaire(s), interview guides or other test instruments. These should be on University of Guelph letterhead if they are intended for public dispersal.

Once ethics approval has been granted, both from the University of Guelph Ethics Committee and from the Wellington Catholic District School Ethics Committee, the WCDSB will send flyers to grade 8 students with the permission form. The parents and students will then be required to return the consent form to the school.
(See Appendix A: Consent Form for Participation - Parent Consent and Appendix B: Consent Form for Participation - Adolescent Consent).

Procedure

The research team will contact the parents and adolescents to determine whether they are eligible to participate during the summer.

Please Note: Protocol of each of the meetings with the parent and adolescent is found in Appendix C: Researcher’s Interview Guide

Meeting 1:
Preparation: The adolescent and parent will meet with the research team to explain procedures and assist
the dyad in generating ideas for discussion. Adolescents will be asked about their interests outside of school, record a list of friends and activities, and plans for the upcoming change in schools. Finally, parents will be asked about their role in the adolescents’ plans. (See Appendix C: Researcher’s Interview Guide).

**Video-recording:** Adolescent and parent will engage in a video-recorded, self-generated, and self-directed conversation regarding plans for structured and unstructured activities with peers for the upcoming school year. The research team will leave the room for this segment.

**Video recall interview:** Following the conversation, each participant will separately view the video-recording with a research interviewer. The video-recording will be stopped after each minute and the participant will be asked to report on his or her thoughts during that segment of the conversation. This interview will be audio taped.

Video-recordings of the conversation and video recall interview will be transcribed verbatim and analyzed. The analysis will result in a narrative summary of parent-adolescent interaction during the video-recording. From this transcript, an identification of the joint goals and actions related to the adolescents’ time spent in structured and unstructured activities with peers will be made. Additionally, a narrative summary for each of the individual recall sessions will be produced.

**Meeting 2:**
Will take place approximately four weeks after *Meeting 1*. The goal of the meeting will be to identify consensually the joint actions and goals of parents and adolescents. This will occur through reading the narrative summaries to each participant for feedback and discussion. Once consensus is reached on the summaries, copies will be provided to the participants.

**Telephone Monitoring:**
After the second meeting, participants (adolescent and parent) will each be contacted by telephone every two weeks for 5 months (Appendix D). The purpose of the calls is to provide an update of activities together regarding the adolescents’ time in structured and unstructured activities with peers.

**Meeting 3:**
The final meeting will occur at the end of the five-month monitoring period (November). Following the protocol described in *Meeting 1*, parents and adolescents will be asked to engage in another video-recorded parent-adolescent conversation and video recall interview. We will address the progress of their joint goal-directed series of actions and provide debriefing for the study.

**Intervention and Follow-up: (to be further developed in Year 2 of study)**
In Year 2, an intervention will be added to the protocol in the form of educational newsletters. Findings from data collected during Year 1 will be used, with evidence from existing literature, to develop educational newsletters. The newsletters will focus on topics and relationship dynamics of interest to parents and adolescents, and include exercises for parents and adolescents. Educational newsletters are a low-cost, but effective intervention, particularly with high risk, hard-to-reach parents (Bogenschneider & Stone, 1997). Parent and adolescent participants in Year 2 will receive the newsletters during the second, third, and fourth months of the monitoring period (total of 3 newsletters). When we know what form the newsletter will take (Year 2 of study) we will approach REB again to have the newsletter and methodology of distribution assessed.

11. **Experience**

What is your experience with this kind of research?

Dr. Susan Lollis has twenty five years of experience with videotaping and transcribing interviews with parents, children, and adolescents. Dr. Susan Lollis will be supervising Agnes Wozniak and Emily Kear during the interviewing and transcription of interviews.
12. **Participants**

Describe the number of participants and important characteristics (such as age, gender, location, affiliation, etc.)

Twenty adolescent-parent dyads (females and males). The adolescents will be enrolled in grade 8 at the time of the interview and will be transitioning to grade 9 and attending schools in the Wellington Catholic District School Board.

13. **Recruitment**

a) Describe how and from what sources the participants will be recruited, including any relationship between the investigator(s) and participant(s) (e.g., instructor-student; manager-employee).

*Note: Attach a copy of any poster(s), advertisement(s) or letter(s) to be used for recruitment.*

Participants will be recruited from schools selected by and in collaboration with the Wellington Catholic District School Board.

b) How and where will you contact these participants?

WCDSB will send flyers (See Appendix E: Letter of Information) to grade 8 students with the permission form. The parents and students will then be required to return the consent form to the school. The research team will contact the parents and adolescents to determine whether they are eligible to participate during the summer.

c) Time required of participants: 3 hours on 3 occasions.

Each dyad will be required to visit the University of Guelph’s Psychology Research Lab (Blackwood Hall 117) three times for approximately three hours total.

d) Are participants proficient in the language in which the survey is being conducted?  

<table>
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<tr>
<th>Yes</th>
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If not, is translation available?

14. **Compensation**

a) Will participants receive compensation for participation?  

<table>
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<tr>
<th>Yes</th>
<th>No</th>
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i) Financial  

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ii) Non-financial  

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b) If Yes to either i) or ii) above, please provide details.
Each participant will receive an honorarium of $20 for participating in each interview (total $60 for adolescents, $60 for parent).

c) If participants choose to withdraw, how will you deal with compensation?

If participants choose to withdraw, they will still receive compensation for the session from which they withdrew.

SECTION C – DESCRIPTION OF THE RISKS AND BENEFITS OF THE PROPOSED RESEARCH

15. Possible Risks

a) Indicate if the participants might experience any of the following risks: Yes No

i) Physical risk (including any bodily contact or administration of any substance)?

ii) Psychological risks (including feeling demeaned, embarrassed worried or upset)?

iii) Social risks (including possible loss of status, privacy and/or reputation)?

iv) Is there any deception involved?

v) Are any possible risks to participants greater than those the participants might encounter in their everyday life?

b) If you answered Yes to any of points i) through v) above, please explain the risk.

Adolescent participants may be embarrassed or uncomfortable to answer questions about peers in front of their parents. Both parents and adolescents may experience slight discomfort when being video-recorded.

c) Describe how the risks will be managed (including an explanation as to why alternative approaches could not be used).

Research assistants will be sensitive to the participants emotions during the video-recording process. A debriefing session will follow after the video-recall interview.

16. Possible Benefits

Discuss any potential direct benefits to the participants from their involvement in the project. Comment on the (potential) benefits to the scientific community/ society that would justify involvement of participants in this study.
Participants will be provided with the opportunity to discuss the ways in which they will act together with regards to transition to high school; particularly how adolescents will spend time in structured and unstructured activities with their peers. Therefore, a possible benefit from involvement in the project is that both the adolescent and the parent will be planning the adolescents’ transition to high school and discussing the adolescents’ relationships with peers.

SECTION D – THE INFORMED CONSENT PROCESS

17. The Consent Process

a) Describe the process that the investigator(s) will be using to obtain informed consent, including a description of who will be obtaining the informed consent. If there will be no written consent form, explain why.

The adolescent and parent dyad will meet with the research team for an explanation of the procedures and to assist both adolescent and parent in generating ideas for discussion. At this meeting, the parent and adolescent will have an opportunity to review the information sheet and review the consent form. Written consent will be obtained from the parent for her/his own participation (Appendix A: Consent Form for Participation – Parent Consent) and for their adolescent’s participation before the data is collected. Consent will also be obtained from the adolescent for her/his own participation (Appendix B: Consent Form for Participation - Adolescent Consent). Adolescents will be asked about their interests outside of school, their friends, and plans for the upcoming change in schools. Finally, parents will be asked about their role in the adolescents’ plans (See Appendix C: Researcher’s Interview Guide).

For information about the required elements in the letter of information and the consent form, please refer to “Instructions for the Preparing Information and Consent Letters” and the sample consent form available at http://www.uoguelph.ca/research/forms_policies_procedures/human_participants.shtml.

Note: Attach a copy of the Letter of Information (if applicable), the Consent Form (if applicable), the content of any telephone script (if applicable) and any other material which will be used in the informed consent process. If the document will be made public, please ensure that it is on University of Guelph letterhead.

b) Will the information provided to the participants be complete and accurate? Yes X No □

If no, please describe the nature and extent of the deception involved. Include how and when the deception will be revealed, and describe the specialized training of the person who will administer this feedback. It is recommended that participants have the opportunity to sign a second consent form, following debriefing when the deception is revealed, to ensure a fully informed consent.

Note: Attach a copy of the debriefing feedback and, if necessary, a copy of the second consent form on University of Guelph letterhead.

18. Consent by an authorized party

If the participants are minors or for other reasons are not competent to consent, describe the proposed alternate source of consent, including any permission / information letter to be provided to the person(s) providing the alternate consent.

Consent will be obtained from both the parent and the adolescent. Adolescents are minors and parental/guardian consent will be necessary to participate in this study; however, we would also like to
have consent from the adolescent for this research project.

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<th>19. Alternatives to prior individual consent</th>
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<tr>
<td>If obtaining individual participant consent prior to starting the research project is not appropriate for this research, please explain and provide details for a proposed alternative consent process.</td>
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<tr>
<th>20. Participant feedback</th>
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<tbody>
<tr>
<td>Explain what feedback/ information will be provided to the participants after participation in the project. (For example, a more complete description of the purpose of the research, or access to the results of the research).</td>
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</table>

**Note:** Please provide a copy of the written information, if applicable.

At the end of the consent form, participants will be given the choice to indicate if they wish to receive a copy of the summary of the research findings. Participants will provide either a postal address or an email address for receipt of the research findings.

<table>
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<th>21. Participant withdrawal</th>
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<tbody>
<tr>
<td>a) Describe how the participants will be informed of their right to withdraw from the project. Outline the procedures that will be followed to allow the participants to exercise this right.</td>
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</table>

At the beginning of Meeting 1, participants will be told that if at any point they wish to withdraw for any reason, that they can withdraw from the project at any time or refuse to answer any questions. If participants choose to withdraw compensation will still be paid.

b) Indicate what will be done with the participant’s data and any consequences for the participant of withdrawing from the study.

