

Adolescent Alienation: Examining the Relevance of  
Contextual Domains and Psychological Components

by

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## Abstract

This theoretical framework defines and examines whether adolescent alienation is a multidimensional construct comprised of “psychological components” and “contextual domains”. It was hypothesized that alienation is comprised of four “psychological components” which are: (a) being alone, not spending time with others, being abandoned and isolated, (b) being a target, the occurrence of being made fun of and teased by others, (c) not fitting-in, being disliked, seen as different, or uninteresting by others, and (d) being cut-off, the occurrence of being ignored, rejected, or excluded by others. It was also hypothesized that alienation is experienced in four “contextual domains” which are people at school, friends, boyfriend/girlfriend, and family. It was examined whether both “psychological components” and “contextual domains” are relevant and the extents to which “psychological components” are specified within “contextual domains” or visa versa.

The proposed framework of alienation was examined by developing and testing the psychometric properties of a new scale, the Adolescent Alienation Questionnaire (AAQ). Two studies were conducted with three primary objectives, namely to examine the (a) structure of alienation, (b) stability of alienation, and (c) impact of alienation on various mental health outcomes. Study 1 consisted of 1870 adolescents at Time 1 (Study 1A) and 1780 adolescents at Time 2 (Study 1B) from which data were collected approximately one year apart. Study 2 was comprised of three groups of adolescents, 31 adolescents who were distressed, 35 adolescents who previously self-harmed, and 35 comparison adolescents, who were followed each month for one year. Study 1 showed that the structure of adolescent alienation was supported. Stability of alienation was shown by good test-retest reliability. Results from Study 2 showed additional support for the structure and stability of alienation. It was shown that alienation was related to mental health outcomes (depressed mood, hopelessness, stress, and self-harm behaviours). It was also shown that adolescents who were distressed or previously self-harmed felt more alienated than the comparison adolescents. Two mediation models supported the sequence of alienation. The proposed theoretical framework of adolescent alienation was supported, stability for the AAQ was shown, and evidence was provided for the impact of alienation.

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## CHAPTER 1. INTRODUCTION

### Overview

Adolescence is the age group most likely to experience alienation (Young, 1985). Adolescents who are alienated often become adults who are socially isolated and live in poverty (Oerlemans & Jenkins, 1998), are unable to form interpersonal relationships where they feel acceptance and support (Newman & Newman, 2001), have difficulty forming meaningful relationships in adult life (Newman & Newman, 2001), or can have difficulties later in life in areas of personal health and the formation of intimate family bonds (East Hess, & Lerner, 1987; Spencer 1988). Adolescents are less alienated in families with good communication, at least one adult seen as an authority figure, or a certain level of satisfaction (Webb, 1995). Adolescents who are alienated by their peers are less likely to have good mental health, a romantic partner, or a university degree as adults (Robson, 2003). Alienated adolescents are likely to have negative outcomes in their adolescent and adult lives.

Alienation has been studied by both sociologists and psychologists (Gupta, 1986). In sociology, alienation is defined and conceptualized in terms of people's relation to society. According to the sociological perspective, alienation is estrangement from the self and is out of one's own control (Skerl, 1977); it is a societal problem. The goal of the sociological perspective is to understand how trends in society and history affect a person's behaviour (Skerl, 1977). In contrast, a psychological perspective views alienation in terms of feelings, beliefs, and behaviours of an individual person. Psychology understands alienation as a difficulty within an individual. Both of these views are important and have been combined into the social-psychological view where

alienation is understood as an interaction between an individual and the person's social environment (Skerl, 1977).

The present framework of adolescent alienation is within a social-psychological perspective and defines alienation in terms of both "psychological components" and "contextual domains". Psychological components are defined as beliefs, feelings, and other psychological outcomes that are internal to an individual. Contextual domains are defined as specific interpersonal relationships that are prevalent, situational, and external to an individual. In the present framework of adolescent alienation, both psychological components and contextual domains are important. Although alienation has been viewed from a social-psychological view, no research conducted to date has operationalized alienation in terms of psychological components and contextual domains. The proposed framework of alienation argues that both psychological components and contextual domains are important to include in a model of alienation. The present studies examine whether both psychological components and contextual domains are relevant in a model of alienation, whether a model of alienation should be defined mainly by the psychological components or by the contextual domains, and the extent to which psychological components are specified within contextual domains or visa versa. The present framework is one of the first to examine the capability of measuring alienation in this manner. It is argued that the proposed framework, including both psychological components and contextual domains, provides a basis for conceptualizing existing models and the present framework of adolescent alienation.

### Scope of the Dissertation

The scope of this research is described next. First, early definitions of alienation are reviewed and past research is evaluated within the present proposed framework of understanding the nature of adolescent alienation, namely psychological components and contextual domains. Secondly, the importance of investigating adolescent alienation in respect to both psychological components and contextual domains is illustrated by reporting the results of two studies. These two studies are designed to yield evidence for the proposed framework of adolescent alienation, in which no research has yet examined alienation in this manner. If this proposed framework is shown to be valid for conceptualizing alienation, then implications for the theory of alienation and applied research conducted on alienation are considered. Lastly the impact that adolescent alienation has on symptoms and functioning, in particular mood, hopelessness, stress, and self-harm behaviours, is discussed.

### History of the Construct of Alienation

The concept of alienation has its roots in three major theories. These are Marx's theory of "alienation", Durkheim's theory of "anomie", and Freud's theory of "discontent" (Horton, 1996). Marx's theory of alienation is a social-psychological perspective since it involves how society affects a person's behaviour. In the 1840s, Marx defined alienation as occurring when an individual's freedom and happiness are restricted due to capitalism (Horton, 1996). According to Marx, alienation would end when capitalism no longer exists. In terms of the present framework of understanding alienation, the social system of capitalism can be viewed as the contextual domain in which an individual experiences alienation. In Marx's theory of alienation, the

contextual domain of capitalism and the psychological component of feeling restricted affects a person to feel alienated. Marx's theory of alienation proposes an interaction between an individual feeling restricted and society, as would be proposed by a social-psychological perspective.

Durkheim's theory of anomie is a sociological perspective since it involves how society affects a person feeling alienated. Durkheim's concept of anomie is defined by an individual's passion to better oneself during a time of social change when there is a lack of social rules (Horton, 1996). Durkheim's theory of anomie is closely related to concept of normlessness, which is the belief that a person's goals can only be met by behaviours that are socially unapproved (Seeman, 1991). In other words, a person may not respect the social norms of the time, not think that there are actual social norms at the time, not trust others, and may not be willing to be deviant to achieve certain goals (Seeman, 1991). Normlessness, which is essentially anomie, is not a state of a person's feelings and beliefs but is a state of society (Seeman, 1991). According to Durkheim, anomie is resolved when society has more control over an individual person (Skerl, 1977). Durkheim's theory of anomie is similar to Marx's theory of alienation since both are the result of certain conditions in society. However, the two theories differ since Marx's specified condition in society is capitalism and Durkheim's condition in society is the lack of social rules. For Marx, alienation exists when a person cannot act in a self-directed manner but instead acts in a manner that is determined by society (Skerl, 1977). For Durkheim, alienation occurs when society has less control over a person's actions and then the person becomes frustrated and there is social conflict (Skerl, 1977). In terms of the present framework of understanding alienation, society for Durkheim can be

viewed as the contextual domain in which and individual experiences alienation. In Durkheim's theory of anomie, the contextual domain of society, when society lacks social rules, affects a person to feel alienated and there is no concept of psychological components. Durkheim's theory of anomie does not propose that an individual feelings or beliefs affect the experience of alienation, as would be proposed in a psychological perspective of alienation, and it also does not propose that an interaction between an individual's feelings or beliefs and society, as would be proposed by a social-psychological perspective.

Freud's theory of discontent is a social-psychological perspective and is defined by an individual's dissatisfaction with an inadequate civilized society (Horton, 1996). Discontent for Freud involves an interaction between an intrapsychic conflict and social processes. Through the intrapsychic conflict, there is an increased self-understanding, and results in an individual to act in his own interest in an inadequate society (Horton, 1996). Freud's theory of discontent is similar to Marx's theory of alienation and differs from Durkheim's theory of anomie, since in addition to an influence of society, there is also an interaction between the society and an individual. In terms of the present framework of understanding alienation, an inadequate society for Freud can be viewed as the contextual domain and the intrapsychic conflict can be viewed as the psychological component. In Freud's theory of discontent, it has both a contextual domain and a psychological component.

Despite the important differences between these three theories, each of the theories can be understood in terms of the present framework of psychological components and contextual domains. Marx's theory of alienation can be viewed with



capitalism as the contextual domain and feeling restricted as the psychological component. In Durkheim's theory of anomie, society can be viewed as the contextual domain and this theory does not relate the society to a psychological component. Freud's theory of discontent emphasizes an interaction between an inadequate society, which can be viewed as the contextual domain, and an intrapsychic conflict, which can be viewed as the psychological component. Both Marx's theory of alienation and Freud's theory of discontent are social-psychological perspectives and Durkheim's theory of anomie is a sociological perspective.

### Contemporary Models and Definitions of Alienation

Contemporary theories of alienation were initiated by Seeman (1959) and his model has dominated alienation research for the last 40 years. Seeman's (1959) original paradigm consists of five categories: (a) powerlessness, an individual's belief that their own actions cannot change the outcome, (b) meaninglessness, the belief that the future will be unsatisfactory, (c) normlessness, the belief that goals can only be met by behaviours that are unapproved, (d) isolation, the belief that typically high valued goals will give low rewards, and (e) self-estrangement, the belief that one is dependent on behaviours that may lead to a certain goal (Harvey, Warner, Smith, & Harvey 1983; Manderscheid, Silbergeld, & Dager, 1976).

One of Seeman's main contributions to defining the construct of alienation was that his theory was based on past sociological views of alienation and combined them to develop his theory of alienation. He also contributed by developing a theory of alienation that was a psychological perspective since his theory attributed characteristics to individuals. Another of Seeman's contributions is that his theory led to empirical

research to be conducted on alienation and to other researchers developing measures of alienation. Lastly, Seeman's model led to longitudinal and quasi-experimental studies to be conducted on the construct of alienation (Seeman, 1975). Despite these contributions, there are a number of limitations to this model. Although Seeman (1959) based his alienation work on Marx, his theory was mainly a psychological perspective (Harvey et al., 1983) and the five categories can be viewed in the present framework as psychological components. Thus main limitation of this model is it fails to consider how these psychological components are linked to contextual domains, the external situations, that alienation is experienced. Seeman's (1959) model of alienation only defines alienation in terms psychological components, according to the present framework of alienation.

Seeman (1972) revised his theory of alienation since the majority of alienation research was being conducted within the social-psychological perspective and he wanted his theory to also be employed in this perspective. Seeman's revised theory of alienation consists of six categories: (a) powerlessness, having low control versus mastery of events, (b) meaninglessness, incomprehensibility versus understanding of personal and social affairs, (c) normlessness, believing that goals can be met by behaviours that are socially unapproved versus conventional ways of achieving goals, (d) cultural estrangement, the rejection of common societal values versus commitment to a certain group's standard for acting, (e) self-estrangement, engagement in activities that are not rewarding versus being involved in activities for its own sake, and (f) social isolation, being excluded or rejected versus being socially accepted (Seeman, 1972). Seeman's (1972) theory of alienation is an improvement on his previous theory (Seeman, 1959). This theory of alienation can be

viewed in the present framework of alienation as having both psychological components and contextual domains. The psychological components are feelings and beliefs that are experienced by an individual within each of Seeman's (1972) six categories of alienation and the contextual domain of society is within some of the six categories. However, Seeman's (1972) model of alienation is not very specific regarding the contextual domains, other than there is societal role that an individual experiences alienation.

In contemporary research on alienation, Seeman probably has been the main contributor to the area of research on alienation. There have been other researchers that have proposed valuable definitions for alienation. For instance, Mau (1992) defines alienation as a sense of social estrangement, which is the lack of social support or meaningful social relationships. Young (1985, p. 55) defines alienation as "a multi-dimensional socio-psychological concept consisting of a number of different subjective feeling states that emerge in the face of objective social conditions". This means that alienation involves negative feelings one may develop due to being exposed to certain situations imposed by specific relationships. Young's (1985) definition of alienation infers the relevance of both psychological components and contextual domains, according to the present framework.