If a participant chooses to withdraw from the study, his/her data will not be used and will be destroyed in accordance with APA guidelines.

c) If the participants will not have the right to withdraw from the project, please explain.

N/A

SECTION E – CONFIDENTIALITY

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<th>22. Ensuring confidentiality</th>
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<tbody>
<tr>
<td>a) Will all participants be anonymous?</td>
</tr>
<tr>
<td>b) Will all data be treated as confidential?</td>
</tr>
</tbody>
</table>

Please note the difference: Participants’ identity/data will be confidential if an assigned ID code or number is used, but it will not be anonymous. Anonymous data cannot be traced back to an individual participant.
c) Describe the procedures to be used to ensure anonymity of participants and/or confidentiality of data both during the conduct of the research and in the release of its findings.

In order to ensure confidentiality, only the research team will have access to the video-recordings of the parent-adolescent dyad.

d) Explain how written records, video/audio tapes and questionnaires will be secured, and provide details of their final disposal or storage.

All the data from the study (video recordings, transcriptions and consent forms) will be stored in a locked filing cabinet in Dr. Susan Lollis’ research office and will be viewed only by members of the research team and a professional transcriber. The professional transcriber will sign a confidentiality agreement (Appendix F). Information stored on the researcher’s personal computer will be secured by a password. Personal information will not be linked to the transcribed interview. The consent form will be locked in a different filing cabinet than the transcriptions. Personal information will not be linked to the transcribed interview; interviews will not be identified by a participants’ name. Instead, each of the participants’ names will be replaced by a participant number.

e) If participant anonymity or confidentiality is not appropriate to this research project, explain, providing details of how all participants will be advised of the fact that data will not be anonymous or confidential.

N/A

SECTION F – MONITORING ONGOING RESEARCH

23. Annual Review and Adverse Events

a) Minimum protocol review requires the completion of a “Renewal/Completed Status Report” at least annually. Indicate whether any additional monitoring or review would be appropriate for this project.

*Note: It is the investigator’s responsibility to notify the REB using the “Renewal/Completed Status Report” when the project is completed, or if it is cancelled. The form is available at http://www.uoguelph.ca/research/forms_policies_procedures/human_participants.shtml.*

None required

b) Adverse events (unanticipated negative consequences or results affecting participants) must be reported to the Research Ethics Board and the Research Ethics Coordinator as soon as possible.

24. Additional Information

(Use an additional page if more space is required to complete any sections of the form, or if there is any other information relevant to the project that you wish to provide to the Research Ethics Board.)
This research is funded through a SSHRC Strategic Grant, “Parents’ and adolescents’ joint goal-directed actions regarding extracurricular structured and unstructured activities with peers”, awarded to Dr. Sheila Marshall (PI), School of Social Work, UBC; Dr. Richard Young (Co-Applicant), Counseling Psychology, UBC; Dr. Susan Lollis (Co-Applicant), Family Relations & Applied Nutrition, Guelph; and Dr. Lauree Tilton-Weaver (Collaborator), Behavioural, Social and Legal Services, Orebro University, Sweden.

SECTION G – SIGNATURES

Responsible Faculty Assurance:

I, ___________________________ [PLEASE PRINT] have the ultimate responsibility for the conduct of the study described in this application including my responsibilities as an advisor to any students involved in this project. I have read and am responsible for the content of this application. If any changes are made in the above arrangements of procedures, or adverse events are observed, I will bring these to the attention of the Research Ethics Coordinator.

(yyyy-mm-dd)

Signature

Date
Appendix B: Certification of Ethical Acceptability of Research

RESEARCH ETHICS BOARD
Certification of Ethical Acceptability of Research Involving Human Participants

<table>
<thead>
<tr>
<th>APPROVAL PERIOD:</th>
<th>May 21, 2009 to May 21, 2011</th>
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<tr>
<td>REB NUMBER:</td>
<td>09AP010</td>
</tr>
<tr>
<td>TYPE OF REVIEW:</td>
<td>Delegated Type 1</td>
</tr>
<tr>
<td>RESPONSIBLE FACULTY:</td>
<td>SUSAN LOLLIS</td>
</tr>
<tr>
<td>DEPARTMENT:</td>
<td>Family Relations &amp; Applied Nutrition</td>
</tr>
<tr>
<td>SPONSOR:</td>
<td>SSHRC STRATEGIC RESEARCH CLUSTER</td>
</tr>
<tr>
<td>TITLE OF PROJECT:</td>
<td>Parents' and Adolescents' Joint Goal-directed Actions Regarding Extracurricular Structured &amp; Unstructured Activities with Peers</td>
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The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human subjects in the above-named research project and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement.

The REB requires that you adhere to the protocol as last reviewed and approved by the REB. The REB must approve any modifications before they can be implemented. If you wish to modify your research project, please complete the Change Request Form. If there is a change in your source of funding, or a previously unfunded project receives funding, you must report this as a change to the protocol.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Responsible Faculty, the safety of the participants, and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-council Policy Statement requires that ongoing research be monitored by, at a minimum, a final report and, if the approval period is longer than one year, annual reports. Continued approval is contingent on timely submission of reports.
Membership of the Research Ethics Board: M. Dwyer, Legal Representative; M. Fairburn, Ethics and External; D. Emslie, Physician; B. Ferguson, CME; Lachapelle, S. COA; J. Minogue, EHS; Saunders, P. Alternative Health Care and External; Spriet, L. CBS; L Trick, Psychology; J. Tindale, FRAN, T. Turner; SOAN.

Approved: ______________________

per
Chair, Research Ethics Board

Date: ______________________
Appendix C: Information Letter

Parent-Adolescent Joint Goal Directed Actions

We (Dr. Susan Lollis & Agnes Wozniak) from the Department of Family Relations and Applied Nutrition at the University of Guelph are interested in the decisions that parents and adolescents make together regarding the adolescents’ time spent in structured and unstructured activities with peers.

We want to learn more about how parents and adolescents talk, negotiate, agree, and disagree about structured and unstructured activities with peers during the transition from grade 8 to grade 9.

We, with the support of and in conjunction with the Wellington Catholic District School Board, would like to invite adolescents and their parents to participate in our study. You are eligible to participate in this study if you are:

- An adolescent in grade 8; and will be transitioning to grade 9 in September 2010
- A parent who has an interest in what your adolescent does outside of school with peers

Your participation will consist of three separate meetings at the University of Guelph.

**First Meeting: (Approximately 1 ½ hours)**
The research team will meet with you to explain the research. Adolescents will be asked to think about their interests outside of school, record a list of friends and activities, and plans for the upcoming change in schools. Parents will be asked to think about their role regarding their adolescents’ time spent with peers. We will then ask both of you to engage in a 10 minute conversation with each other. This conversation will be videotaped. It is possible that you may feel a bit awkward about being video-recorded or during the conversation. However, you may also find being videotaped to be very interesting.

After completion of the video recorded conversation there will be an individual interview with both the parent and the adolescent. This part includes showing the videotape to each person separately and stopping the videotape each minute and asking questions about the videotape. We will ask “What were you thinking and feeling during this part of the conversation with your parent/adolescent?”

**Second Meeting (Approximately 1 hour)**
In this meeting you will be shown a narrative of the 10 minute conversation that you had with each other. We just want to check that we understood the conversation correctly. We will also talk with you about actions and goals that both of you discussed regarding the adolescents’ time spent with peers. Again, we want to check with you that we have
summarized your goals accurately. This will allow for the opportunity to add or correct anything.

**Telephone Monitoring:**
After the second meeting we will contact you every two weeks for 5 months by telephone. The purpose of these calls is to provide an update of activities done together regarding the adolescent’s time in structured and unstructured activities with peers.

**Third Meeting (Approximately 1 ½ hours)**
The final meeting will occur at the end of the five-month telephone monitoring period. We will be doing much of the same things that we did in our first meeting. You’ll be asked to engage in another video-recorded parent-adolescent conversation and individual interview using the video recording.

Participants in our research will receive $20 per person per visit. Parents will receive $60 in total and adolescents will receive $60 in total.

In this letter, we are asking for your consent to contact you. On the next page, you will find a space to indicate your willingness to participate.

Participation is voluntary and you are free to withdraw consent and discontinue participation at any time, even after you have started to participate. Your participation will be confidential, and every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. No individual adolescent or parent will be identified. Some quotations from the tapes may be used in the research report but no names or identifiers will be used. Only the research team, student researcher, Agnes Wozniak and professor, Dr. Susan Lollis, will have access to the video recordings and audio recordings. The video recordings and audio tape recordings will be erased when the study is completed.

You will be required to sign a consent form to participate in the study. If you are interested in participating in this study, please indicate below:

__ I am willing to participate in this study

__ I am not willing to participate in this study

Parent’s name: ________________________________

Adolescent’s name: ________________________________

Contact telephone number: __________________________
If you have any questions about this study, please contact Dr. Susan Lollis or Agnes Wozniak at the contact below. If you have any concerns about your participation in this study, please contact Sandy Auld at the University of Guelph Office of Research, sauld@uoguelph.ca or (519) 824-4120, ext. 56606.

Susan Lollis, PhD, C. Psych.
Professor
Department of Family Relations & Applied Nutrition
University of Guelph
(519) 824-4120 ext. 53003
slollis@uoguelph.ca

Agnes Wozniak, BASc
MSc Candidate
Department of Family Relations & Applied Nutrition
University of Guelph
(519) 824-4120 ext. 53861
awozniak@uoguelph.ca
Appendix D: Initial Telephone Interview

ID#______________ Date completed: ______________

**Information about Adolescent and Parent (Initial Telephone Interview):**

**Adolescent:**

1) Gender: _____male  _____female

2) Date of birth: ______________________________________

3) Born in Canada? ________ If not, where? __________________

4) If no, number of years you have lived in Canada? ______________

5) Primary language spoken in the home? _____________________________

6) Grade in school? __________

7) Name of school currently attending? ____________________________

8) Name of high school to be attended? ____________________________

**Parent:**

1) Gender: _____male  _____female

2) Date of birth: ______________________________________

3) Born in Canada? ________ yes/no.