In recent years, alienation has been viewed as a struggle of adolescence between group identity and individualization (Newman & Newman, 2001). This struggle between group identity and individualization occurs in early adolescence and involves a psychosocial conflict between allying oneself with specific groups and learning to be comfortable functioning as a member of a group (Newman & Newman, 1999). Group identity refers to connections with social groups and individualization refers to the

process of being an individual. According to Newman and Newman (1999), most adolescents feel a sense of loneliness and isolation, which is implied in the term alienation, and is part of the adolescent developmental process. A positive resolution of the conflict group identity versus individualization occurs when an adolescent perceives herself with a group that meets their social needs and provides them with a sense of group identity (Newman & Newman, 1999). In the positive resolution, an adolescent seeks a positive balance that allows him to confidently feel connected to others, while being able to tolerate periods of separateness (Newman & Newman, 2001). However, a negative resolution of the conflict can result by three different means, according to Newman and Newman (1999). First, a negative resolution may occur if parents pressure the adolescent to limit her association to a peer group and the adolescent does not become a member of that group. Second, a negative resolution can occur if an adolescent cannot find a peer group that meets his personal and individual needs. A third bases for a negative resolution is if no peer groups offer the adolescent to become an accepted part of the peer group (Newman & Newman, 1999). These are generally the positive resolution (not alienated) and negative resolution (being alienated) that can result due to the conflict between group identity and individualization.

#### Existing Alienation Constructs & Measures

Alienation has been defined and operationalized in many different ways, beginning with Marx, who asserted that alienation occurs to people when they feel restricted in a certain situation, most notably capitalism. In this section, different measures of alienation will be reviewed. Although theoretical work on alienation has

been considerable, there are a number of concerns associated with many of the conceptualizations of alienation that need to be carefully considered.

Marx's theory of alienation highlighted the key idea developed in this dissertation, namely that alienation is comprised of different psychological components, such as "feeling restricted", which are embedded within specific contextual domains, such as "capitalism". For Marx the situation is an economic and political system in which people work that they feel they do not have control over their work situation. Marx viewed this situation as indicative of capitalism. From the very beginning, according to Marx, alienation occurs to people when they feel restricted in a certain situation. So this early construct of alienation defined a situation (i.e., capitalism) as being important. The present framework asserts that both psychological components (i.e., feelings or beliefs) and contextual domains (i.e., situations) are important for alienation to occur. This framework is important for understanding other developed alienation constructs and attempt to define alienation.

A number of alienation constructs have been developed. Early constructs of alienation can be defined with both psychological components (e.g., feeling restricted) and contextual domains (e.g., capitalism) being important. These constructs can be related to the present framework and for understanding previously developed alienation constructs. Many of the existing alienation measures have been based on Seeman's (1959; 1972) construct of alienation, which include the Alienation Scale (Dean, 1961), Alienation (Kohn, 1969)<sup>1</sup>, the University Alienation Scale (Burbach, 1972), the Classroom Alienation Scale (Blumenkrantz & Tapp, 1977), Dimensions of Adolescent Alienation (Mackey & Ahigren, 1977), the Measurement of Adolescent Alienation

(Skerl, 1977), Alienation (Roberts, 1987), the Measurement of Alienation (Gireesan & Raj, 1991), the Student Alienation Scale (Mau, 1992), and Adolescent Alienation (Lacourse, Villeneuve, & Claes, 2003). There are also alienation measures that have been developed based on Durkheim's theory of anomie, which include the MOS Alienation Scale (Travis, 1993) and the Palestinian Student Alienation Scale (Abdallah, 1997). There are measures on the construct of alienation that used questions developed in previously developed alienation measures, such as the Alienation Scale (Ray, 1982)<sup>2</sup> and Social Alienation (Seidel & Vaughn, 1991). An alienation measure was also developed to use with adolescent psychiatric population, the Alienation Content Scale of the MMPI-A (Butcher, Williams, Graham, Archer, Tellegen, Ben-Porath, & Kaemmer, 1992)<sup>3</sup>. There are alienation measures in other languages such as Japanese (Alienation Scale; Miyashita & Kobayashi, 1981) and Chinese (Adolescents' Student Alienation; Dong, & Jinfu, & Xiting, 2002). Five of these alienation measures are described and each of them is classified to the present framework of alienation of psychological components and contextual domains, which is argued to be essential for an accurate alienation construct.

Many of the most important alienation measures have based their alienation models on Seeman's (1959; 1972) theory of alienation. The two most important theorists regarding the definition and conceptualization of alienation were Dean (1961) and Skerl (1977). Both of these theories view alienation as comprised of some of Seeman's (1959) categories of alienation, which are powerlessness, meaninglessness, normlessness, social isolation, and cultural estrangement.

### The Alienation Scale (Dean, 1961)

Dean (1961) viewed alienation as comprised of three main components, which are powerlessness, normlessness, and social isolation. Dean (1961) stated that a person feels alienated when they have less status in society. Dean operationalized the three categories as being important for alienation to occur as: powerlessness is the feeling of lack of control or helplessness over your life, normlessness involves both feelings of a lack of purpose in life and conflicts within a person between conflicting norms, and social isolation which is feelings of being separated or isolated from a group (Dean, 1961).

This definition of alienation clearly emphasizes the psychological components of the construct with only the consideration of the situation or contextual domain of society, in which these elements of alienation (i.e., powerlessness, normlessness, and social isolation) are experienced. The model implies that alienation is experienced within the situation of society and there is no reference to any other type of situation. Although this formulation only explicitly makes reference to the situation of society in which alienation occurs, Dean himself acknowledges the importance of the situation. In fact, Dean (1961, p. 757) states that alienation may not be “a personality ‘trait’, but is a situation-relevant variable”. Dean’s (1961) measure of alienation was comprised of items assessing the psychological components, namely powerlessness, normlessness, and social isolation, since they are generally cognitive dimensions. These psychological components are experienced within the contextual domain of society, which is the “situation-relevant variable” for Dean (1961).

Although the measure only included the contextual domain of society, Dean’s (1961) measure of alienation has been used in numerous research studies (e.g., Blane,

Hill, & Brown, 1968; Burbach & Thompson, 1971; Calabrese, 1989; Calabrese & Fisher, 1988; Calabrese & Poe, 1990; Calabrese & Raymond, 1989; Cross, 1999; Gould, 2004; Hensley, Hensley, & Munro, 1975; Knapp, 1976; Pulvino & Hansen, 1972; Shoho, Katims, & Wilks, 1997). For example, Hensley et al. (1975) examined the factor structure of the Dean Alienation Scale (1961) for a sample of college students. This study showed eight factors, not three factors as would be expected. Hensley et al. (1975) concluded that the Dean Alienation Scale (1961) does appear to measure different categories of alienation but it does not appear to measure the three categories of powerlessness, normlessness, and social isolation as it was defined to measure.

Dean (1961) stated that much more research was required on alienation in order for the construct of alienation to be empirically validated. This is exactly what the research conducted by Hensley et al. (1975) examined and showed that Dean's (1961) measure does not appear to measure the three categories of alienation as defined by Dean. This is a limitation of the measure. Another limitation of Dean's (1961) measure is that the only contextual domain operationalized as relevant for alienation to occur is society. Due to these limitations, there are some concerns using the Dean Alienation Scale (1961) as a measure of alienation.

#### The Measurement of Adolescent Alienation (Skerl, 1977)

Concerns also exist with the manner in which Skerl (1977) defined and operationalized alienation. Skerl (1977) developed an adolescent measure of alienation that examined four of the five Seeman's (1959) factors, which measure the psychological components of powerlessness, meaninglessness, normlessness, and isolation or cultural estrangement across a number of situations, which included school, family, and



interpersonal relationships. Skerl (1977) defined powerlessness, meaninglessness, normlessness, and isolation or cultural estrangement in the same manner as Seeman (1959). Skerl's (1977) concept of interpersonal relationships included friends, peers, and opposite sex relationships. As a result, there are 12 scales for the Measurement of Adolescent Alienation (Skerl, 1977).

This model of alienation clearly emphasizes both psychological components and contextual domains of the construct in which alienation occurs, as related to the present framework of alienation. The model implies that alienation is experienced within the situations of school, family and interpersonal relationships (i.e., friends, peers, and opposite sex relationships). The model also implies alienation is experienced by the psychological components of powerlessness, meaninglessness, normlessness, and isolation or cultural estrangement. An example of a school-powerlessness question is: "I feel that the making of rules for students in school is beyond my control". An example of a family-meaninglessness question is: "The way my parents react to what I do is not predictable". An example of an interpersonal relationships-normlessness question is: "I believe that being fair with persons my own age is necessary to be accepted by them".

Although Skerl's (1977) measure of alienation is based on a detailed model of alienation that includes many psychological components and many contextual domains, there have not been any research studies besides Skerl's (1977) that have used this measure of alienation. However, Skerl (1977) showed that the scales suggest internal consistency (i.e., reliability). There was also some support shown for validity of the scales by correlating the scales with self-reports of alienated behaviours and by comparing the scores on the scales of a group of alienated adolescents with a group of

non-alienated adolescents. Skerl's (1977) model of alienation is a good model for alienation since it examines alienation according to the present framework of alienation of both psychological components and contextual domains. There are though two main concerns with Skerl's (1977) measure of alienation: 1) many of the questions are confusing (e.g., "Being accepted by others my own age is not unimportant to me."), and 2) different separately important contextual domains (friends, peers, and opposite sex relationships) are put into one category (interpersonal relationships). Skerl's (1977) measure for his model of alienation could be improved if certain questions were not as confusing and if the interpersonal relationships contextual domain was separated into distinct contextual domains. Skerl's (1977) model of alienation has a good theoretical background but there are some concerns with the alienation measure that was developed based on this model.

#### Social Alienation towards Classmates Scale (SACS; Seidel & Vaughn, 1991)

Seidel and Vaughn (1991) operationalized and defined alienation by social alienation, which is a construct involving estrangement that is similar to loneliness (Daugherty & Linton, 2000). Social alienation is defined as a person feeling rejected and perceived negatively by others and the person rejecting and looking negatively at others (Seidel & Vaughn, 1991).

The definition of social isolation emphasizes both the psychological component of feelings of rejection and the contextual domain of the classroom setting, which fits into the present framework of alienation of having both a psychological component and a contextual domain. Since this model of social alienation only has one psychological

component and one contextual domain, it is very specific to only feelings of rejection in the classroom setting.

The SACS focuses on feelings and attitudes of social alienation towards classmates (Seidel & Vaughn, 1991). In developing the questionnaire, the researchers first completed a review of the literature on social alienation. Next they gathered previously developed measures of alienation and social isolation. Eight local experts then reviewed the items. Lastly preliminary interviews were conducted with adolescents with learning disabilities (Seidel & Vaughn, 1991). Two examples of the questions on the SACS are: 1) “I could trust my friends at school” and 2) “I had trouble with people in class”. Seidel and Vaughn (1991) showed that learning disabled students who dropped-out of school are more socially alienated from their classmates than learning-disabled students who completed school. Other research has used the SACS. For example, Lane and Daugherty (1999) used a revised version of the SACS and it was used with college students. This study showed that women reported less social alienation than men. This study also showed that students who were affiliated with a Greek organization also reported less social alienation than non-affiliates. Daugherty and Linton (2000) also used a revised version of the SACS, which they referred to as the SACS-R, with college students. It showed the SACS-R had high internal consistency, which was interpreted as social alienation being one-dimensional (Daugherty & Linton, 2000). This study also showed support for concurrent validity since the SACS-R scores significantly correlated with scores on measures of mood, stress, personality, attractiveness, and family functioning (Daugherty & Linton, 2000).

The SACS and the SACS-R appear to be sufficient measures for social alienation in a classroom setting. However, these measures do not examine perceived alienation in other situations. For example, they do not examine perceived alienation from an adolescent's family. Also these measures only focus on feelings of being rejected. Therefore the SACS and SACS-R fit into the present framework of alienation of having both a psychological component and a contextual domain, but these measures do not have various psychological components and various contextual domains. These measures are very specific to only feelings of rejection in the classroom setting, which was the intended use and was not to encompass a definitive framework for encapsulating the entire experience of adolescent alienation. This is a limitation and the main concern for these measures.

#### Adolescent Students' Alienation Scale (ASAS; Dong et al., 2002)

There are also concerns with the Adolescent Students' Alienation Scale developed by Dong et al. (2002). The ASAS is a scale developed in China to measure alienation in adolescents. In a study to test the theoretical structure of this model of alienation and to test the reliability and validity of the ASAS, junior high school students completed the measure. Since Dong et al.'s (2002) study is in Chinese, it is difficult to know exactly how they defined and operationalized alienation. Results showed that the measure had adequate reliability and validity. Principle components analysis showed that alienation is a multi-dimensional and multi-hierarchical construct. From this study, it was shown that the first hierarchy of alienation had three dimensions, which were social alienation, interpersonal alienation, and environmental alienation. The second hierarchy had nine dimensions, which included sense of non-meaning, sense of self-alienation, sense of

loneliness, sense of oppression and restriction, sense of uncontrollability, sense of social isolation, natural alienation, alienation between family members, and alienation to living situation (Dong et al., 2002).

There is one study that used the ASAS as their measure of alienation, which was conducted by Jinfu and Dong (2003). This study showed that the adolescents scored much higher on the sense of environmental alienation and the sense of oppression and restriction than the other dimensions (Jinfu & Dong, 2003). An inversed v-shape tendency from junior high school students to college students was shown for the amount of alienation experienced (Jinfu & Dong, 2003). This means that there appears to be less alienation experienced by younger and older adolescents and more alienation experienced by mid-aged adolescents.

A strength of the ASAS is that it appears to be developed based on a theoretical construct of alienation containing both psychological components, which appear to be sense of non-meaning, sense of self-alienation, sense of loneliness, sense of oppression and restriction, sense of uncontrollability, sense of social isolation, and natural alienation and contextual domains, which appear to be family members and living situation. Other strengths of the ASAS are that it is a multi-hierarchical construct and appears to be a reliable and valid measure for a Chinese population of adolescents. The main concern with the ASAS is that it is Chinese and not presently published in English. Even if the ASAS was translated into English, the questions may not translate into relevant questions for the present purposes. Research would have to be conducted on an English version to examine the theoretical construct and the psychometric properties before it could be used for specific purposes.

### Adolescent Alienation (Lacourse et al., 2003)

The model and measure developed by Lacourse et al. (2003) has some similar concerns as were specified for previously discussed models and measures of alienation. Lacourse et al. (2003) defined a structure of alienation that was conceptualized using Seeman's (1959) five dimensions of alienation, namely self-estrangement, powerlessness, social isolation, normlessness, and meaningfulness. Previous to this study, Seeman's (1959) five dimensions were modified by Mackey and Ahlgren (1977) and Mau (1992) so they could be applied to adolescent populations in the school context. Self-estrangement is defined as the discrepancy between actual and idealized self, powerlessness is defined as pessimism and the perception of losing control over one's life, social isolation is defined as the lack of intimate relationships which lead to a feeling of loneliness, normlessness is defined as belief that socially disapproved behaviours can achieve culturally defined goals, and meaningfulness is defined as an adolescent's belief that what they learn in school has little or no relationship with what they are going to do in the future (Lacourse et al., 2003).

Lacourse et al.'s (2003) model of alienation can be related to the present framework of alienation of having both psychological components and contextual domains as relevant to the definition and experience of alienation. The model implies that adolescent alienation is experienced by the psychological components of self-estrangement, powerlessness, social isolation, normlessness, and meaningfulness, since these are cognitive dimensions. In the model the contextual domains that are relevant for the experience of adolescent alienation are intimate relationships and school.

Lacourse et al.'s (2003) model of alienation was operationalized into a measure they used to examine adolescent alienation. Their measure was a shorter version of the questionnaire developed by Mau (1992) and they added three questions on self-estrangement, which were taken from Roberts (1987). The questionnaire was then reduced to 15 items in which each of the five dimensions of alienation had 3 items. Adolescent responses were examined by confirmatory factor analyses by one first-order and one second-order factor models separately for boys and girls. Lacourse et al. (2003) concluded that a general factor of alienation with five dimensions fits the data well. The results also showed that self-estrangement and powerlessness best defined alienation. Normlessness and meaninglessness were less related to alienation. Lacourse et al. (2003) stated that alienation is experienced as a loss in meaning of daily activities and as a feeling of powerlessness. Due to the results, it appears that self-estrangement and powerlessness best define adolescent alienation and these two dimensions can be viewed as psychological components and the contextual domains of intimate relationships and school were not specified within these two dimensions of adolescent alienation. According to the present framework of adolescent alienation, both psychological components and contextual domains should be specified within models of adolescent alienation. So the main concern regarding the Adolescent Alienation measure developed by Lacourse et al. (2003) is that the psychological components of self-estrangement and powerlessness, which were shown to best define alienation, are not defined to be experiences within any specific contextual domains. The present framework of adolescent alienation argues that this is a limitation of the model to just focus on feelings and to not relate these feelings to particular contexts.

## Main Problems with Existing Alienation Constructs & Measures

Although a number of models and measures assessing alienation have appeared, there are concerns with these models and measures. Some of the models are limited since they do not link alienation to enough key adolescent developmental events, which involve various specific situations (i.e., contextual domains) and various associated feelings (i.e., psychological components) in which alienation occurs (e.g., Dean, 1961; Lacourse et al., 2003; Seidel & Vaughn, 1991). Previously developed measures are limited since they: (a) have not been developed specifically for an adolescent population (e.g., Dean, 1961), (b) have outdated and/or confusing questions (e.g., Dean, 1961; Skerl, 1977), (c) are too long for large scale screening purposes (e.g., Skerl, 1977), (d) have different separately important contextual domains in one category (e.g., Skerl, 1977), and/or (e) are not published for an English population (Dong et al., 2002). These limitations are all reasons for developing a new framework of alienation, and thus a new measure of alienation. A new framework of alienation was developed for the present research to determine if alienation can best be viewed in terms of contextual domains and/or psychological components. Before this new framework of adolescent alienation is described in detail, specific contextual domains and psychological components will be reviewed.

### Foundation for a Theory of Alienation:

#### Differentiating Contextual Domains & Psychological Components

The preceding review of earlier research and theories on alienation illustrates the importance of both psychological components, such as feeling restricted or oppressed (Marx; Dong et al., 2002), self-estrangement or self-alienation (Dong et al., 2002;



Lacourse et al., 2003), powerlessness or sense of uncontrollability (Dean, 1961; Dong et al., 2002; Lacourse et al., 2003; Seeman, 1959; Skerl, 1977), normlessness (Dean, 1961; Seeman, 1959; Skerl, 1977), social isolation (Dean, 1961; Dong et al., 2002; Seeman, 1972), isolation or cultural estrangement (Seeman, 1959; Skerl, 1977), meaninglessness or sense of non-meaning (Dong et al., 2002; Seeman, 1959; Skerl, 1977), and sense of loneliness (Dong et al., 2002), and contextual domains, such as capitalism (Marx), society (Dean, 1961), interpersonal relationships (i.e., friends, peers, and opposite sex relationships) (Skerl, 1977), school or the classroom (Blumenkrantz & Tapp, 1977; Lacourse et al., 2003; Seidel & Vaughn, 1991; Skerl, 1977), family members (Skerl, 1977), and living situation (Dong et al., 2002), which conceptualize the central features and determinants of alienation, according to the present framework. For example, alienation consists “of a number of different subjective feeling states that emerge in the face of objective social conditions” (Young, 1985, p. 55). This means that alienation involves negative feelings one may develop due to being exposed to certain situations (i.e., specific relationships). The “feeling states” can be viewed as psychological components and the “social conditions” can be viewed as contextual domains. The saliency of this distinction was highlighted by Dean (1961, p. 757) who argued that alienation might not be “a personality ‘trait’, but a situation-relevant variable”.

Dean (1961) stated it is not just the experience of alienation but alienation is influenced by different contexts. Understanding alienation within a specific context is central to both understanding what alienation is but also central to measuring an individual’s level of alienation. Recall that for Marx, alienation was grounded in the

experience of exploited workers and in this sense, what it means to be alienated, is closely tied to this experience.

To view alienation as a personality construct or variable implies that the experience of alienation generalizes across contexts or situations (i.e., contextual domains). Although different experiences may contribute to feeling alienated, once an individual feels alienated, that experience is expected to transcend or pervade across different contexts. Irrespective of the context, an individual who feels alienated should experience the feeling of being alienated.

Viewing alienation as a personality construct has a number of implications for operationalizing the construct or measuring an individual's level of alienation. As a personality construct that generalizes across situations, it is sufficient to ask about an individual's general level of alienation, irrespective of the extent to which alienation is felt in different contexts. In this regard, the majority of models of alienation were constructed within a personality tradition (e.g., Seeman, 1959). If, however, alienation is viewed as a contextually dependent construct, this implies that the psychological components (e.g., loneliness) should be assessed within specific contexts (e.g., family). Then variability on scores for the psychological components should be examined by the scores for different contextual domains.

In essence, the key objective of the current dissertation is to develop and test a framework of alienation, in which the importance of both psychological components and contextual domains can be tested explicitly. In this regard, the key question concerns whether or not alienation should be assessed with respect to different psychological

components or if there is any advantage or utility to assessing alienation explicitly with regard to specific contextual domains.

To develop a relevant list of meaningful psychological components (e.g., loneliness) and contextual domains (e.g., family) much can be learned from carefully reviewing the existing research on alienation within a framework that differentiates psychological components and contextual domains. The purpose of the following review was to (a) examine the previous research on associations between alienation and contextual domains; (b) examine the previous research on associations between alienation and psychological components; and (c) identify the particular contextual domains and psychological components to use in the present framework of adolescent alienation.

#### Past Research on Associations between Alienation & Contextual Domains

According to the present framework of alienation, contextual domains are an essential feature of alienation. The specific contextual domains of people at school, friends, family, and boyfriend/girlfriend are examined. Whether these contextual domains showed associations to alienation in past research are reviewed. These contextual domains are examined since relationships with people at school, friends, and family are the relationships that adolescents experience the most conflict (Newman & Newman, 1976) and romantic relationships are large sources of stress for adolescents (Larson & Asmussen, 1991).

##### *People at School*

Studies have examined an association between alienation and student's relationships with people at school. For example, Baker (1983) examined an association

between classroom environment and alienation for gifted students. A negative association between classroom environment and alienation for the gifted students was shown. In another study conducted by Paulson (1984), junior high school students completed questionnaires on alienation and on their conceptualization of group affiliation within school. This study showed that students affiliated with different groups in school did experience different levels of alienation. In a third study by Seidman (1996), an association between alienation and people at school was examined for junior high school students. This study showed that alienation negatively predicted perception of school membership. In a different study conducted by Natvig (2001), junior high students completed measures on alienation, school stress, and bullying. It was shown that students who felt alienated from school had an increased risk of being bullied. From these four studies, there is a general association for alienated adolescents having issues with relationships with people at school, mainly in terms of affiliation, school membership, and having an increased risk of being bullied. In these studies, the school is the contextual domain in which alienation is experienced. However the definition of school differs between the various studies.

Skerl (1977) and Lacourse et al. (2003) are the main researchers who examined the context of school within an alienation measure. Skerl (1977) showed validity for the contextual domain of school. Lacourse et al. (2003) did not explicitly examine the context of school as a separate contextual domain but they instead implicitly examined the school context within the psychological components of normlessness and meaninglessness. It was shown that both of these dimensions were relevant for examining alienation (Lacourse et al., 2003). Since previous research has shown that

alienated adolescents have issues with people at school (Baker, 1983; Natvig, 2001; Paulson, 1984; Seidman, 1996) and the school context was relevant for examining alienation (Lacourse et al., 2003; Skerl, 1977), the contextual domain of school is important to use when developing a framework of adolescent alienation.

### *Friends*

There are a few studies that have examined the associations between alienation and relationships with friends and peers. Collins (1981) conducted a study that showed alienated high school students had difficulty with friendships. These difficulties included problems enjoying friendships, confiding in and discussing problems with friends, and feeling uneasy with other students. This study showed an association between alienation and friendships. This study is also an example of how alienation can be experienced by adolescents within the contextual domain of friends. In other studies, it was shown that adolescents with poor peer relationships have high scores on anxiety and depression (Gaspar de Matos, Barrett, Dadds, & Shortt, 2003) and emotional problems (Roychaudhury & Basu, 1998). Thus, adolescents who have difficulties with friendships are more alienated and have more emotional difficulties than adolescents without friendship difficulties.

Skerl (1977) is the only researcher who examined the context of friends within a model of alienation. However, the contextual domain of friends was within the larger context of interpersonal relationships. According to Skerl (1977), validity was not shown for interpersonal relationships (i.e., friends, peers, and opposite sex relationships) in his model. It is argued in this dissertation that if these interpersonal relationships were separate contextual domains in a framework of alienation, they may be shown to be

relevant. Since an association was established between relationships with friends and alienation for adolescents (Collins, 1981), friends are important and often conflictual relationships for adolescents (Newman & Newman, 1976), and the friend contextual domain was examined in a previous model of alienation (Skerl, 1977), it is argued that the contextual domain of friends is important to use in a framework of adolescent alienation.