4) If no, number of years you have lived in Canada? ______________

5) Who else lives in your house with you and your teenager? (no names, just relationship to parent)

_____________________/DOB: ________________
_____________________/DOB: ________________
_____________________/DOB: ________________
_____________________/DOB: ________________

103

7) Work approx. how many hours per week? _________________________

8) Currently attending post-secondary education? _____________

9) If yes, hours per week spent on post-secondary education? ______________

10) Name of institution and the program you are enrolled in?
_______________________________________________________________________

11) What is your highest level of education attained?
________________________________

12) Telephone # where you can best be reached:
________________________________

13) Best date/time for interview: ________________________________
Parent-Adolescent Communication about Structured and Unstructured Activities with Peers

CONSENT TO PARTICIPATE IN RESEARCH
Parent Consent Form

You are asked to participate in a research study conducted by Dr. Susan Lollis, a professor in the Department of Family Relations and Applied Nutrition and Agnes Wozniak, a Master of Science candidate.

PURPOSE OF THE STUDY

The purpose of the study is to understand the ways in which parents and adolescents act together with regard to adolescents’ time in structured and unstructured activities with peers, during the transition from grade 8 to high school.

PROCEDURES

If you volunteer to participate in this study, we will ask for three hours of your time, on three separate occasions.

❖ Meeting # 1: You and your adolescent child will meet with the research team at the University of Guelph to help generate ideas for discussion. Your adolescent child will be asked about their interests outside of school, record a list of friends and activities, and plans for the upcoming change in schools. Finally, you will be asked about your role in your adolescent child’s plans. Video-recording: You and your adolescent child will engage in a video-recorded, self-generated, and self-directed conversation regarding plans for structured and unstructured activities with peers for the upcoming school year. Video-recall interview: Following the conversation, you will separately view the video-recording with a research assistant. The video-recording will be stopped after each minute and you will be asked to report on your thoughts during that segment of the conversation. This segment will be audio taped. The research assistant will ask “What were you thinking and feeling during this part of the conversation with your adolescent child?”
Meeting # 2: Approximately four weeks after the initial meeting with you and your adolescent child, the both of you will be asked to meet with the research team at the University of Guelph once again. This meeting will last approximately one hour. The goal of the meeting will be to identify consensually the joint actions and goals of you and your adolescent child. This will occur through reading the narrative summaries to you for feedback and discussion. You will have the opportunity to add or correct anything. This will take place without the presence of your adolescent child.

Bimonthly Telephone Monitoring: After the second meeting, you will be contacted by telephone every two weeks for 5 months. The purpose of the calls is to provide an update of activities together regarding the adolescents’ time in structured and unstructured activities with peers.

Meeting #3: The final meeting will occur at the end of the five-month monitoring period. This meeting will be similar to Meeting # 1 and parents and adolescents will be asked to engage in another video-recorded parent-adolescent conversation and a video recall interview.

POTENTIAL RISKS AND DISCOMFORTS

We will be asking you to talk about, and describe how you and your adolescent child will act together with regard to your adolescent child’s time in structured and unstructured activities with peers during their transition from elementary school to high school. This conversation will be video-taped. It is possible that you may experience some discomfort when being video-recorded. A debriefing session will follow after your participation in the study. Lastly, remember that you are free to terminate your involvement in the study at any time. You will receive your $20.00 regardless of whether you finish participating in the first meeting. You will also receive your $20.00 if you participated in the first meeting, but did not finish participating in the second meeting.

Dr. Susan Lollis is a registered psychologist with the College of Psychologists of Ontario and is trained to discuss difficult issues with individuals. She is available to you if you have any questions regarding the nature of the study.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

- You will be presented with the opportunity to discuss with your adolescent child the ways in which you will act together with regard to time they spend in structured and unstructured activities with peers during the transition from elementary to high school. Therefore, it is hoped that you and your adolescent child will take this opportunity to thoughtfully plan out this transition and discuss your adolescent child’s relationships with their peers.
- There will be no direct or immediate benefit to participating in this research. However, this research will help professionals who work with parents and adolescents, as they will be able to enrich their understanding of how parents
anticipate change or stability in adolescents’ peer relationships, react to changes in adolescent’s peer relationships, and create and manage family boundaries.

- Satisfaction from helping a graduate student and contributing to research on parent-adolescent relationships.
- Exposure to research methods used to conduct research on parent-adolescent relationships.

**PAYMENT FOR PARTICIPATION**

You will receive $60.00 in total in partial thanks for your participation in this study. You will receive $20.00 at the end of the first meeting and you will receive $20.00 at the end of the second meeting, and $20 at the end of the third meeting. If at any one of these meetings you choose to withdraw from the study, you will still be given $20.00 regardless of whether you finish participating in the study.

**CONFIDENTIALITY**

*Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.*

- Your name will not be used in any reports of this study.
- Any personal information you give will be strictly confidential.
- You are completely free to withdraw consent and to discontinue participation at any time.
- The interview will be videotaped and transcribed without any identifying information.
- Quotes from the videotaped or audio recorded conversation may be used in the research report but no name or identifiers will be used.
- The videotapes and audio recordings will be erased when the thesis is completed.
- Only the student researchers, professional transcriber, and supervising professor will have access to the tape recordings.
- You can withdraw at any time, before, during or after the interview, without penalty.

**PARTICIPATION AND WITHDRAWAL**

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.
RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Sandy Auld
Research Ethics Coordinator
University of Guelph
437 University Centre
Guelph, ON N1G 2W1

Telephone: (519) 824-4120, ext. 56606
E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236
SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “Parents-Adolescent Communication about Structured and Unstructured Activities with Peers” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form. I also give consent for my adolescent __________________________ to participate in this study.

____________________________________
Name of Participant (please print)

____________________________________
Signature of Participant or Legal Representative Date

SIGNATURE OF WITNESS

____________________________________
Name of Witness (please print)

____________________________________
Signature of Witness Date

NOTIFICATION OF RESULTS OF RESEARCH

_____ I would like to be informed of the results of this research.

Email: ____________________________________________

Telephone: ________________________________________

Address: _________________________________________


Susan Lollis, PhD, C. Psych. Agnes Wozniak, MSc Candidate
Professor Master’s Student
Department of Family Relations Department of Family Relations
& Applied Nutrition & Applied Nutrition
University of Guelph University of Guelph
519-824-4120 Ext. 53003 519-824-4120 Ext. 56987
slollis@uoguelph.ca awozniak@uoguelph.ca
Appendix F: Consent Form – Adolescent

Parent-Adolescent Communication about Structured and Unstructured Activities with Peers

CONSENT TO PARTICIPATE IN RESEARCH
Adolescent Consent Form

You are asked to participate in a research study conducted by Dr. Susan Lollis, a professor in the Department of Family Relations and Applied Nutrition, and Agnes Wozniak, a Master of Science candidate.

PURPOSE OF THE STUDY

The purpose of the study is to understand the ways in which parents and adolescents act together with regard to adolescents’ time in structured and unstructured activities with peers, during the transition from grade 8 to high school.

PROCEDURES

If you volunteer to participate in this study, we will ask for three hours of your time, on three separate occasions.

Meeting # 1: You and your parent will meet with the research team at the University of Guelph to help generate ideas for discussion. You will be asked about your interests outside of school, record a list of friends and activities, and plans for the upcoming change in schools. Finally, your parent will be asked about their role in your plans.

Video-recording: You and your parent will engage in a video-recorded, self-generated, and self-directed conversation regarding plans for structured and unstructured activities with peers for the upcoming school year. Video-recall interview: Following the conversation, you will separately view the video-recording with a research assistant. The video-recording will be stopped after each minute and you will be asked to report on your thoughts during that part of the conversation. This segment will be audio taped. The research assistant will ask “What were you thinking and feeling during this part of the conversation with your parent?”
Meeting # 2: Approximately four weeks after the initial meeting with you and your parent, the both of you will be asked to meet with the research team at the University of Guelph once again. This meeting will last approximately one hour. The goal of the meeting will be to identify consensually the joint actions and goals of you and your parent. This will occur through reading the narrative summaries to you for feedback and discussion. You will have the opportunity to add or correct anything. This will take place without the presence of your parent.

Bimonthly Telephone Monitoring: After the second meeting, you will be contacted by telephone every two weeks for 5 months. The purpose of the calls is to provide an update of activities together regarding your time in structured and unstructured activities with peers.

Meeting # 3: The final meeting will occur at the end of the five-month monitoring period. This meeting will be similar to Meeting # 1 and parents and adolescents will be asked to engage in another video-recorded parent-adolescent conversation and a video recall interview.

POTENTIAL RISKS AND DISCOMFORTS

We will be asking you to talk about, and describe how you and your parent will act together with regard to your time spent in structured and unstructured activities with peers during the transition from elementary school to high school. This conversation will be video-taped. It is possible that you may experience some discomfort when being video-recorded. It is also possible that you may feel slightly embarrassed or uncomfortable to discuss your peer relationships with your parent. A debriefing session will follow after your participation in the study. Lastly, remember that you are free to terminate your involvement in the study at any time. You will receive your $20.00 regardless of whether you finish participating in the first meeting. You will also receive your $20.00 if you participated in the first meeting, but did not finish participating in the second meeting.

Dr. Susan Lollis is a registered psychologist with the College of Psychologists of Ontario and is trained to discuss difficult issues with individuals. She is available to you if you have any questions regarding the nature of the study.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

- You will be presented with the opportunity to discuss with your parent the ways in which you will act together with regard to time you spend in structured and unstructured activities with peers during the transition from elementary to high school. Therefore, it is hoped that you and your parent will take this opportunity to thoughtfully plan out this transition and discuss your relationships with your peers.
- There will be no direct or immediate benefit to participating in this research. However, this research will help professionals who work with parents and
adolescents, as they will be able to enrich their understanding of how parents anticipate change or stability in adolescents’ peer relationships, react to changes in adolescent’s peer relationships, and create and manage family boundaries.

- Satisfaction from helping a graduate student and contributing to research on parent-adolescent relationships.
- Exposure to research methods used to conduct research on parent-adolescent relationships.