### *Family*

Associations between alienation and family relationships have also been examined. Rutkowski (1979) examined the association between adolescent alienation and the adolescent's perception of their early relationship with their parents. This study provided evidence that there is an association between alienation and early parent-child relationship in terms of the factors of love, rejection, and affection between the parent and child at an early age. In this study, family is the contextual domain and the psychological components are love, rejection, and affection. It is unclear from this study whether it is the family contextual domain or the psychological components that are essential to the experience of alienation. In a study by Webb (1995), it was concluded that the family contributes to the amount of alienation experienced by adolescents and the family can be viewed as the contextual domain. Alienation was less in families with good communication, where at least one adult is seen as an authority figure, and where there is a certain level of satisfaction within the family (Webb, 1995). In a different study by Calabrese and Raymond (1989), associations between alienation and certain family factors were also examined. It was shown that adolescents from two-parent families who had a strong religious commitment were more alienated from their peers. However, from

this study it is unclear whether it is the context of family and/or religion that is specific to feeling alienated from peers. In these studies, the results consistently show associations between the context of family and feelings of alienation. In these studies, alienation was not always measured just within the specific context of family since there were other contexts and/or other components involved in the measurement.

In the alienation model developed by Skerl (1977), the context of family was included. Validity was shown for the family variable but it was not as strong as the school context. Skerl's (1977) model of alienation is the main alienation model that included the contextual domain of family in the model. Since associations were shown between the context of family and alienation for adolescents (Calabrese & Raymond, 1989; Rutkowski, 1979; Webb, 1995) and since the family context was examined in Skerl's (1977) model of alienation, it is argued that the family contextual domain is important to use in an adolescent alienation framework.

#### *Boyfriend/Girlfriend*

Alienation is negatively associated with positive relationships with people at school, friends, and family but there has been limited research on examining an association between alienation and romantic relationships. According to Larson and Asmussen (1991), romantic relationships are a large source of stress for adolescents. When there are disruptions in adolescent romantic relationships, this can have a negative affect on their well-being. Women in late adolescence, but not men in late adolescence, have higher levels of distress following rejection in a romantic relationship (Hammen, Burge, Daley, Davila, Paley, & Rudolph, 1995; Ayduk, Downey, & Kim, 2001). Studies on adolescent romantic relationships show that disruptions in these relationships can have

a negative effect on their emotional health, in particular for women. Even though it was shown that there is an affect on well-being following being rejected in a relationship, it is still important to examine if there is an association between the experience of alienation and romantic relationships. It would also be relevant to distinguish between the contextual domain of romantic relationships and the psychological component of rejection.

Skerl (1977) is the main researcher who noted the importance of romantic relationships in a model of alienation. Skerl (1977) included opposite sex relationships within the interpersonal relationships context. According to Skerl (1977), validity was not shown for interpersonal relationships (i.e., friends, peers, and opposite sex relationships). Again it is argued in this dissertation that if these interpersonal relationships were separate contextual domains in a framework of alienation, they may be shown to be relevant. Since romantic relationships are a large source of stress for adolescents (Larson & Asmussen, 1991), there is a higher level of distress following rejection in a romantic relationship (Hammen et al., 1995; Ayduk et al., 2001), and the opposite sex relationships context was examined in a previous model of alienation (Skerl, 1977), it is argued that the contextual domain of boyfriend/girlfriend is important to include in an adolescent alienation framework.

#### *Summary of a Foundation for Contextual Domains*

The previous review was to outline the important associations shown between alienation and people at school, friends, family, and boyfriend/girlfriend contextual domains. It was to also to summarize existing adolescent alienation models that included these contextual domains. From the previous research conducted on these areas, it is



argued that the people at school, friends, family, and boyfriend/girlfriend contextual domains are relevant to include in an adolescent alienation framework. There are undoubtedly numerous contexts in which individuals may feel alienated. Past research suggests that some of the key contextual domains to include are friends, family, peers, and romantic relationships. Although this may not represent all of the possible situations that may be important to understand adolescent alienation, it is argued to be appropriate for testing the relative importance of contextual domains versus psychological components. These contextual domains are examined since relationships with people at school, friends, and family are the relationships that adolescents experience the most conflict (Newman & Newman, 1976) and romantic relationships are large sources of stress for adolescents (Larson & Asmussen, 1991). These contextual domains were also selected in the present framework since they were often used in previous models of alienation that explicitly examined specific contextual domains (Lacourse et al., 2003; Skerl, 1977).

#### Past Research on Associations between Alienation & Psychological Components

According to the present framework of adolescent alienation, psychological components are an essential feature of alienation. In past research, the main psychological components used in alienation models have been based on Seeman's (1959) theory of alienation (i.e., powerlessness, meaninglessness, normlessness, isolation, and self-estrangement) or Seeman's (1972) revised theory of alienation (i.e., powerlessness, meaninglessness, normlessness, cultural estrangement, self-estrangement, and social isolation). It is believed that Seeman's model may be outdated, since it was first developed in the 1950's, and it is probably more relevant to use with the adult

population. Since it was not developed particularly for adolescents, it is argued that the psychological components used in a framework should be updated to describe the present feelings and issues that adolescents typically experience today. It is also argued that a framework for adolescents should describe the feelings and issues that adolescents deal with rather than those typically dealt with as adults.

The specific psychological components of feeling alone, being a target, not fitting-in, and feeling cut-off explored in this dissertation are argued to be relevant and distinct psychological components to adolescents at this present time and thus more relevant in a framework on adolescent alienation than the psychological components used in past alienation models. These psychological components that show associations to alienation in past research will be reviewed. There appears to be even less studies conducted on examining associations between alienation and these specific psychological components than there was with the contextual domains. Although some associations have been shown between alienation and these specific psychological components, there is not as much research as may be expected. In this section, the studies that examine these associations, as well as the alienation models that include these psychological components will be discussed.

### *Being Alone*

Loneliness can be defined as the affective response to a relational deficit (Johnson, 1982). Loneliness is a common problem for adolescents (Brage, Meredith, & Woodworth, 1993). In one study, 66% of junior high and high school students reported loneliness as being a problem (Culp, Clyman, & Culp, 1995). It was shown that loneliness was greater among younger participants, males, unemployed, and participants

whose parents divorced when they were young (Johnson, 1982). In this study, loneliness was positively associated with feelings of alienation, emotional isolation, social isolation, and social maladjustment. In a study conducted by Sexton (1983), alienation was associated with feelings of hostility, aggression, loneliness, rejection, and isolation for university students. In this study, loneliness is a psychological component in which alienation is experienced. Another study showed an association between peer-related loneliness and scores on depression measures (Koenig & Abrams, 1999). The adolescents who felt lonely from peers were more likely to have depressive symptoms. However it is unclear whether the psychological component of loneliness and/or the contextual domain of peers is what resulted in an association with depression scores to be shown. Loneliness is similar to the psychological component of being alone for the present dissertation.

The main alienation model that included the psychological component of being alone in an adolescent alienation model was developed by Dong et al. (2002). Dong et al. (2002) examined the factor structure of their alienation model and showed that the component of sense of loneliness was one of the nine dimensions in the second hierarchy of their model. Thus Dong et al. (2002) showed that the psychological component of loneliness is distinct and relevant in a model of adolescent alienation. It is argued for this dissertation that the being alone psychological component is important to include in a framework of adolescent alienation since feelings lonely is common for adolescents (Brage et al., 1993; Culp et al., 1995) and associated with other negative emotions (Koenig & Abrams, 1999), in particular with feelings of alienation (Sexton, 1983). The being alone psychological component is also relevant in a framework of adolescent

alienation since Dong et al. (2002) showed that sense of loneliness was relevant and distinct in their model.

### *Being a Target*

Previous research on adolescents being a target, especially by people at school and friends, appears to be similar to the experience of being bullied. Olweus (1993, p. 9) defined bullying as when a student is “exposed, repeatedly over time, to negative actions on the part of one or more students”. Bullying in adolescence is a common experience and a common problem. In 2002 a Canadian sample collected by the World Health Organization Health and Behaviour Survey of School-Aged Children (JHBSC) for children and adolescents aged 11 to 15 years showed that one-third of boys and one-quarter of girls self-reported having been bullied within the last six weeks. It also showed that 54% of the boys and 32% of girls who reported being a victim or a bully reported associated various difficulties (Craig & Yossi, 2004). For example, victims of bullying report behavioural, social, and emotional problems, such as depressed mood and suicidal ideation (Lipman, 2003). The more extensive the victimization or bullying, the more likely an adolescent will be part of a high-risk group (Craig & Pepler, 2003).

Adolescents who experience bullying are more likely to experience associated negative emotions. In a study that investigated the emotional reactions associated with bullying in students showed that victims of bullying experienced feelings of vengeance, anger, and self-pity (Borg, 1998). Bond, Carlin, Thomas, Rubin, and Patton (2001) conducted a study examining emotional impact of being bullied in students who were surveyed twice in Grade 8 and once in Grade 9. Results showed that symptoms of anxiety and depression in Grade 9 were associated with being a victim in

Grade 8 at either the first or the second survey. Results also showed that after adjusting for sociodemographic factors, recurrent victimization was still predictive of anxiety and depression symptoms for girls (Bond et al., 2001). Roland (2002) conducted a study examining bullying in Grade 8 students. Results showed that victims of bullying reported more depressive symptoms but bullies reported more suicidal thoughts (Roland, 2002). Previous cross-sectional studies showed that victims of bullying by peers is associated with higher psychological distress, less social adjustment, and adverse health symptoms and previous longitudinal studies showed that peer bullying is a causal factor in lowering children's health and well-being and these effects can be long-lasting (Rigby, 2003). Thus an adolescent who is bullied may have emotional difficulties, such as feeling vengefulness, anger, self-pity, anxious, depressed, and/or distress.

Bullying research needs to not only examine the individual adolescent and associated negative emotions, but also needs to examine the family, peers, school, and community (Craig & Pepler, 2003). Champion (1998) compared victims of bullying and non-victims. Victims rated higher levels of conflict in friendships than non-victims. Ninth grade adolescent boys who identified more with their peer group were less likely to be bullied and also less likely to bully. Other factors that also affect the amount of bullying behaviours included family relationships and type of child-rearing environment. Thus friendships, peers, and family relationships all have associations with bullying in adolescents. The relevance of bullying is mainly viewed in terms of friends/peers. However research has shown the importance of other contexts for bullying, such as family. Therefore it is important to examine bullying (i.e., being a target) in various contexts, in particular when examining this component in an adolescent alienation model.

In this dissertation, the being a target psychological component is being compared to the construct of bullying. Presently bullying is a very important area of adolescent research and thus it is argued that this component is important to include in the present framework of adolescent alienation. There has not been a model of adolescent alienation that has included being a target or bullying as a psychological component. It is argued that the psychological component of being a target is important to include in a framework of adolescent alienation since it has been shown to be associated with various negative feelings and negative outcomes (Bond et al., 2001; Borg, 1998; Champion, 1998; Craig & Pepler, 2003; Rigby, 2003; Roland, 2002) and also the various contexts of friends, peers, and family are associated with bullying. However, previous adolescent alienation research has not shown the importance of the being a target psychological component in a model of adolescent alienation and thus it has not been shown how this psychological component is distinct from other psychological component. In this dissertation, it will be examined if the being a target psychological component is relevant to include in a framework of adolescent alienation. It is also examined whether the being a target psychological component is distinct from other psychological components.

#### *Not Fitting-In*

Adolescents usually want to feel like they fit-in with their peers and to be popular in school. In a survey on how worried adolescents felt about not fitting-in with others at school, 48% were not at all worried, 28% were a little worried, 15% were a fair amount worried, and 10% were very worried about not fitting-in (Herkimer County Risk Assessment Profile, 2000). Fitting-in is closely related with popularity for adolescents. For adolescents who are unstable introverts, they see themselves as less happy and less

popular than other students (Young & Bradley, 1998). In another study, it was shown that peer pressure, peer conformity, and popularity were all related for adolescents but that peer pressure and peer conformity more strongly predicted risk behaviours than popularity (Santor, Messervey, & Kusumakar, 2000). In conclusion, fitting-in with peers is a concern for some students, but it does not strongly predict risk behaviours and it is not a major issue unless an adolescent also has other issues (e.g., is an unstable introvert). However, it is unclear if it is the psychological component of not fitting-in that is relevant and/or the contextual domain of peers.

The sense of not fitting-in is closely related to the struggle of adolescents between group identity and individualization (Newman & Newman, 2001). This struggle between group identity and individualization occurs in early adolescence and involves a psychosocial conflict between allying oneself with specific groups and learning to be comfortable functioning as a member of a group (Newman & Newman, 1999). Group identity refers to connections with social groups and individualization refers to the process of being an individual. It is argued that if an adolescent does not feel part of a group, they feel they do not fit-in. The psychological component of not fitting-in is relevant to include in a model of adolescent alienation since if adolescents do not develop with a group, they feel they do not fit-in, which is argued is an important component of adolescent alienation. This psychological component is argued to be relevant to include in an adolescent alienation framework, even though there has not been an alienation model that has included this component. The not-fitting-in psychological component is relevant to include in an adolescent alienation model since the process of group identity is a developmental process during adolescence (Newman & Newman, 2001). In this

dissertation, it will be examined if the not fitting-in psychological component is relevant to include in the proposed framework of adolescent alienation. It is also examined whether the not fitting-in psychological component is distinct from other psychological components.

### *Being Cut-Off*

Previous research on being cut-off has been examined mainly as the concepts of rejection and social isolation. Rejection is the loss of a meaningful relationship. Social isolation is being excluded or rejected instead of being socially accepted (Seeman, 1972). Rejection and social isolation can have many associated negative effects on a person's well-being. For example, interpersonal rejection has a negative impact on self-worth (Sommer, 2001). Other associations of being rejected are lower self-esteem, loneliness, social anxiety, depressive symptoms, jealousy, negative cognitive processing, and being withdrawn (Kelly, 2001). People have negative emotions following being rejected or excluded. Identified moderators of rejection are rejection sensitivity, self-esteem, narcissism, attachment style, social anxiety, social support, depression, and gender (Kelly, 2001). These associations have been shown for adults but not for adolescents.

Although the above results were based on adults, there is research also on the impact of interpersonal rejection on children and adolescents. In a study with seventh- and eighth-graders, aggressiveness, submissiveness, and low levels of prosocial behaviours were associated with peer rejection. However, in this study it is unclear if it is the psychological component of rejection and/or the contextual domain of peers that is relevant for the association with aggressiveness, submissiveness, and low prosocial behaviours. In a study involving adolescents, parental rejection was associated with



shame in males but not females and parental acceptance predicted personal hopefulness better than social desirability (Hodgkins, 2001). Again it is unclear if it is the psychological component of rejection and/or the contextual domain of parents that is the most relevant to these associations. Lopez (2002) conducted a study with junior high school students to examine a relationship between peer victimization, peer rejection, and self-esteem. This study showed a direct effect of peer rejection on global self-esteem but is it the experience of feeling rejected or is it the context of peers that affect self-esteem? In a study that involved adolescents, the consequences of long-term rejection in school was examined and the results showed that for male adolescents, poor performance in physical education, and internalizing problems at baseline predicted rejection at follow-up (Laukkanen, Pölkki, Oranen, Viinamäki, & Lehtonen, 2002). In a study conducted by Sexton (1983), university students completed measures of alienation and personality traits and alienation was associated with feelings of hostility, aggression, loneliness, rejection, and isolation (Sexton, 1983). In a study by Bond (1990), social alienation led to feelings of isolation, frustration, rejection and/or depression for aggressive children. The main associations for adolescents experiencing rejection include: aggression, submissiveness, low prosocial behaviours, shame, self-esteem, poor performance in physical education, internalization of problems, and alienation. However, it is unclear if it is the experience of rejection (i.e., psychological component of being cut-off) and/or the contexts of peers and family that are important. It is also important to point out that it is difficult to separate feelings of being rejected from the context these feelings are experienced since a person experiences feeling rejected within the context of a relationship with someone else.

The psychological component of social isolation, which is similar to the psychological component of being cut-off, has been included in various models of alienation, such as those by Dean (1961), Dong et al. (2002), and Seeman (1972). All of these researchers, except for Seeman (1972), developed an alienation measure. Dean (1961) showed that the social isolation component of alienation significantly correlated with the total alienation score for an adult sample. Dong et al. (2002) tested the factor structure of their alienation model and they showed that social isolation was a second-order component in their model of alienation for adolescents. These two models of alienation showed that social isolation was relevant to include in a model of alienation and it is distinct from other psychological components. Since rejection/social isolation (i.e., being cut-off) for adolescents was shown to be associated with various negative outcomes including alienation, social isolation is relevant to include in a framework of alienation, and social isolation is distinct from other psychological components (Dean, 1961; Dong et al., 2002), it is argued that the psychological component of being cut-off is relevant to include in a framework of adolescent alienation.

#### *Summary of a Foundation for Psychological Components*

The previous review was to outline the important associations shown between alienation and the psychological components of being alone, being a target, not fitting-in, and being cut-off, and the existing adolescent alienation models that included these psychological components. From the previous research conducted on these areas, it is argued that the being alone, being a target, not fitting-in, and being cut-off psychological components are relevant to include in a framework of adolescent alienation. There are various components in which adolescents may feel alienated. Although this does not

represent all of the possible psychological components that may be important to understand adolescents feeling alienated, it was considered to be appropriate for examining the relative importance of psychological components versus contextual domains in a framework of adolescent alienation. These psychological components are examined since they have shown to be associated with various mental health outcome measures. These psychological components are also examined since the being alone and being cut-off psychological components were associated with alienation and were distinct psychological components in models of alienation.

*Summary of a Foundation for Contextual Domains & Psychological Components*

The previous results are consistent with the proposed framework that differentiates contextual domains and psychological components. However, it is unclear from many of the studies whether it is the contextual domains and/or the psychological components are essential. Because of this, it is not possible to understand the importance of the psychological components within the contextual domains. It is also important to distinguish between the contextual domains from the psychological components. This is important to determine whether contextual domains or psychological components are most relevant to the experience of alienation. If alienation is experienced by contextual domains, then alienation can be viewed as a situation-specific construct. If alienation is experienced by psychological components, then alienation can be viewed as a personality construct and implies that the experience of alienation generalizes across contexts or situations.

### Present Research on Adolescent Alienation

The present dissertation research on adolescent alienation differs from previous research since no other research has explicitly differentiated psychological components and contextual domains. This research discusses the potential importance of investigating alienation in respect to both psychological components and contextual domains. If it is shown to be valid to examine alienation in this respect then this framework of alienation is both psychological and contextual/situational. This would mean that if an individual feels alienated, it depends on both identifying the situation as well as the manner in which it is experienced. Thus the importance of psychological components and contextual domains are: understanding the psychological and situational portions of alienation, having significant implications of designing a measure of alienation, and having implications of the impact of alienation on adolescents. The Adolescent Alienation Questionnaire (AAQ) was developed for the current research to test the proposed framework of adolescent alienation and to assess the experience of adolescent alienation. Previous research has not examined adolescent alienation in this way.

### Overview of the Present Research

The present research is comprised of three main areas, namely, (a) the structure of alienation, (b) the stability of alienation, and (c) the impact of alienation on well-being and functioning. Two studies are conducted to examine these three main areas of research. The main objective of Study 1A is to explore the structure of alienation. Study 1A also examines the stability and impact of adolescent alienation. The objective of Study 1B is to explore the stability of adolescent alienation. Study 2 mainly examines

the impact of adolescent alienation and also explores the stability of adolescent alienation.

### Structure of Adolescent Alienation

#### *Theory of the Structure of Adolescent Alienation*

Although there are a number of alienation constructs, they have a number of shortcomings. The main shortcoming of past alienation constructs is they usually do not link alienation to a number of specific situations (i.e., contextual domains) and a number of associated feelings (i.e., psychological components) in which it is proposed that alienation occurs. According to Marx, alienation is a process between the self and the social system of capitalism. This early construct of alienation is defined with both a psychological component (i.e., feeling restricted) and a contextual domain (i.e., capitalism), which is argued to be important for alienation to occur. Marx's view of alienation can be related to the present framework that both psychological components and contextual domains are important for alienation to occur, and this framework is important for understanding other alienation constructs developed and to attempt to define alienation. It is argued that a good alienation measure must be able to be defined in terms of a number of psychological components and a number of contextual domains.

Marx defined a good alienation construct, for its purpose, since it can be distinguished with both a psychological component and a contextual domain. However, Marx did not develop a measure of alienation that can be relevant for various purposes. Other researchers have developed constructs and measures of alienation but they have various shortcomings, which were previously reviewed. For example, Dean's (1961) Alienation Scale only has various psychological components and does not have

contextual domains other than society. Skerl's (1977) Measurement of Adolescent Alienation is a good model for alienation since it examined alienation according to the present framework of alienation composing of both a number of psychological components and a number of contextual domains. However, the two main problems with Skerl's measure of alienation are that many of the questions are confusing and different separately important contextual domains (friends, peers, and opposite sex relationships) were in one category (interpersonal relationships). The main problem with most of the existing alienation models and measures is that they are not usually based on both a various number of psychological components and a various number of contextual domains. It is argued that a good alienation measure must be able to be defined in terms of both a number of psychological components and a number of contextual domains. A new framework of alienation was developed to determine if alienation is best viewed in terms of various contextual domains and/or psychological components, and different models using this framework were tested.

The present theoretical framework conceptually defines alienation and forms the basis of a new measure, which was developed to address the limitations with the existing measures. This new theoretical framework of adolescent alienation integrates two broad concepts, psychological components and contextual domains, which have been implicit in past research but not formally distinguished or validated. The present framework of adolescent alienation consists of psychological components and contextual domains and is composed on the basis of past research (e.g., Dong et al., 2002; Newman & Newman, 1976, 2001; Skerl, 1977). The four psychological components are: (a) being alone: not spending time with others, being abandoned and isolated, (b) being a target: the

occurrence of being made fun of and teased by others, (c) not fitting-in: being disliked, seen as different, or seen as uninteresting by others, and (d) being cut-off: the occurrence of being ignored, rejected, or excluded by others. For this dissertation, the specific psychological components of feeling alone, being a target, not fitting-in, and feeling cut-off are thought to be updated psychological components to adolescents at this present time and thus relevant in a framework on adolescent alienation. These psychological components are operationalized in four contextual domains, people at school, friends, boyfriend/girlfriend, and family, which are the main relationships adolescents experience conflicts and stress (Larson & Asmussen, 1991; Newman & Newman, 1976).

The proposed framework of adolescent alienation is depicted by two possible models in Appendix A and Appendix B. These models imply that the psychological components could be manifested in the contextual domains or the contextual domains could be manifested in the psychological components. In these models, the measured variables will be referred to as “packets”, in which there are 16 of them. The packets are indicators and are not latent variables in the models analyzed. Each packet is a summed variable of the corresponding four questions. There are various reasons to use these packets in various analyses. First, these packets are subscales of the contextual domains and psychological components and are thus meaningful. If internal consistencies are shown for the packets, then this will provide additional support for the importance of the packets. These packets impose structure onto the models of alienation and this will allow the confirmatory factor analyses to be more meaningful. The four psychological components or contextual domains are the first-order factors and alienation is the second-order factor in the models.

The proposed theoretical framework of alienation has some similarities and differences from previously developed models. One difference is that most of the existing models of alienation do not explicitly define alienation in terms of psychological components or contextual domains. Another difference is that the psychological components in the proposed framework mainly differ from Seeman's (1959) five dimensions of alienation, which are used in many models of alienation (Dean, 1961; Kohn, 1969; Lacourse et al., 2003; Skerl, 1977); however social isolation is similar to the psychological component of being cut-off. Other models do not define alienation in terms of psychological components but do have some contextual domains that are similar to the proposed framework. Seidel and Vaughn (1991) have the contextual domains of friends and people at school in their measure. Skerl's (1977) psychological components are based on Seeman's (1959) model of alienation and also include the contextual domains of school, family, and interpersonal relationships. These contextual domains are similar to the contextual domains of people at school, family, friends, and romantic relationships in the proposed framework of alienation. Other measures have some of the psychological components and contextual domains that are in the present framework. For example, Dong et al. (2002) has a psychological component of loneliness and has the contextual domain of family. It can be seen that there are similarities and differences between previous models and the present framework of adolescent alienation.