**PAYMENT FOR PARTICIPATION**

You will receive $60.00 in total in partial thanks for your participation in this study. You will receive $20.00 at the end of the first meeting, $20.00 at the end of the second meeting, and $20 at the end of the third meeting. If at any one of these meetings you choose to withdraw from the study, you will still be given $20.00 regardless of whether you finish participating in the study.

**CONFIDENTIALITY**

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

- Your name will not be used in any reports of this study.
- Any personal information you give will be strictly confidential.
- You are completely free to withdraw consent and to discontinue participation at any time.
- The interview will be videotaped and transcribed without any identifying information.
- Quotes from the videotaped or audio recorded conversation may be used in the research report but no name or identifiers will be used.
- The videotapes and audio recordings will be erased when the thesis is completed.
- Only the student researchers, professional transcriber and supervising professor will have access to the tape recordings.
- You can withdraw at any time, before, during or after the interview, without penalty.

**PARTICIPATION AND WITHDRAWAL**

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.
RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Sandy Auld  
Research Ethics Coordinator  
University of Guelph  
437 University Centre  
Guelph, ON N1G 2W1  
Telephone: (519) 824-4120, ext. 56606  
E-mail: sauld@uoguelph.ca  
Fax: (519) 821-5236
SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I have read the information provided for the study “Parent-Adolescent Communication about Structured and Unstructured Activities with Peers” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Name of Participant (please print)

____________________________________

Signature of Participant or Legal Representative

Date

SIGNATURE OF WITNESS

Name of Witness (please print)

____________________________________

Signature of Witness

Date

NOTIFICATION OF RESULTS OF RESEARCH

____ I would like to be informed of the results of this research.

Email: _______________________________________

Telephone: ___________________________________

Address: _____________________________________

________________________________________________________________________

Susan Lollis, PhD, C. Psych.                        Agnes Wozniak, MSc Candidate
Department of Family Relations                     Department of Family Relations
& Applied Nutrition                                & Applied Nutrition
University of Guelph                                University of Guelph
(519) 824-4120 Ext. 53003                          (519) 824-4120 Ext. 56987
Appendix G: Time 1 Protocol Guidelines

Time 1 Protocol Guidelines

TURN ON VIDEO EQUIPMENT

CONSENT FORM

DEMOGRAPHIC INFORMATION
- Check completeness of Information about Parent and Adolescent

WARM UP
- As we mentioned in the consent forms, we will be video- and audio-recording everything, to make sure we have accurate records of what is going on. I’ll just turn on the equipment now.

  * remember to turn on BOTH video-tapes, and the audio-tape *

- ease into it with questions / comments related to weather, travel / finding the location, where did you find out about the study or other relevant topic.

EXTRACURRICULAR ACTIVITY SHEET

To adolescent: So what kinds of things do you like to do for fun outside of school? [Follow up questions about interests and hobbies] Do you like to do these things with friends?

Who do you usually do these activities with? On clipboard list first name only of adolescents’ friends and match name to activities in a ‘map’. Allow adolescent and parent to help map activities and friends. Be sure to ask: Do you ever just hang out?

How do you organize the planning of these activities with friends?

When you go to high school, are any of these activities changing?

To parent: What role do you play in your son’s/daughter’s involvement in these activities? How do you help with organizing these activities?

Summarize content of warm-up, focusing on planning of extra-curricular activities.

ADOLESCENT-PARENT CONVERSATION

To parent and adolescent: So, do you think the two of you are up to having a conversation together about planning activities outside of school?
If no, what is confusing? What needs to happen first?

To parent and adolescent: OK, well we will leave the room now. Take the next 10 minutes or so to have your conversation, and come and get us when you’re done.

VIDEO INTERVIEW (Parent and adolescent interviewed separately)

- provide snack

- explain what will occur during the video recall.

Each minute, stop video and ask participant What were you thinking during that segment?, What were you feeling during that segment?

- to end a segment: Is there anything else that you’d like to tell me about that segment?
That gives me a good idea of what you were thinking and feeling during that segment.

At the end of the video recall interview:

Is there anything else you would like to add about the conversation we are watching?

Ask Adolescent: When you go to high school, do you have any specific concerns about your relationships with friends? What are you particularly looking forward to?

Ask Parent: Do you have any specific concerns about your adolescent’s relationships with friends during his/her transition from Grade 8 to High School? What are you particularly looking forward to?

AT END OF TIME 1

Thank both parent and adolescent. Mention that another session will be booked in a 4-5 weeks time. Ask about any holiday time to work around.
Appendix H: Time 2 Protocol Guidelines

Time 2 Protocol Guidelines

WARM UP

-thank family for participating in project up to this point

-Explain: final session will be like the initial meeting with conversation and watching video separately and questions afterward.

*We have had phone calls and throughout the last 6 months you have been engaged in activities and conversations.*

EXTRACURRICULAR ACTIVITY SHEET

To adolescent: *So what kinds of things are you doing for fun outside of school?* [Follow up questions about interests and hobbies]

*Who do you usually do these activities with? On clipboard list first name only of adolescents’ friends and match name to activities in a ‘map’. Allow adolescent and parent to help map activities and friends. Be sure to ask: Do you ever just hang out?*

*How do you organize the planning of these activities with friends?*

To parent: *What role do you play in your son’s/daughter’s involvement in these activities? How do you help with organizing these activities?*

*Over past 6 months this “project” was about [repeat original project topic]. You have participated in a number of conversations and other activities related to this “project” -- some of these you told us about on the phone. Now we would like you to have a conversation together about how the “project” is going and what upcoming plans for <adolescent> might be.*

Do you understand what we are asking?

OK, well we will leave the room now. Take the next 10 minutes or so to have your conversation, and come and get us when you are done.

VIDEO RECALL (parent and adolescent separately)

- explain what will occur in the video recall.

Each minute, stop video and ask participant *What were you thinking during that segment?, What were you feeling during that segment?*
At end of interview: *Is there anything else you would like to add about the conversation we are watching?*

**After video recall:**

*Has the focus of the “project” changed over the last 6 months, or stayed the same?*
- If it has not changed: *What helped you to stay focused?*
- If it has changed: *In what way has it changed? Does it feel like it just kind of went off track, or did you intentionally change the focus of what you were doing?*
  - If went off track: *How did that happen, and what was it like for you to have it go that way?*
  - If it was purposefully changed: *What motivated you to change things around? Are you happy with having made the change?*

*How much progress do you think has been made on the project? How can you tell?*

*Do you see <reiterate topic of project> as something that the two of you will continue working on together in the future?*

**If yes,** what might get in the way of you continuing doing that; what would help you to keep on making progress in this?

**If no,** how come? [probe further for what they see will occur instead]

*Was there anything else that came up over the past 6 months that affected the family? How did that influence the project?*

**To Parent:** *What else is important for me to know about, in terms of you / your son/daughter and your activities outside of school with friends?*

**To Adolescent:** Let’s look at your friends and activities from our first meeting. And here is the list of friends and activities from today.

*What do you notice about the two sheets?*

**If changes:** Do you have any ideas about these changes?
  - If no ideas, say “I’ve noticed “…….” What ideas do you have about this?
  - Do you have any ideas about how they changed? Any ideas about why they changed?

**If no changes:** Do you have any ideas about how they stayed the same? Any ideas about why they stayed the same?
Appendix I: Interview Guide

Parent-Adolescent Communication about Transition to High School

Time 1

Introduction:

Thank you for agreeing to participate in this research study. As we indicated on the information sheet that was provided to you, we are interested in the ways that parents and adolescents act together with regard to adolescents’ time in structured and unstructured activities with peers, during the transition from grade 8 to high school. We want to learn more about how parents and adolescents negotiate or talk about the adolescents’ time in activities with peers during their transition from elementary school to high school. We are interested in how parents and adolescents either agree or disagree about the adolescents’ time with their peers.

Information Sheets and Consents to be given to participants

We have an information sheet outlining this study and the consent form for you to review and sign. Please take some time to review these and sign the consent forms. If you prefer, I would be happy to read them to you. I would be happy to answer any questions you have about the study or the consent forms at any time.

*OBTAIN PARTICIPANTS’ WRITTEN CONSENT*

As we mentioned in the consent form, we will be video- and audio-recording everything to make sure we have accurate records. We’ll just turn on the equipment now.

Part 1: Preparation with Researcher:

The first step of this meeting will involve me, the student researcher, in assisting the both of you, the parent and the adolescent, in generating some ideas for your discussion in regards to the adolescent’s time in structured and unstructured activities with peers, during the transition from elementary school to high school.

Questions for the Adolescent:

Can you tell me about you interests outside of school?

Could you talk about the activities that you usually engage in with your peers?

Could you tell me about your feelings about the transition from Grade 8 to High School?

Do you have any specific worries about the transition from Grade 8 to High School?
Do you think that anything will change (peers or activities) as a result of the transition?

Have you had any discussions with your mother/father about the time you spend in extracurricular structured and unstructured activities with your peers?

What role do you think your parent could have in deciding the time you spend in extracurricular structured and unstructured activities with your peers?

Do you think that your relationship with your mother/father will change from the transition from Grade 8 to High School?

Questions for the Parent:

Have you had any discussions with your adolescent child about the transition from Grade 8 to High School yet? If so, could you explain?

Could you tell me about your feelings in regards to your adolescent child’s transition?

Do you have any specific worries about your adolescent for his/her transition from Grade 8 to High School?

Do you think that anything will change for your adolescent child (peers or activities) as a result of the transition?

What do you think will be your role in your adolescent child’s plans for extracurricular structured and unstructured activities with peers?

Do you think that your relationship with your adolescent child will change from the transition from Grade 8 to High School?

Video recording of conversation:

Now that the both of you have started to think about the adolescents’ time in structured and unstructured activities with peers, during the transition from Grade 8 to High School, it is time to move onto the second part of the study. Do you think that the two of you are ready to have a conversation with each other about planning activities outside of school? We will leave the room while you have this conversation. Take the next 10 minutes or so to have your conversation, and come and get us when you are done.

Part 2: Video-Recall Interview

After the parent and the adolescent have finished their video-recorded conversation, the parent and the adolescent will separately view the video recorded conversation with one of the research team.
**Researcher and Parent:**

We will now watch the video recorded conversation and I will stop it after each minute has passed. When I stop the video recorded conversation, I will ask you “What were you thinking and feeling during this part of the conversation with your adolescent child?” This segment will be audio taped.

**Researcher and Adolescent:**

We will now watch the video recorded conversation and I will stop it after each minute has passed. When I stop the video recorded conversation, I will ask you “What were you thinking and feeling during this part of the conversation with your parent?” This segment will be audio taped.
Time 2

Warm-up

-thank family for participating in project up to this point
-Explain that this is the final session and will be like the initial meeting with conversation and watching video separately and questions afterward.
We have had phone calls, but throughout the last 6 months you have been engaged in activities and conversations. We are interested in hearing your conversation about those.

Both of you remember what this project was about right? ... [Repeat original project topic]. You have participated in a number of conversations and other activities related to that project -- some of these you told us about on the phone. Now we would like you to have a conversation together about how the project is going and what upcoming plans for <adolescent> might be.

Do you understand what we are asking?

Okay, well we will leave the room now. Take the next 10 minutes or so to have your conversation, and come and get us when you are done.

Video Recall (parent and adolescent separately)

- explain what will occur in the video recall.

Each minute, stop video and ask participant, “What were you thinking during that segment?” and “What were you feeling during that segment?”

At end of interview: Is there anything else you would like to add about the conversation we are watching?

AFTER THE VIDEO RECALL:

Has the focus of the project changed over the last 6 months, or stayed the same?
- If it has not changed: What helped you to stay focused?
- If changed: In what way has it changed? Does it feel like it just kind of went off track, or did you intentionally change the focus of what you were doing?

If went off track: How did that happen, and what was it like for you to have it go that way?

If it was purposefully changed: What motivated you to change things around? Are you happy with having made the change?

How much progress do you think has been made on the project? How can you tell?
Do you see <reiterate topic of project> as something that the two of you will continuing working on together in the future?
- If yes, what might get in the way of you continuing doing that; what would help you to keep on making progress in this?
- If no, how come? [probe further for what they see will occur instead]

Was there anything else that came up over the past 6 months that affected the family?

How did that influence the project?

What else is important for me to know about, in terms of you / your son/daughter and your activities outside of school with friends?

**At the end of Time 2:**

We would like to thank you for taking the time to share some very personal information about your life.
Appendix J: Extracurricular Activities Sheet

ID#______________ Date completed: ______________

Extracurricular activities currently enrolled in:

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124
Appendix K: Acknowledgement of Receipt of Payment

Acknowledgement of Receipt of Payment

Title of Project: Parents’ & Adolescents’ Joint Goal Directed Actions

Grant #: 430057

Principal Investigator: Dr. Susan Lollis 519-824-4120, ex. 53003
Graduate Researcher: Agnes Wozniak 519-824-4120, ex. 56987
Department of Family Relations and Applied Nutrition

Adolescent Acknowledgement:
I ________________________________ (Print Name) participated in:
Meeting # 1 __________ Meeting # 2 __________ Meeting # 3 __________
of the above named study and that I received a small compensation of $20 for my participation.
Signature ____________________________________________________________
Date: ______________________________

Parent Acknowledgement:
I ________________________________ (Print Name) participated in:
Meeting # 1 __________ Meeting # 2 __________ Meeting # 3 __________
of the above named study and that I received a small compensation of $20 for my participation.
Signature ____________________________________________________________
Date: ______________________________
Appendix L: Specific Affect Coding System and State Space Grid Categories

Specific Affect Coding System Codes and State Space Grid Categories

SPAFF Codes

Coding the SPAFF requires that attention be paid to verbal content, facial behaviours, voice tones, and other forms of communication. What follows are detailed descriptions of the codes that make up the current version of the SPAFF. Descriptions include subsections that detail the function of the code in interpersonal communication, various indicators of the code, physical cues for the code, and specific counterindicators regarding the code. Indicators and physical cues provide information about behaviours that probably derive from the presence of the code, whereas counterindicators provide information about behaviours that probably do not derive from the presence of the code. Throughout these descriptions, reference is made to speakers and receivers. Speakers are those who are observed using the code, and receivers are those the speakers are speaking to.

Current Codes of the SPAFF

<table>
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<tr>
<th>Positive Affects</th>
<th>Negative Affects</th>
<th>Neutral</th>
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<tbody>
<tr>
<td>Affection</td>
<td>Anger</td>
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<td>Enthusiasm</td>
<td>Belligerence</td>
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<td>Humour</td>
<td>Contempt</td>
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<td>Interest</td>
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<td>Validation</td>
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<td>Domineering</td>
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<td>Fear / Tension</td>
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<td>Stonewalling</td>
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<td>Threats</td>
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SSG Categories

The State Space Grid categories were developed and modified from those categories used by Hollenstein, Granic, Stoolmiller, and Snyder (2004). The SPAFF codes were grouped together on both the basis of similar social functions and positive, negative, and neutral behaviours. Five distinct engagement categories were created:

1. **Negative Engagement**
   (Active social engagement of negative affective behaviour – Criticism, Domineering, Contempt, Belligerence, Threats, Disgust, and Anger)

2. **Negative Disengagement**
   (Withdrawn or disengaged types of negative affective behaviour – Sadness, Fear/Tension, Defensiveness, Stonewalling, and Whining)

3. **Neutral**
   (The absence of any other discernable affect – Neutral)

4. **Genuine Positive Engagement**
   (Sincere and supportive positive affective behaviour – Interest, Validation, and Affection)

5. **Joyful Positive Engagement**
   (Joyful, excited positive affective behaviour – Enthusiasm and Humour)

   **1. Negative Engagement**

   **Criticism**

   *Function*
   Criticism functions as an attack on someone’s character or personality in a way that is not obviously insulting, as in Contempt. It is a complaint that suggests that the partner’s personality is defective. It is often accompanied by blame and is quite distinct from complaining. Complaints refer to specific instances of behaviour, whereas Criticisms are characterized by negative global assessments of a person’s abilities or value as a person. Complaints accompanied by “you always” or “you never” statements are considered criticisms. Criticism may or may not make reference to a specific event.

   *Indicators*
   1. *Blaming.* In blaming, one individual assigns fault to another, along with a personal attack or global accusation, as in “the reason the engine blew up is that you never put oil in it.”
   2. *Character attacks.* Often expressed as “you never/you always” generalizations, character attacks are critical of a person’s personality or abilities in very general ways. Examples include statements such as “you don’t care,” “you always put yourself first,” and so forth.
3. Kitchen sinking. This is essentially a long list of complaints. Even though any particular item on the list may not fit criteria for Criticism per se, a long list functions to illustrate the incompetence or personality defects of the person on the receiving end. For example, an individual might “kitchen sink” using complaints and “I” statements, such as, “I don’t feel listened to by you, and you don’t touch me very often, and I asked you to do certain chores, but you didn’t, and we don’t do very many fun things together lately.”

4. Betrayal statements. Similar to blaming, betrayal statements specifically reference trust and commitment, implying that the person on the receiving end is either not committed, untrustworthy, or both. “How could you?” is a question frequently indicative of Criticism.

5. Negative mind reading. Generally speaking, mindreading statements express attributions about another’s feelings, behaviours, or motives. They indicate Criticism when negative or accompanied by negative affect. An example of negative mind reading would be “you just don’t like Tom because he smokes.”

Physical Cues
There are no particular AUs that indicate Criticism.

Counterindications
• Insults. Critical statements designed to inflict gratuitous emotional pain (e.g., “you’re an idiot”) are coded Contempt.

Domineering

Function
The function of Domineering behaviour is to exert and demonstrate control over one’s partner or a conversation. Domineering behaviours attempt to impose compliance on the receiver’s responses or behaviours.

Indicators
1. Invalidation. Invalidation deliberately and forcefully contradicts the validity of the receiver’s point of view (e.g., “that’s just wrong”) or expressed feelings (e.g., “oh, you are not afraid, quit exaggerating”).

2. Lecturing and patronizing. This indicator identifies attempts to belittle or disempower a person or a person’s arguments. Many “subindicators” suggest the presence of lecturing and patronizing, including pointing or wagging a finger while talking, citing authorities (e.g., “well, Dr. Phil says . . .”), speaking in platitudes and clichés, appealing to an ambiguous “everyone” (as in “everyone knows”), and so forth. A distinctly patronizing quality often accompanies these behaviours. Look for finger pointing used for emphasis.

3. Low balling. Low balling expresses itself in the form of questions that have predetermined answers. The questions are not merely rhetorical but also have a manipulative quality, such as, “You want me to be happy, don’t you?” Low-ball behaviours are similar to sales ploys that seek to force unwary customers to answer “yes” to very simple questions (e.g., “Do you want your children to achieve their potential?”) in order to manipulate them into purchasing a product.
4. Incessant speech. By using incessant speech, domineering persons can ensure that the receiver is not allowed an opportunity to respond. It is a form of forcibly maintaining the floor in a conversation at all times. Incessant speech often has a repetitious, steady, almost rhythmic quality in the voice. When speaking incessantly, domineering persons often repeat or summarize their point of view while paying very little attention to the verbal content of things said by the people with whom they are speaking. Look for finger pointing used for emphasis.

5. Glowering. Glowering is really a kind of steady gaze, often characterized by the head tilted forward with the chin down, and the outer portions of the eyebrows raised—an eyebrow configuration we refer to as “the horns” because, when configured in this way, the eyebrows do indeed resemble horns. Thus, when glowering, the “horns” are emphasized, and the person may be leaning the head, body, or both forward.

**Physical Cues**

AU 2 (“the horns”), head forward, body forward, finger pointing, head cocked to one side.

**Counterindicators**

• Contemptuous patronizing. Whenever the content of patronizing becomes blatantly insulting, it should be coded Contempt.