From this comparison of psychological components and contextual domains in the proposed framework of alienation to existing models of alienation, the present framework is most similar to the models proposed by Skerl (1977) and Dong et al. (2002). However, comparing the present framework to these two specific models, there are still very



distinct differences. For example, the present framework views alienation as a multi-dimensional construct consisting of a number of psychological components (e.g., being alone, being a target, not fitting in, and being cut-off) and a number of contextual domains (e.g., people at school, friends, boyfriend/girlfriend, and family).

*Objectives & Hypotheses on the Theory of the Structure of Adolescent Alienation*

The main shortcoming of past alienation constructs is that they do not explicitly link alienation to a number of specific situations (i.e., contextual domains) and a number of associated feelings (i.e., psychological components) in which alienation occurs. The main reason for conducting Study 1A is to test the proposed framework of alienation by examining various models of this framework.

There are some logical questions regarding the structure of the present framework of alienation. Do all four psychological components and four contextual domains differentiate or assess a single unitary construct? Will all four psychological components and all four contextual domains be relevant in a model of alienation or will only a certain number of these dimensions be relevant? Is the structure of alienation defined mainly by the psychological components (see Appendix A) or contextual domains (see Appendix B)? These questions regarding the structure of alienation will be examined with principle components analyses and confirmatory factor analyses. Examining psychological components and contextual domains offers the opportunity to examine the extent to which various psychological components are specified within certain contextual domains or visa versa.

How the structure of this alienation framework is defined carries both theoretical and practical implications. If the contextual domains are defined by the psychological

components of alienation (see Appendix A), then conceptually alienation is psychological in nature, and may support the notion that alienation is a personality trait, and this will provide support for adolescents being more alienated for a certain state (e.g., being a target) than a different type of state (e.g., being cut-off). Alternatively, if the psychological components are defined by the contextual domains of alienation (see Appendix B), then conceptually the nature of alienation is determined by certain relationships and may support the notion that alienation is situation-specific. Thus certain people in their life (e.g., family) alienate adolescents more so than other predominate people (e.g., boyfriend/girlfriend). Each of the two possible results will also support different implications for treatment. In other words, psychological components factors will support the implication of an individualized treatment approach and contextual domains factors will support the implication of a systems treatment approach.

The first objective of the present research is to examine the structure of adolescent alienation. The first method the structure of alienation is examined is to show that the packets, contextual domains, and psychological components correlate with each other. In particular it is hypothesized that for Study 1A and 1B, the 16 packets will significantly correlate with each other, the four psychological components will correlate with each other, the four contextual domains will correlate with each other, and all of the psychological components and contextual domains will correlate with total alienation (Hypothesis 1). For Study 2, it is hypothesized that at each time interval over all the participants, all of the psychological components and contextual domains will significantly correlate with total alienation (Hypothesis 2). Another method to examine the structure of adolescent alienation is by conducting principle components analyses in

Study 1A. One analysis is conducted on participants without a boyfriend or girlfriend and the second analysis is conducted on participants with a boyfriend or girlfriend. It is hypothesized that the principle components analyses for participants without a boyfriend or girlfriend and for participants with a boyfriend or girlfriend will show that most of the questions for a certain psychological component or for a certain contextual domain will have factor loadings in separate factors (Hypothesis 3). The structure of adolescent alienation is also examined by confirmatory component analyses in Study 1A. Three confirmatory factor analyses are conducted and they examine: 1) a first-order single factor model of alienation with 16 packets; 2) a second-order four factor contextual domains model of alienation (see Appendix B); and 3) a second-order four factor psychological components model of alienation (see Appendix A). It is hypothesized that the factor structure of alienation will support a multidimensional view of alienation and will support one of the two second-ordered proposed models of alienation (Hypothesis 4). The last way the structure of adolescent alienation is examined is by internal consistencies for the AAQ in Study 1A and Study 2 at month 1. It is hypothesized that high internal consistencies will be shown for the AAQ in Study 1A and Study 2 at month 1 (Hypothesis 5).

#### *Analytic Method for Examining Structure of Adolescent Alienation*

The structure of the AAQ is first explored by computing correlations between the 16 packets, four contextual domains, four psychological components, and total alienation. To examine the specific structure of adolescent alienation, the analytic methods to be used are principle components analyses, confirmatory factor analyses, and internal consistencies. Principle components analyses are used to find the set of factors that

account for all the common and unique variance of the variables. Confirmatory factor analyses are used to compare alternative models of alienation in terms of their overall agreement with the data. Internal consistencies are examined by Cronbach alpha coefficients to assess the consistency of results over time.

### Stability of Adolescent Alienation

#### *Theory of the Stability of Adolescent Alienation*

In addition to examining the relevance of all of the psychological components and contextual domains for adolescent alienation, it is also important to examine the stability of adolescent alienation over time for adolescents. It is proposed that adolescent alienation is stable over a certain amount of time (e.g., months) but it probably is not stable over a long time (e.g., years). It is argued that alienation should show test-retest stability. When test-retest stability is shown, there is temporal stability of the construct. Previous research has shown that some adolescent alienation measures have reliability. Skerl (1977) showed that the Measurement of Adolescent Alienation showed good internal consistencies. The ASAS was shown to have good test-retest reliability (Dong et al., 2002).

#### *Objective & Hypotheses on the Stability of Adolescent Alienation*

The second objective is to examine the stability of adolescent alienation in both studies. The main purpose of Study 1B is to examine the temporal stability of adolescent alienation. It is hypothesized that the four contextual domains, the four psychological components, and the total AAQ score will show good test-retest from Study 1A to Study 1B (Hypothesis 6). This will support stability. The stability of adolescent alienation is also examined in Study 2 by test-retest reliability of the AAQ. It is hypothesized that the

AAQ will show high test-retest reliability between month 1 and month 2 over all the participants (Hypothesis 7).

#### *Analytic Method for Examining Stability of Adolescent Alienation*

The stability of alienation is examined in Study 1 and 2. Stability is examined by test-retest reliabilities. Correlations between two sets of the same type of alienation data on the same participants will be calculated to examine the stability of alienation.

#### Impact of Adolescent Alienation on Functioning

##### *Theory of the Impact of Adolescent Alienation on Functioning*

Alienation is viewed as a vulnerability factor for negative mood states, high-risk behaviours, and other psychological concepts. This framework delineates the manner in which alienation is related concurrently and prospectively to mental health outcomes (e.g., depression and anxiety). In the present research it is proposed that the level of alienation experienced will differ between the three groups of participants of comparison, self-harm, and distressed groups.

This proposed framework argues that adolescents who are alienated are vulnerable to negative mood states, which is hypothesized to be a consequence of alienation. This framework also suggests that adolescents who experience extreme levels of alienation are vulnerable to acts of high-risk behaviours, but this is mediated by negative moods (Baron & Kenny, 1986). In the present research, it is proposed that negative mood states mediate the relationship between alienation and high-risk behaviours (e.g., self-harm behaviours, suicide ideation) (see Appendix C).

There are very few studies examining mediator relationships involving alienation for adolescents. The couple of studies will be discussed. In a study with juvenile

delinquents, it was shown that alienation mediated the relationship between school-related experiences and association with delinquent peers, and alienation mediated the relationship between school-related experiences and delinquent behaviour (Sankey & Huon, 1999). In another study with eighth-graders, O'Donnell (2002) showed that the alienation dimension of normlessness mediated between community violence exposure and high-risk delinquent behaviours, and between community violence exposure and psychoemotional maladjustment. In this study it was also shown that the alienation dimension of isolation/self-estrangement mediated the relationship between violence exposure and psychoemotional maladjustment (O'Donnell, 2002). Most of the research that examined alienation as the mediator but the present research hypothesizes that depressed mood mediates the relationship between alienation and self-harm behaviours. The past mediating relationships with alienation show how alienation is related to other outcome measures, but more research needs to be conducted in this area.

*Objective & Hypotheses on the Impact of Adolescent Alienation on Functioning*

The third objective is to examine the impact of adolescent alienation in Study 1A and Study 2. First it is examined whether adolescent alienation predicts certain outcome measures. In Study 1A and Study 2, it is hypothesized that some, but probably not all, of the contextual domains and psychological components will predict each of the outcome measures (Hypothesis 8). In particular it is hypothesized that one of the psychological components or one of the contextual domains will be the most predictive of depressed mood in Study 1A (Hypothesis 9). If a contextual domain is the most predictive of depressed mood, the family or people at school contextual domain will probably be the most common predictor(s) of most of the outcome measures. This may be shown since

adolescents who feel alienated are more likely to be from families that are not functioning well (Daugherty & Linton, 2000), have a negative perception of school membership (Seidman, 1996), and have an increased risk of bullying if they feel alienated from school (Natvig, 2001). If a psychological component is shown to be the most predictive of depressed mood, the being alone contextual domain will probably be the most predictive since feelings of loneliness are related to depressed mood in adolescence (Joiner, Lewinsohn, & Seeley, 2002).

Study 2 examines the impact of adolescent alienation on outcome measures. It is hypothesized that the total alienation over all the participants will significantly correlate with all of the outcome measures of hopelessness, depressed mood, suicidality, negative events, stress, and aggression (only month 6 and month 12) at each time interval (Hypothesis 10). When examining the impact of alienation, it is also important to examine how adolescent alienation differs between the three groups of participants at the different months for Study 2. It is hypothesized that at each month, the self-harm group will be experiencing a higher level of alienation than the comparison group, the distressed group will also be experiencing a higher level of alienation than the comparison group, and the self-harm group will be experiencing more alienation than the distressed group (Hypothesis 11). It is hypothesized that the self-harm group will experience more alienation than the distressed group since it was suggested that alienation is a common characteristic of self-harm behaviours (Walsh and Rosen, 1988). However, Walsh and Rosen (1988) did not explicitly examine this hypothesis.

Study 2 also examines the impact of alienation by testing two mediation models, which are depressed mood mediating the relationship between alienation and suicidality,

and alienation mediating the relationship between depressed mood and suicidality (see Appendix C). It is hypothesized that depressed mood mediating the effect between alienation and suicidality will be supported and this mediation model will show a better reduction in the variance explained than the other mediator model (Hypothesis 12). These mediation models will provide support for the sequencing of alienation and will provide support that alienation is an important construct.

Lastly, the impact of alienation in Study 2 is examined by seeing which month 12 outcome measures can be predicted from month 1's alienation scores over all the participants. It is hypothesized that month 1 alienation will predict month 12 depressed mood and suicidality (Hypothesis 13). Hypotheses are not stated for month 1 alienation predicting hopelessness, negative events, stress, and aggression.

#### *Analytic Method for Examining Impact of Adolescent Alienation on Functioning*

To examine the impact of adolescent alienation on functioning in Study 1A, hierarchical regression analyses are used to predict outcome measures. In Study 2, hierarchical regression analyses are also used to predict outcome measures. Proc mixed analyses are used to show differences in alienation between groups. Lastly, regression analyses are used to examine two mediation models and then to examine which month 12 outcome measures can be predicted from month 1's alienation scores over all the participants.

#### Validating Adolescent Alienation on Functioning

An important area of adolescent alienation research is how it impacts on well-being and functioning. Past research has examined the impact of alienation on various aspects of functioning. The most relevant areas, in relation to the present research, are



depressed mood, self-harm behaviours, hopelessness, suicide ideation, negative events, stress, and aggression. The past research conducted on the impact of adolescent alienation on these various aspects of functioning will be reviewed separately to validate the areas examined for the impact of alienation for adolescent in the present studies.

#### Impact of Adolescent Alienation on Depressed Mood

Various studies have examined the relationship between alienation and depressed mood. In a study by Bush (1982), alienation was strongly correlated with depression in a sample of graduate students. Torres-Rivera (1989) measured alienation, depressive symptomatology, and negative events at two time periods separated by two months in a sample of university students. In this study, participants with high depression scores had significantly higher alienation scores. The objective of the study by Abdallah (1997) was to develop an Arabic version of the Student Alienation Scale (Mau, 1992). Students between the ages of 14 to 21 years of age completed various measures. There was an association between alienation and depressed mood. These three studies showed similar findings that there is an association between alienation and depressed mood.