**Contempt**

**Function**

The function of Contemptuous behaviour is to belittle, hurt, or humiliate. Contempt can be any statement made from a superior position to the partner, such as correcting an angry person’s grammar. Such behaviour deliberately and forthrightly communicates an icy lack of respect, often cruelty. On theoretical and empirical grounds, we regard this behaviour as extremely detrimental to interpersonal relationships (Coan et al., 1997; Gottman, 1993a; Gottman et al., 1998; Gottman & Levenson, 1992), and so the SPAFF gives it precedence over most other behaviours.

**Indicators**

1. **Sarcasm.** Sarcasm in conversation frequently precedes derisive laughter at the receiver’s expense or manifests as a ridiculing comment regarding something the receiver has said. Frequent examples include the ironic use of such statements as “sure!” or “I’ll bet you did!”

2. **Mockery.** When speakers mock, they repeat something the receiver has said while exaggeratedly imitating the receiver’s manner of speech or emotional state for the purpose of making the receiver look ridiculous or stupid.

3. **Insults.** Insults are active and straightforward forms of contempt—they are shows of disrespect for the receiver through obvious verbal cruelty.

4. **Hostile humour.** Often, the contemptuous speaker uses a form of unshared humour that, though an apparent joke, utilizes sarcasm, mocking, or insults to achieve the aim of contempt. By delivering such messages as a “joke,” the speaker may be attempting to leave him- or
herself an “out” (as in, “hey, I was only joking”). Hostile humour can be momentarily confusing for coders and receivers alike. The contemptuous speaker may laugh heartily, and sometimes the receiver will briefly and reflexively laugh along. Such moments are not coded as Humour.

*Physical Cues*
AU 14 (uni- or bilateral). *Note: Eye rolls are nearly always coded as contempt.*

*Counterindicators*
- *Good-natured teasing.* Good-natured “jabs” at the receiver’s foibles are not coded as contempt. A good indication that contempt is not occurring is that the context of the conversation appears to contradict contemptuous intentions or that the speaker and receiver appear to both experience laughter and joy as a result of the teasing.

**Belligerence**

*Function*
The function of Belligerence is to “get a rise” out of the receiver through provocation of anger. The belligerent speaker is, in a sense, looking for a fight.

*Indicators*
1. *Taunting questions.* These are questions whose function is to irritate or confuse the receiver. An example might include the frequent and irritating use of the question “Why?” in the context of a serious discussion. Frequently the belligerent speaker is seen struggling to suppress a smirk while asking taunting questions as the receiver becomes increasingly enraged.
2. *Unreciprocated humour.* Sometimes, the belligerent speaker appears to actually believe he or she is being funny, even though the receiver is obviously annoyed. Such moments of unreciprocated humour are neither playful, fun, and shared (as in humour) nor sarcastic, mocking, and insulting (as in contempt). Belligerent speakers do not appear to get the message that the humour is not universally funny, or the fact that the jokes are annoying the receiver may increase the level of humour experienced by the speaker.
3. *Interpersonal terrorism.* Here, the belligerent speaker is posing direct challenges to the agreed-on rules or boundaries of the relationship. Frequently, such behaviour takes the form of a dare, as in “What would you do if I did?” or “What are you going to do about it?” It can also be accompanied by a kind of emotional “strutting,” whereby the belligerent person will make use of loud commands such as “Don’t interrupt me!” as a means of demonstrating his or her power. This is often seen in violent men as a vestigial reminder of how dangerous they can be.

*Physical Cues*
AUs 1 or 2. Jaw thrust forward.

*Counterindicators*
1. *Good-natured teasing.* Good-natured “jabs” at the receiver’s foibles are not coded as belligerence, especially if the humour or the teasing appears to be shared.
2. Hostile humour. Unreciprocated humour that is obviously hostile, mocking, belittling, or insulting is coded Contempt.

Threats

Function
Threats are a particularly hostile form of domineering behaviour in that their function is to control the behaviour of the receiver by setting explicit conditions under which the receiver will be punished for behaving in ways the speaker finds undesirable.

Indicators
1. Bans. These are direct “if/then” statements that forbid certain behaviours and threaten to impose punitive (sometimes violent) consequences if those behaviours occur. An example might be “if you ever speak to me like that again, I’ll . . . .”
2. Ultimatums. Ultimatums reflect demands for change within some defined context or time period. An example might include “if you don’t start doing your share around here by next month, I’m moving out.”

Physical Cues
AU 1, 2 (“the horns”), 1+2, 1+2+5, head forward, body forward, finger pointing, head cocked to one side.

Counterindicators
• Good-natured teasing. Good-natured “jabs” at the receiver’s foibles and those that include humorous threats (as in, “ooh, I’m going to get you for that!”) are coded as Humour.

Disgust

Function
Disgust is a relatively involuntary verbal or nonverbal reaction to a stimulus that is perceived to be noxious. Harmful substances (e.g., feces, rotted food) reliably elicit disgust, but disgust can also occur for moral or symbolic reasons (Rozin, Lowery, & Ebert, 1994).

Indicators
1. Involuntary revulsion. Here the object of disgust is some obvious image of, or reference to, an aversive, noxious stimulus, as in momentary descriptions of a gruesome physical injury.
2. Moral objection. Here the object of disgust is an action or idea that the speaker finds repulsive for moral or other symbolic reasons, as in responses to undesirable sexual practices or even political positions.

Physical Cues
The physical cues of Disgust are robust and specific. AUs 9, 10, 4, 15, and 17 can sometimes be seen, either singly or in any combination. The tongue will sometimes
protrude, and the head will sometimes turn to one side as if avoiding the noxious stimulus.

**Counterindicators**

1. **Mockery, insults, or belittlement.** If the function of a disgust response, whether verbal or nonverbal, appears to be to communicate obvious disrespect of the receiver, it is more properly coded as Contempt. This includes instances in which the speaker appears to be disgusted by the behaviour of the receiver.

2. **Disapproval without Disgust affect.** Disapproval, absent other obvious signs of disgust, can be coded Neutral (when lacking in obvious affective tone), Domineering (when spoken in a patronizing tone), or Anger (with angry affect).

**Anger**

**Function**

In the SPAFF, anger functions to respond to perceived violations of the speaker’s rights to autonomy and respect. It serves as a kind of “affective underlining” of displeasure and complaint, indicating that an interpersonal boundary has been transgressed. Some SPAFF coders have called the SPAFF code of Anger “angry affect without belligerence, contempt, defensiveness, disgust or attempts to dominate.” This is largely true.

**Indicators**

1. **Frustration.** A relatively low intensity form of Anger, here facial expressions of anger become apparent at low levels and the voice may lower in pitch and tempo. The anger will appear constrained or out of the obvious awareness of the speaker. Otherwise, the person may not express anger verbally at all.

2. **Angry “I-statements.”** These are verbal statements that express personal feelings, as in “I am so angry!” or “I am so frustrated right now!”

3. **Angry questions.** Questions asked with angry affect and usually with sharp exhalations, as in “Why?!”

4. **Commands.** Commands are not attempts to dominate but rather are strong, affectively intense attempts to stop a recent or ongoing violation of the speaker’s autonomy or dignity. Sharp exhalations and strong angry affect frequently accompany commands. Examples include “Stop!” or “Don’t speak to me like I’m a child!”

**Physical Cues**

AUs 4, 5, 7, 4+5, 4+5+7, 23, 24. The lips will frequently thin, with the red of the upper lip disappearing or the lips pressed together; the teeth will clench; and the muscles of the jaw and neck will tighten. The voice may suddenly increase in pitch, amplitude, and tempo and may include a kind of “growl” as when yelling.

**Counterindicators**

- **Blends with other codes.** Angry affect is frequently observed during moments in which indicators of other negative codes are present. In these instances, Anger is never coded.
2. Negative Disengagement

Sadness

*Function*

In the SPAFF, the Sadness code refers to behaviours that communicate loss, resignation, helplessness, pessimism, hopelessness, or a plaintive or poignant quiescence.

*Indicators*

1. *Sighing.* Sighs, especially deep sighs, very frequently occur in the context of Sadness. Thus sighing is nearly always considered an indication of sad feelings (note, however, “relief” as a counterindicators).
2. *Pouting/Sulking.* Sadness physical cues in the context of being rebuffed, ignored, or not getting one’s way. Pouting may cause the sad person to appear to withdraw from the conversation.
3. *Resignation.* Sad individuals will frequently behave as if resigned or hopeless. This behaviour is communicated through a pattern of very low energy, slouching, long pauses between words, and so forth. In the resigned person, nearly all movement appears to require extra effort.
4. *Crying.* Nearly all instances of crying indicate sadness (but see “happy tears” as a counterindicator.) Sometimes individuals can be observed “choking back tears,” or trying not to cry. Physical cues and tears welling up in the eyes will give them away.
5. *Hurt feelings.* In response to moments of high negativity, such as belligerence, contempt, or anger, individuals will sometimes report or appear to have hurt feelings. Such moments are coded as Sadness.

*Physical Cues*

AUs 1, 6, 15, 17, 1+6, 1+15, 1+6+15, 1+6+15+17. Shoulders may droop, and individuals may hang their heads or look down. The lips and the chin may tremble. The voice may quaver in terms of pitch and amplitude and may occasionally break.

*Counterindicators*

1. *No back channels.* A lack of responding that is attributable to the deliberate attempt to communicate lack of interest is not a form of pouting and is more properly coded Stonewalling.
2. *Relief.* Individuals who display a sudden decrease in energy as a result of the diffusion of tension or an escape from responsibility may be showing evidence of relief, which may be coded as Neutral.
3. *Happy tears.* Happy tears are here intended to mean one of two things. First, tears can sometimes result from intense laughter. Second, tears can sometimes result from sudden moments of shared intimacy, compliments, accomplishments, and so forth. These instances of tears are more properly coded as Humour, Enthusiasm, or Affection.
Fear/Tension

Function
Fear/Tension communicates, usually involuntarily, fear, worry, anxiety, nervous anticipation, or dread.

Indicators
1. Speech disturbances. Fearful or tense speakers will often have a difficult time expressing or even knowing what they want to say. This will manifest as incomplete or unfinished statements, stuttering, or frequent and rapid “uhhs” and “ahs.” Watch also for shallow, rapid breathing. (Note that the occasional use of “ah,” “er,” or “um” can simply reflect attempts to keep the floor or turn at speech.)
2. Shifts in fundamental frequency. In studies of vocal quality, chest register refers to a lower pitch characterized by vibratory sensations felt in the sternum and trachea, and head register refers to a higher pitch characterized by vibratory sensations felt in the head. Either of these states can characterize a fundamental frequency, or the lowest frequency, of sound waves characterizing a person’s speech. In fear/tension, one can often detect a shift in fundamental frequency that moves from a chest register to a head register.
3. Fidgeting. Fearful or tense individuals will fidget, repeatedly shifting their position in their chairs (as if in the “hot seat”), plucking at clothes or hands, rubbing their faces (especially the temple, mouth, and chin), or biting the lips or inside of their mouths.
4. Nervous laughter. Unshared laughter or giggling that doesn’t appear to fit in the conversation and likely is a response to nervous tension (e.g., no jokes or humorous moments have occurred). Often, the fearful or tense individual will seem unable to stop. The smile will often appear “pasted on” (see “Physical Cues”).
5. Nervous gestures. Certain gestures of the arms and face can indicate fear/tension, such as arms akimbo (folded across the chest) and hands frequently touching the face.

Physical Cues
AUs 1, 2, 4, 12, 20, 1+2+4, 1+2+4+5. Watch for frequent eye movements, frequent gulping, biting of lips and inside of mouth, and the “unfelt smile,” a smile without AU6 that has been associated with neurophysiological patterns suggestive of behavioural withdrawal (Ekman & Davidson, 1993; Ekman, Davidson, & Friesen, 1990).

Counterindicators
1. Away behaviours. Away behaviours, such as paying attention to trivial objects in the room, looking at one’s own hands or nails, and so forth, when unaccompanied by anxious affect and when in the context of high negative affect, are more properly coded as Stonewalling.
2. Foreign object. Sometimes individuals will become occupied with picking their teeth or removing something from their eye in the midst of a conversation. Such behaviours may be associated with increased anxiety but are more likely simply Neutral.
3. *Shared nervous laughter.* Nervous laughter that is shared among two or more individuals can quickly escalate into a shared moment of positive affect that is more properly coded as Humour.

**Defensiveness**

*Function*
Defensiveness functions to deflect responsibility or blame. It communicates a kind of innocent victimhood or righteous indignation (e.g., as a counterattack) on the part of the speaker, implying that whatever bad thing being discussed is not the speaker’s fault. Defensive speakers can engage in defending themselves or friends and loved ones who may be under attack by their partners.

*Indicators*
1. *The “yes-but.”* SPAFF coders refer to statements that start off as momentary agreements but very quickly end in disagreements as “yes-buts.” They are common indicators of defensiveness.
2. *Cross-complaining.* This behaviour involves meeting one complaint with an immediate countercomplaint. In this way, complaints are simply not responded to—cross-complaints deflect them by leading the conversation into a suddenly new direction.
3. *Minimization.* Defensive speakers will frequently try to minimize a complaint by asserting that the problem they are potentially responsible for was scarcely a problem in the first place. A minimizing speaker might say, for example, “You’re right, I did forget to put the garbage out, but there was hardly any garbage anyway, so it really isn’t a problem. It can wait until next week.”
4. *Excuses.* Excuses are attempts to locate responsibility or blame in something other than the speaker, as in, “well, traffic was all backed up, there was nothing I could do.”
5. *Aggressive defenses.* Oftentimes a speaker will aggressively assert things, for example, “I did not!” These are vehement denials of responsibility that come across as childish, as in “did not/did too” interactions.

*Physical Cues*
AUs 1, 2, 1 + 2, arms folded across chest. The voice will increase in pitch and amplitude.

*Counterindicators*
*Invalidations.* Statements designed to directly contradict the receiver (e.g., “you are wrong” or “that’s simply untrue”), spoken in a lower pitched voice tone, are more properly coded Domineering.
Stonewalling

Function
Stonewalling functions to communicate an unwillingness to listen or respond to the receiver.

Indicators
1. *Active away behaviour*. The speaker focuses on some trivial object in order to avoid contact with the receiver. Such away behaviour frequently entails the use of “automanipulation,” a behaviour characterized by playing with hair or hands (e.g., cleaning fingernails or looking at split ends). This behaviour is “active” in Stonewalling in that it is not a function of idleness but rather purposefully communicates an unwillingness to pay attention, especially during conversational moments characterized by high levels of negative affect. The “speaker” (i.e., the contemptuous person) is communicating the message, “I’d rather not be here right now, and I don’t want to listen to you.” Note: If an individual verbally responds to the receiver, but continues to engage in active away behaviour (e.g., cleaning fingernails or looking at split ends) with no eye contact, and the verbal response is not better/ more representative of a different code (e.g., Contempt, Defensiveness), then the speaker should be coded as Stonewalling.

2. *No back channels*. The stonewalling person offers no vocal or nonvocal back channels such as one would find in Validation. There are no head nods, the neck is rigid, there are no vocal or verbal assents (as in “ummmmmm,” “yeah,” “uh-huh,” etc.), and no other verbal responses. There is little if any facial movement and certainly no facial mirroring or eye contact. The “no back-channeling” behaviour may occur very abruptly, as if intended to suddenly put up an obvious, though technically invisible, wall between the speaker and the receiver.

3. *Monitoring gaze*. Within the context of “no back channels,” stonewalling individuals will occasionally steal glances at their partners, as if to remind their partners to notice their lack of listening behaviour. This can appear as a intermittent glance in the partner’s direction, as if the partner is an annoyance that must be endured, much as one might occasionally glance over at a noisy person in a library.

Physical Cues
In Stonewalling, the face will typically appear stiff or frozen. The jaw may be clenched, and the muscles of the neck may be obviously flexed. Other times, the face will show no obvious signs of emotion at all, deliberately arranged to appear neutral.

Counterindicators
1. *Boredom*. Individuals can sometimes become bored or otherwise run out of things to say to each other. Sometimes, this will cause them to sit quietly without interacting for seemingly long periods of time. Away behaviour can characterize these moments, but they should not be confused with Stonewalling behaviour. Stonewalling does not result from idleness or boredom but is rather a form of active and aggressive communication, most frequently observed during heated moments.

2. *Sleepiness*. If an individual stops offering back channels but also appears to be very sleepy (as sometimes happens), his or her behaviour is more properly coded as Neutral.
3. Resignation. Sometimes individuals will become sad or defeated during an intense conversation. During such moments, they can appear to be Stonewalling for want of back-channeling behaviour. It is important to recognize when this is occurring and to code accordingly. Most often, resigned behaviours such as these are coded as Sadness.

**Whining**

*Function*
Whining functions to make what might otherwise be an ordinary complaint into a plaintive or pleading form of emotional protest. Whining suggests an innocent victim stance, communicating something like “What are you picking on me for?” or “What about all the good I do?”

*Indicators*
- *Whiny protest.* Whining is really characterized by a quality of voice paired with a complaint or protest. This voice quality is high-pitched, nasal, “sing-songy,” or otherwise annoyingly plaintive. For example, the question “why” might be expressed in a high-pitched voice and drawn out with an exaggerated “eeee” sound at the end, as in “whyyyyyeee?”

*Physical Cues*
AU 1, 1 + 2, 1 + 2 + 15.

*Counterindicators*
- *Defensive whining.* Sometimes defensive behaviours can be expressed in a whiny voice style. Such moments are more properly coded Defensive.

3. **Neutral**

**Neutral**

*Function*
The Neutral code represents a sort of “dividing line” between positive and negative SPAFF codes. It is relatively nonaffective and is associated with the exchange of unvalenced information. The voice will have a relaxed quality, with an even pitch and volume. It is important to become familiar with an individual’s neutral behaviour early on in a coding session, as facial morphology and other characterological mannerisms that are actually neutral for a given person can often seem affective to coders unfamiliar with them.

*Indicators*
1. Information exchanges.
2. Noncodable moments. Sometimes it will be unclear whether a behaviour is affective or what a particular affective behaviour represents. In the SPAFF, such moments are coded Neutral.
Physical Cues
The neutral face is apparent, though care must be taken to avoid coding baseline facial morphologies as affective facial behaviour.

Counterindicators
1. Loaded issue. It is possible that a moment of behaviour that seems to be a neutral exchange of information actually makes reference to an issue that has emotional relevance to the speaker, the receiver, or both. Such moments are not properly coded Neutral.
2. Any codable affect.

4. Genuine Positive Engagement

Interest

Function
The function of this behaviour is to communicate genuine interest in one’s partner through active elaboration or clarification seeking. As used in the SPAFF, Interest is characterized as a positively valenced behaviour that emphasizes information gathering about the partner as opposed to minor or trivial factual information.

Indicators
1. Nonverbal attention with positive affect. Interested persons will frequently attempt to actively communicate their interest through nonverbal behaviours, such as leaning forward in their chairs, affecting a warm tone of voice, and making steady eye contact. The interested person will communicate focused, respectful, and active engagement with what his or her partner is saying. If cues associated with Fear/Tension are not present, the interested person will sometimes communicate low levels of excitement (not to be confused with Enthusiasm) that communicates a desire to hear more.
2. Elaboration seeking and clarification seeking (i.e., Questions). Interested individuals will often ask specific questions in order to gather additional information. Frequently, such questions will be accompanied by nonverbal behaviours such as those described in indicator 1. It is important that questions that serve to elicit more information are not accompanied by nonverbal negative affect, as such affect can indicate other affective agendas. Elaboration and clarification-seeking questions can include questions about a partner’s opinions and questions that serve to paraphrase what a partner has been saying. Paraphrasing questions are easy to confuse with paraphrasing statements that are coded as Validation (discussed later).
3. Open-ended questions. Almost any question that does not require a “yes” or “no” response and that allows the partner to express him- or herself in greater detail.
4. Elaboration (i.e., Answers/ responses that are not questions). Interested individuals will often show interest in, or respond to, another person’s comment or clarification seeking/ open-ended question by elaborating or providing information that is nontrivial (e.g., about one’s opinions, perceptions, or feelings, about an event). It is important that
elaboration is not accompanied by nonverbal negative affect, as such affect can indicate other affective agendas.