#### Impact of Adolescent Alienation on Self-Harm Behaviours

Formally, self-harm is defined as “deliberate, non-life-threatening, self-inflicted bodily harm or disfigurement of a socially unacceptable nature” (Walsh & Rosen, 1988, p. 10). The main theory for self-harm is a desire to perform injury to oneself to relief emotional pain (Pattison & Kahan, 1983). Walsh and Rosen (1988) suggest that alienation is a common characteristic of self-harm behaviours; however this hypothesis is lacking detailed research. In one study, (Walsh, 1987 as cited in Walsh & Rosen, 1988) adolescents who self-harmed and those who do not self-harm in a treatment setting were

compared on the occurrence of childhood and adolescent factors. The groups did not differ in terms of age, psychiatric diagnosis, and length of in-patient treatment. This study found four childhood factors (placement/divorce, physical/sexual abuse, illness/surgery, and family violence/alcohol abuse) and four adolescent factors (recent loss, body alienation, peer conflict/activity, and substance abuse) that were significantly associated with self-harm behaviours (Walsh, 1987 as cited in Walsh & Rosen, 1988). This study also showed that the most predictive factors of self-harm behaviours were body alienation, followed by childhood loss, and then physical/sexual abuse.

In another study examining the relationship between alienation and self-harm behaviours, Shea (1993) compared male prisoners who self-harm to those who do not self-harm. These prisoners completed the MMPI (Hathaway & McKinley, 1970). The results of the study showed that the prisoners who self-harmed had more somatic complaints, subjective distress, immature defenses, acting-out behaviours, and alienation than the other prisoners. The studies conducted by Walsh (1987 as cited in Walsh & Rosen, 1988) and Shea (1993) are a start for examining the relationship between alienation and self-harm behaviours in adults but more research in this area is needed. Walsh and Rosen (1988) suggest that alienation is a common characteristic of self-harm behaviours for adolescents but this has not been explicitly examined.

#### Relationships between Alienation, Depressed Mood, & Self-Harm Behaviours

Identifying and treating emotional problems, such as depression, is an important area of research in adolescents. Studies show that depression increases during adolescence by three to ten fold (Fleming, Offord, & Boyle, 1989; Lewinsohn, Clarke, Seeley, & Rohde, 1994; Offord, Boyle, Szatmari, & Rae-Grant, Links, Cadman, Byles,

Crawford, Blun, Byrne, Thomas, & Woodward, 1987). Depressed adolescents can have fewer friends and fewer sources of support (Klein, Lewinsohn, & Seeley, 1997), which can result from alienation and contribute to ultimately high-risk behaviours, such as aggression and self-harm behaviours. Relationships between alienation, depressed mood, and self-harm behaviours have not been examined in adolescence; however it is an area of research that should be examined.

#### Impact of Adolescent Alienation on Hopelessness

There is a lack of research examining a relationship between alienation and hopelessness in adolescence. There has been one study examining this relationship for gay HIV+ men. Olivier (1998) examined the relationship between existential guilt, hopelessness, loneliness, and alienation in gay HIV+ males. Results showed that hopelessness is a mediator between existential guilt and alienation and loneliness, which means that the relationship between existential guilt, alienation, and loneliness is due to having a shared commonality with hopelessness. The results also showed that as hopelessness increased, alienation and loneliness also increased. Lastly, high levels of hopelessness were associated with high levels of alienation and loneliness above levels of existential guilt. This study is the beginning for research examining the role of hopelessness in experiencing alienation, but more research is needed in this area for adults and adolescents.

#### Impact of Adolescent Alienation on Suicidal Ideation

Young (1985) theorized that adolescent suicide is a clinical manifestation of alienation, in which alienation is a social pathology. Calabrese (1987) stated that alienated adolescents are prone to complete suicides. To examine the relationship

between alienation and attempted suicide, Wenz (1979) had adolescents who attempted suicide complete an alienation measure. In a multiple regression, the following variables were found to be predictive of alienation: social contact with peers in the neighborhood, conflict with parents, broken romance, economic status of parents, communication blockage with parents, school performance, stepparents, and coming from a broken home. Lacourse, Claes, and Villeneuve (2001) showed that the dimensions of self-estrangement and powerlessness of alienation were associated with suicidal risk after controlling for the alienation dimensions of social isolation, normlessness, and meaninglessness. These two studies are the beginning of research on examining suicidality and alienation. Further research needs to be conducted examining the relationship between alienation and suicidality in adolescence.

#### Impact of Negative Events on Adolescent Alienation

There appears to be an association between the number of negative events experienced and the amount of alienation felt. In the study by Torres-Rivera (1989), which was described under the depressed mood section, there was a relationship between alienation at Time 1 and negative events at Time 2 for female university students. In a study conducted by Seidman (1996), described previously under the contextual components section, showed that stressful life events were associated with increased alienation. More research needs to examine how negative events may or may not influence level of alienation, especially for adolescents.

#### Impact of Adolescent Alienation on Stress

Manderscheid et al. (1976) theorized that when a person experiences alienation, there is a cybernetic feedback to reduce the experienced level of stress; however this was

not tested. Daugherty and Linton (2000) showed an association between alienation and stress level. Besides this one study, there is a lack of research examining an association between stress level and alienation, especially when stress is measured differently than negative events.

### Impact of Adolescent Alienation on Aggression

Aggression can be described in various forms, such as simple disruptive behaviours in the classroom to violent acts. As mentioned previously, Bond (1990) showed that for aggressive children, social alienation led to feelings of isolation, frustration, rejection and/or depression. Alienation was shown to be positively correlated with truancy and disruptive behaviours (Williamson & Cullingford, 1998). Sankey and Huon (1999) examined causal pathways to delinquency; in particular the role of alienation to delinquency was tested for adolescents. The results showed that alienation had a mediating role in explaining delinquency. In another study on delinquent adolescents, incarcerated adolescents were compared to non-incarcerated adolescents by completing an alienation measure. The incarcerated adolescents had higher levels of total alienation, isolation, and powerlessness (Calabrese & Adams, 1990). In the last study describing the relationship between alienation and aggression, Slater (2003) examined if alienation, aggression, and sensation seeking could predict the use of violent films and violent websites. It appeared that alienation contributed to the use of violent websites. Alienation from school and family also appeared to somewhat mediate the effects of sensation seeking and aggression on the use of violent internet content (Slater, 2003). These four studies seem to show that alienation has an association with aggression and/or violence and may even explain some of these aggressive/violent behaviours.

### Summary of the Impact of Adolescent Alienation on Functioning

There are different areas of well-being and functioning that have shown an impact on adolescent alienation and visa versa. Various studies have examined the relationship between alienation and depressed mood. Bush (1982) showed alienation strongly correlated with depression in a sample of graduate students. Torres-Rivera (1989) showed alienation participants with high depression scores had significantly higher alienation scores. Abdallah (1997) also showed a relationship between alienation and depression. These four studies showed similar findings that there is an association between alienation and depressed mood. Walsh (1987 as cited in Walsh & Rosen, 1988) showed body alienation was associated with self-harm behaviours for adults and Shea (1993) showed that male prisoners who self-harmed were more alienated than male prisoners who did not self-harm. Olivier (1998) showed high levels of hopelessness were associated with high levels of alienation for gay HIV+ males. In a study by Lacourse et al. (2001), the dimensions of self-estrangement and powerlessness of alienation were associated with suicidal risk after controlling for the alienation dimensions of social isolation, normlessness, and meaninglessness. Torres-Rivera (1989) and Seidman (1996) showed relationships between negative events and alienation. Various studies have also show relationships between alienation and aggression (Bond, 1990; Sankey & Huon, 1999; Slater, 2003; Willianson & Cullingford, 1998). Relationships have been shown between alienation and depressed mood, self-harm behaviours, hopelessness, suicidal risk, negative events, and aggression, but more research needs to be completed to examine these relationships.

### Summary of Objectives & Hypotheses

A number of objectives and hypotheses were specified throughout the present research on adolescent alienation section. Some of the hypotheses were based on predictions and other hypotheses were based on supporting literature. All of these were referred to as objectives and hypotheses and they are summarized below.

*Objective 1:* To examine the structure of adolescent alienation. Hypothesis 1: In Study 1A and 1B, the 16 packets will significantly correlate with each other, the four psychological components will correlate with each other, the four contextual domains will correlate with each other, and all of the psychological components and contextual domains will correlate with total alienation. Hypothesis 2: For Study 2 at each time interval over all the participants, all of the psychological components and contextual domains will significantly correlate with total alienation. Hypothesis 3: In Study 1A, the principle components analyses for participants without a boyfriend or girlfriend and on those with a boyfriend or girlfriend will show that most of the questions for a certain psychological component or for a certain contextual domain will have factor loadings in separate factors. Hypothesis 4: In Study 1A, the factor structure of alienation will support one of the two second-ordered models of alienation. Hypothesis 5: To show high internal consistencies for the AAQ in Study 1A and Study 2 at month 1.

*Objective 2:* To examine the stability of adolescent alienation. Hypothesis 6: To show good test-retest reliability for the AAQ from Study 1A to 1B. Hypothesis 7: To show good test-retest reliability in Study 2 for month 1 to month 2 over all participants.

*Objective 3:* To examine the impact of adolescent alienation. Hypothesis 8: In Study 1A and Study 2, some of the contextual domains and psychological components,

but probably not all of them, will predict some of the outcome measures used.

Hypothesis 9: In Study 1A, one of the contextual domains or one of the psychological components will be the most predictive of depressed mood. Hypothesis 10: In Study 2 at each time interval, the total alienation over all the participants will significantly correlate with all of the outcome measures of hopelessness, depressed mood, suicidality, negative events, and stress. Hypothesis 11: In Study 2 when examining how adolescent alienation differs between the three groups of participants at the different months, it is hypothesized that at each month the self-harm group will experience a higher level of alienation than the comparison group, the distressed group will also experience a higher level of alienation than the comparison group, and the self-harm group will experience more alienation than the distressed group. Hypothesis 12: In Study 2 when testing the mediation models, it is hypothesized that depressed mood will mediate the effect between alienation and suicidality and this mediation model will show a better reduction in the variance explained than the other mediator model. Hypothesis 13: In Study 2, when examining which month 12 outcome measures will be predicted from month 1 alienation over all the participants, it is hypothesized that month 1 alienation will predict month 12 depressed mood and suicidality.



## CHAPTER 2. METHODS

For the present research, two studies were conducted. Since the studies have some overlap examining the structure, stability, and impact of adolescent alienation, it is more comprehensible to distinguish the introduction, results, and discussion sections by the structure, stability, and impact rather than distinguishing these sections by the two separate studies. It is though more logical to separately describe the three methods and sample characteristics for studies 1A, 1B, and 2.

### Study 1A

#### Participants

Participants were 1870 (879 boys; 981 girls; 10 unknown) junior high and senior high school students. These students were from three local junior high and one local high school in the public school system. The students ranged from Grades 7 to 12. The ages of these students ranged from 11 to 20 with a mean age of 14.87 years ( $SD = 1.84$ ). Demographic information of the students' grade level and age in Study 1A is shown in Table 1.

#### Measures

The participants completed a number of questionnaires in a standardized order. All of the questionnaires were part of a larger research study examining adolescent mental health. For the present study, the administered questionnaires used were the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), the Problems Questionnaire (Santor, Kusumakar, Poulin, & LeBlanc, 2001), and the Adolescent Alienation Questionnaire (AAQ; Patterson & Santor, 2004). Demographic information obtained was birth date, gender, grade, and age.

Table 1

Study 1A: Demographic Characteristics of Participants

Characteristic	Male		Female		Total	
	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Grade Level ( <u>N</u> = 1860)						
7	177	9.52	239	12.85	416	22.37
8	156	8.39	172	9.25	328	17.63
9	165	8.87	148	7.96	313	16.83
10	135	7.26	155	8.33	290	15.59
11	132	7.10	155	8.33	287	15.43
12	114	6.13	112	6.02	226	12.15
Total	879	47.27	981	52.74	1860	100.00
Age ( <u>N</u> = 1852)						
11	0	0	2	.11	2	.11
12	66	3.56	114	6.16	180	9.72
13	158	8.53	181	9.77	339	18.30
14	154	8.32	170	9.18	324	17.49
15	148	7.99	143	7.72	291	15.71
16	133	7.18	170	9.18	303	16.36
17	121	6.53	120	6.48	241	13.01
18	85	4.59	72	3.89	157	8.48
19	11	0.59	2	0.11	13	.70
20	0	0	2	.11	2	.11
Total	876	47.29	976	52.71	1852	99.99

*Beck Depression Inventory-Second Edition* (BDI-II; Beck et al., 1996). The BDI-II is a 21-item self-report scale that measures the intensity of depression (see Appendix D). Each item is a list of 4 to 7 statements arranged in increasing severity regarding a certain symptom of depression (e.g., sadness). Respondents are to choose one statement for each item that best describes the way s/he has been feeling for the past two weeks. Each statement is assigned a value from 0 (no severity) to 3 (most severe). The scores on the 21 items can be added for a total BDI-II score. Scores range from 0 to 63. The BDI-II requires a Grade 5 or 6 reading level to understand the questions (Groth-Marnat, 1990). The internal consistency of the BDI-II ranges from .73 to .92 (Beck, Steer, & Garbin, 1988). The BDI-II correlates moderately with other self-report measures of depression (e.g., Hamilton Psychiatric Rating Scale, .73) (Groth-Marnat, 1990). The BDI-II has shown to differentiate between loneliness, stress, and self-reported anxiety (Groth-Marnat, 1990).