**Physical Cues**
AUs 1+2, 6, 12, 6+12, leaning forward, positive valence.

**Counterindicators**
1. *Lack of eye contact.* Eye contact is not absolutely essential for coding Interest, but a lack of eye contact can indicate that interest is feigned or that questions are serving some other affective function.
2. *No pauses following questions.* When questions are frequent and no opportunity is provided for a partner to respond to them, it is unlikely that genuine interest is being observed. Relentless question asking, especially if it appears to be leading the partner to a very specific series of answers, can be a sign of Domineering behaviour.
3. *Low-ball questions.* Similar to counterindicator 2, low-ball questions are those to which there is only one rational answer. An example would be, “Don’t you want me to be happy?” Such a question is properly coded Domineering.
4. *Exchange of general factual information.* It is important, though sometimes difficult, to distinguish between questions that communicate an interest in the partner and those that communicate an interest in settling some minor factual issue. An example of a noninterested (per SPAFF) question might be “What time is it?”

**Validation**

**Function**
The function of validation is to communicate sincere understanding and acceptance of one’s partner or of one’s partner’s views and opinions. In the SPAFF, Validation is considered to be a positively valenced behaviour.

**Indicators**
1. *Back channels.* Back channels are behaviours that indicate attentive and affirmative listening through the use of paralinguistic and physical cues, such as head nods and “uh-huh” or other physical and vocal assenting behaviours. Usually, back channels are accompanied by eye contact.
2. *Direct expressions of understanding.* Direct expressions of understanding include explicit expressions of respect or agreement (e.g., “I agree,” or “that’s a very good point”).
3. *Paraphrasing.* In this behaviour, individuals repeat back what their partners have told them, usually verbatim, but sometimes in a slightly altered style.
4. *Apologies.*
5. *Sentence finishing.* In this behaviour, individuals will place endings on the sentences their partners have begun. This behaviour lets partners know that both individuals are “on the same page.” Importantly, sentence finishing is an indicator of validation only if it is delivered in a package of positive affect (see “Physical Cues”).
Physical Cues
AUs 1+2, 6, 12, 6+12. Head nod, eye contact, nonconfrontational voice tone.

Counterindicators
1. Lack of eye contact. A lack of eye contact can mean that the back channels being offered are insincere, as in humouring. Back channels without eye contact can also be associated with sarcastic behaviour.
2. Bobbing heads. “Bobbing heads” are head nods that appear so automatic and repetitive that they essentially become meaningless. Bobbing heads can also be a sign of exasperation—a kind of nonverbal request to “shut up.”
3. Affect mirroring. Sometimes, the various indicators of validation occur in the context of strong mirroring of affect, as when an individual says, “I understand how you’re feeling” while expressing facial signs of sadness in response to their crying partners. The SPAFF considers such expressions to be signs of empathy, and such signs are properly coded Affection.
4. Interrupting. Sentence finishing can be an important indicator of Validation, but if the sentence finishing is abrupt or is delivered with negative affect, it is likely nothing more than an interruption related to Domineering, Defensiveness, or other negative affective behaviours.

Rules for Coding Validation
1. Calculate the average interval of time between each indicator of Validation. When an individual demonstrates Validation indicators/cues multiple times in succession during an interaction, it is necessary to calculate the average duration of time (in seconds) between the termination and onset of each indicator.
2. Incorporating the calculated average into the coding of Validation. In coding Validation, it is necessary to take into consideration a person’s individual and unique pace of acknowledgement. Review the sections of the interaction, which have been coded as Validation for each individual. If the interval of time between indicators is less than, or equal to, the value of the individual’s respective average, then that interval of time between indicators should remain coded as Validation. If the length of time between indicators is greater than the calculated average, then the portion of the time interval, which falls within range of the average time, should be coded as Validation. However, the remaining segment of that interval of time, which exceeds the average time, should not be coded as Validation. Often these moments will be coded as Interest (e.g., individual continues to demonstrate nonverbal attention with positive affect by making steady eye contact or leaning forward in chair) or Neutral (e.g., information exchanges).
3. Example of applying rules. Seven seconds was calculated as the average length of time between indicators of Validation for one individual. In coding Validation for this individual, intervals of time between indicators, which ranged in length from one to seven seconds, were coded as Validation. However, in coding a 15-second interval of time, for example, the first seven seconds were coded as Validation, while the latter eight seconds were not coded as Validation. For the latter eight seconds of the interval, the individual’s affective behaviour was coded according to displayed indicators (e.g., Interest or Neutral).
Affection

Function
Affection expresses genuine caring and concern and offers comfort. Often the voice slows and becomes quieter or lower. Its function is to facilitate closeness and bonding.

Indicators
1. Reminiscing. The speaker shares warm memories of something she and the receiver enjoyed together.
2. Caring statements. Direct statements of affection or concern, such as “I love you,” “I care about you,” “I worry about you,” and so forth.
3. Compliments. Statements that communicate pride in or admiration of one’s partner (e.g., “you are so smart!” or “you did such a great job with the . . .”).
4. Empathy. Empathizing individuals mirror the affect of their partners. Such mirroring need not be verbal, but however it is expressed, it should be obvious that the intent of the mirroring is to express an understanding of the partner’s feelings. Importantly, empathy does more than simply validate the partner’s thoughts and feelings—by mirroring the affect of the partner at the same time, it conveys a level of care that surpasses validation per se.
5. The common cause. An important indicator of Affection, similar to empathy, is the common cause, whereby individuals engage in virtually any affective behaviour together as a form of building trust, closeness, consensus, or bonding. This indicator can sometimes be confusing. Insults, such as remarking that “Bob is a jerk,” can be coded Affection if intended to express obvious agreement. A shared anger, a shared fear, a shared and vocalized political opinion—all of these things could be coded Affection.
6. Flirting. When individuals flirt, they are communicating desire for their partners. The verbal expression would be “I want you,” but flirting needn’t be verbal. Flirting can be playful, sweet, warm, intense, or all of these.

Physical Cues
There are no particular AUs that indicate affection, but AUs 6 + 12 will commonly be seen.

Counterindicators
• Defensive affection. Occasionally, a speaker will insist that he loves the receiver as a defensive manoeuvre. The indicators of defensiveness (discussed later) will usually give this away. Watch for defensive voice tone, a defensive context, and a lack of warm, positive feeling underlying the affectionate message.
5. Joyful Positive Engagement

Enthusiasm

Function
The function of enthusiasm is to express a passionate interest in a person or activity, as well as a positive valence associated with that interest. Enthusiasm is infectious and often sudden, loud, boisterous, and energetic. Nonverbal behaviours prominently accompany verbal expressions of eagerness and joy. (Formerly coded Joy)

Indicators
1. Anticipation. Anticipatory behaviours are hopeful, future-oriented, and often childlike. They may be accompanied by fidgeting and distraction.
2. Positive surprise. This is an emphatically happy reaction to some unanticipated event or remark. Prominent smiles and loud verbalizations characterize this indicator (e.g., AU 1+2+6+12+24, accompanied by “Really!?"
3. Positive excitement. Similar to positive surprise, positive excitement includes expressions of joy and anticipation at very high levels of intensity.
4. Joy. Joyful moments reflect high levels of often suddenly felt happiness, similar to positive surprise but less intense. Joy will frequently follow receipt of a compliment and will often be accompanied by broad, warm smiles and bright, alert, positive facial expressions.
5. Expansiveness. Expansive individuals feel creative, motivated, and inspired and convey an effervescent and elated affect.

Physical Cues
AUs 1+2, 5, 6+12, 23, 24, 25–27 will commonly be seen. Individuals will sometimes sit up or forward in their chairs, and their voices will increase in pitch and volume.

Counterindicators
• Interest indicators. Enthusiasm can sometimes look like Interest and vice versa. Interested questions are accompanied by positive affect but of a lower intensity than those coded Enthusiasm.
• Negative Surprise. Surprise reactions are not unequivocally positive, and it is important to be watchful for surprise reactions that contain either a lack of positive affect or the presence of negative affect.

Humour

Function
The function of humour is to share in mutual amusement and joy following a mutually recognized moment of absurdity or fun. Humour is relatively unique within the SPAFF in that it cannot be coded in isolation. The humour code requires a moment of shared amusement.
Indicators
1. Good-natured teasing. When an individual teases, she highlights qualities or behaviours in her partner that both agree are somewhat ridiculous, cute, or otherwise funny.
2. Wit and silliness. Wit is expressed as an apt or clever observation that is considered by both individuals to be humorous. This could manifest as a funny observation or the straightforward telling of a joke.
3. Private jokes. Private jokes can include moments of shared laughter and obvious amusement that derive from coded messages or moments of sudden mutually recognized humour that are opaque to all but the two individuals who are communicating.
4. Fun and exaggeration. A very playful form of humour; here individuals share active, animated, and exaggerated play or imitation behaviour. High energy and a deeper form of laughter often accompany this indicator.
5. Nervous giggling. Occasionally, individuals will begin to chuckle with each other for no apparent reason. This could result from a private joke or may indicate a brief release of nervous tension given the experimental context. The affect underlying the giggling should be obviously positive and shared, unlike a similar form of giggling associated with the Fear/Tension code.

Physical Cues
AUs include 1, 2, 6, 12, 6 + 12, and 25–27.

Counterindicators
1. Unshared humour. Laughter or amusement that is not shared is never coded Humour.
2. Tense humour. Humour that is obviously both a nervous reaction to a high level of tension in the conversation and either lacking in any positive energy or unshared.
3. Affectionate humour. Sometimes a joke will be coupled with affectionate messages. Such moments are more properly coded affection.
4. Belligerent humour. A form of unshared humour, one individual makes jokes that are intended to “get a rise” out of the other or make the other angry.
5. Contemptuous humour. Jokes that are intended to be hurtful or insulting and that are unshared. This is sometimes confused with teasing. A good rule for distinguishing contemptuous humour from good-natured teasing is to attend closely to the degree to which both individuals are amused.