*Problems Questionnaire* (Santor et al., 2001). The Problem Questionnaire is a non-standardized measure that was included to examine different problem areas for adolescent (e.g., "I had problems getting along with my close friends.") (see Appendix E). Respondents rate each item on a 7-point scale (for just a day or two at a time, for more than a week at a time, for more than 2 weeks at a time, for more than a month at a time, for more than 3 months at a time, for more than 6 months at a time, or most of the time in the last year). Respondents are to indicate what kinds of problems they have had since last year and how long they lasted. The psychometric properties of this measure have not been established.

*Adolescent Alienation Questionnaire* (AAQ; Patterson & Santor, 2004). The AAQ is a 64-item self-report questionnaire that measures the extent to which adolescents feel alienated (see Appendix F). There are four questions for each of the four psychological components (being alone, being a target, not fitting-in, and being cut-off) and for each of the four contextual domains (people at school, friends, boyfriend/girlfriend, and family). For each of the questions, respondents indicate how well each applied to them during the last year by indicating one of three choices (false, sometimes, or true). The respondents first answered the 16 questions concerning people at school. They then answered the 16 questions about their friends, if they had friends in the last year. Next they answered 16 questions about a boyfriend/girlfriend, if they had one within the last year. The last 16 questions completed were about their family. The psychometric properties of the AAQ are discussed in the present studies.

### Procedures

Before the questionnaires were administered to the participants, parental assent forms were sent home regarding the study (see Appendix G). If parents did not want their son/daughter to participate in the study, the students returned the signed form to their teacher before the day the study was conducted. The questionnaires were administered in the spring 2001 to one school per day. During one class period, questionnaires were administered by research assistants. There was one research assistant per 1 to 2 classroom(s). Each classroom consisted of approximately 30 students. Each school completed the questionnaires at the same time. Before the students completed the questionnaires, they were informed that it was time to complete an annual study of adolescent mental health and that participation in the study was voluntary. They

were also informed that if they choose to participate, they would receive a coupon for a free McDonald's Happy Meal. Participants read and signed the informed consent form if they wanted to participate in the study (see Appendix H). They were given approximately an hour to complete the questionnaires. If a student was unable to complete the questionnaires in the specified allowed time, they are asked to complete them at another time and return them to the research assistant who worked at their school, not to a teacher. The majority of the students completed the questionnaires within the specified allowed time. While the students completed the questionnaires, they could ask the research assistant any questions they had about the annual mental health survey.

#### Analytic Method

Study 1A examined the factor structure and some psychometric properties of the AAQ. This study used correlations, Cronbach alpha coefficients, principle components analyses, and confirmatory factor analyses. Correlations were used to show whether similar packets, contextual domains, and/or psychological components have degrees of agreement and if different packets, domains, and/or components have degrees of discrimination. Cronbach alpha coefficients examined internal consistency reliabilities, which were used to assess the consistency of results over time across the items. The factor structure of alienation was examined by principle components analyses and confirmatory factor analyses. Principle components analyses were used to find the set of factors that can account for all the common and unique variance of the variables. Confirmatory factor analyses were used to compare alternative models of alienation in terms of their overall agreement with the data. Various models may provide better fit to the data.

Complete data for certain analyses were unavailable either because certain sections were not applicable to the participants (e.g., did not have a boyfriend or girlfriend) or they did not respond to certain questions. For a number of different analyses, an entire person's data is not used if all data is not complete (e.g., principle components analysis). For the AAQ, two of the four sections were only completed if they apply to the participant. For example, a participant only answered questions regarding a Boyfriend/Girlfriend (or Friends) if the participant had a boyfriend or girlfriend (or friends) within the specified time ("Past Year" for Study 1A and 1B; "Past Month" for Study 2). In Study 1A, there were very few participants who did not have friends within the past year ( $n = 27$ ) and so this missing data is not a concern. However, there are a large number of participants who did not have a boyfriend or a girlfriend within the last year ( $n = 684$ ) and not having this amount of data is a concern and it is also a concern that these participants may fundamentally differ from those who did not have a boyfriend or girlfriend. As a result, many of the analyses are first done for participants who had a boyfriend or girlfriend and then are done for those who did not have a boyfriend or girlfriend. Table 2 shows the demographic characteristics of participants who did have and those who did not have a boyfriend or girlfriend. It can be seen that there are significant differences by grade and age levels for the number of participants who did and did not have a boyfriend or girlfriend within the past year ( $p < .05$ ). Since there are still a large number of participants that did not have a boyfriend or girlfriend, it is argued that these differences will not have major implications for the results in the study.

Table 2

Study 1A: Demographics of Participants with and without a Boyfriend/Girlfriend

Characteristic	Boyfriend/ Girlfriend- Yes		Boyfriend/ Girlfriend- No		Total		Significant Difference between with or without a Boyfriend/Girlfriend
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	
Grade Level ( <u>N</u> = 1689)							
7	191	11.31	185	10.95	376	22.26	
8	150	8.88	149	8.82	299	17.70	
9	172	10.18	105	6.22	277	16.40	d
10	197	11.66	67	3.97	264	15.63	d
11	160	9.47	100	5.92	260	15.39	c
12	136	8.05	77	4.56	213	12.61	d
Total	1006	59.56	683	40.44	1689	100.00	
Age ( <u>N</u> = 1852)							
11	2	.12	0	.00	2	.12	
12	82	4.88	87	5.17	169	10.05	
13	150	8.92	160	9.51	310	18.43	
14	159	9.45	120	7.13	279	16.59	a
15	175	10.40	94	5.59	269	15.99	d
16	199	11.83	74	4.40	273	16.23	d
17	129	7.67	92	5.47	221	13.14	a
18	100	5.95	46	2.73	146	8.68	d
19	6	.36	5	.30	11	.65	
20	1	.06	1	.06	2	.12	
Total	1003	59.63	679	40.37	1682	100.00	
Gender ( <u>N</u> = 1688)							
Male	452	26.78	328	19.43	780	46.21	d
Female	553	32.76	355	21.03	908	53.79	d
Total	1005	59.54	683	40.46	1688	100.00	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

## Study 1B

### Participants

Participants were 1780 (835 boys; 936 girls; 9 unknown) junior high and senior high school students from the same schools as from Study 1A. Some of the participants completed both Study 1A and 1B, in which there was partial overlap of participants from Study 1A to 1B ( $n = 479$ ). For Study 1B, the students ranged from Grade 7 to 12. The ages of these students ranged from 12 to 20 with a mean age of 14.88 years ( $SD = 1.79$ ). Demographic information of the students' grade level and age is shown in Table 3.

### Measures and Procedures

The measures and procedure were the same as described in Study 1A. The data collection for Study 1B was in the spring 2002, which was approximately one year after the data were collected for Study 1A.

### Analytic Method

Study 1B mainly examined the test-retest reliability of the AAQ. Test-retest reliability was used to show the stability of the AAQ from Study 1A to 1B. For Study 1B, the test-retest analyses were completed on all participants together. However, there are other analyses that were done separately for participants who did and did not have a boyfriend or girlfriend. Demographic characteristics of participants who did and who did not have a boyfriend or girlfriend for Study 1B can be found in Table 4. Again it can be seen that there are significant differences by grade and age levels for the number of participants who did and did not have a boyfriend or girlfriend within the past year ( $p < .05$ ). Since there are many participants that did not have a boyfriend or girlfriend, it is argued that these differences will not have major implications for the study's results.



Table 3

Study 1B: Demographic Characteristics of Participants

Characteristic	Male		Female		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
Grade Level ( <u>N</u> =1771)						
7	165	9.32	166	9.37	331	18.68
8	170	9.60	207	11.69	377	21.28
9	151	8.53	171	9.66	322	18.17
10	142	8.02	134	7.57	276	15.58
11	99	5.59	131	7.40	230	12.98
12	108	6.10	127	7.17	235	13.26
Total	836	47.15	936	52.85	1771	100.0
Age ( <u>N</u> = 1758)						
12	61	3.47	54	3.07	115	6.54
13	162	9.22	211	12.00	373	21.22
14	154	8.76	171	9.73	325	18.49
15	156	8.87	144	8.19	300	17.06
16	114	6.48	145	8.25	259	14.73
17	98	5.57	130	7.39	228	12.97
18	69	3.92	68	3.87	137	7.79
19	14	.80	4	.23	18	1.02
20	3	.17	0	0	3	.17
Total	831	47.27	927	52.73	1758	100.0

Table 4

Study 1B: Demographics of Participants with and without a Boyfriend/Girlfriend

Characteristic	Boyfriend/ Girlfriend- Yes		Boyfriend/ Girlfriend- No		Total		Significant Difference between with or without a Boyfriend/Girlfriend
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	
Grade Level ( <u>N</u> =1694)							
7	147	8.68	160	9.45	307	18.12	
8	201	11.87	153	9.03	354	20.90	a
9	165	9.74	140	8.26	305	18.00	
10	162	9.56	110	6.49	272	16.06	b
11	157	9.27	68	4.01	225	13.28	d
12	152	8.97	79	4.66	231	13.64	d
Total	984	58.09	710	41.91	1694	100.00	
Age ( <u>N</u> = 1681)							
12	49	2.91	55	3.27	104	6.19	
13	179	10.65	170	10.11	349	20.76	
14	171	10.17	135	8.03	306	18.20	a
15	164	9.76	127	7.56	291	17.31	a
16	161	9.58	91	5.41	252	14.99	d
17	154	9.16	69	4.10	223	13.27	d
18	85	5.06	51	3.03	136	8.09	b
19	12	.71	6	.36	18	1.07	
20	1	.06	1	.06	1	.12	
Total	978	58.06	706	41.94	1681	100.00	
Gender ( <u>N</u> = 1688)							
Male	437	25.89	346	20.50	783	46.39	b
Female	544	32.23	361	21.39	905	53.61	d
Total	981	58.12	707	41.88	1688	100.00	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

## Study 2

### Participants

Participants for this study were from the same four local junior high and high schools that participated in Study 1A and 1B. Participants in this study were classified into one of three groups: (a) distressed group, (b) self-harm group, or (c) comparison group. The distressed group and the self-harm group were considered the clinical groups and the other group was a comparison. The distressed group was defined as adolescents who reported a current high level of distress, which consisted of adolescents who had a BDI-II (Beck et al., 1996) score of 15 or more for at least 2 months or a score of 20 or more for at least 1 month, and who did not have a history of self-harm behaviours. At month 1, the distressed group BDI-II scores ranged from 15 to 42 with a mean score of 25.06 ( $SD = 6.93$ ). Also the number of months the distressed group felt at their month 1 level of distress ranged from 1 to 59 months with a mean number of 12.75 months ( $SD = 14.37$ ). The self-harm group was defined as adolescents who had a history of purposely hurting themselves. The self-harm behaviour consisted of those who did not intend to end their lives (e.g., cutting behaviours) and those who did intend to end their lives (e.g., attempted suicide). The comparison group consisted of adolescents who stated that they did not presently have a low mood, never purposely hurt themselves, and did not have a major mood disorder as defined by the DSM-IV (American Psychiatric Association, 1994).

There were 31 adolescents in the distressed group (11 males and 20 females), 35 adolescents in the self-harm group (15 males and 20 females), and 35 adolescents in the comparison group (15 males and 20 females). For Study 2, adolescents were recruited

from Grade 8 to Grade 12. At month 1, their ages ranged from 13 to 18 years with a mean age of 15.27 years ( $SD = 1.56$ ). The mean age for the distressed group was 15.35 years ( $SD = 1.56$ ), self-harm group was 15.51 years ( $SD = 1.42$ ), and comparison group was 14.94 years ( $SD = 1.68$ ). The participants for each group were matched as closely as possible for grade and gender. However, there were difficulties in recruiting Grade 11 and 12 males for the distressed group. Also for the self-harm group, more males were recruited from Grade 11 rather than for Grade 10 and Grade 12. The number of participants in each group organized by grade and gender are shown in Table 5. Each participant was followed by one or two of the four research assistants. One research assistant followed 38 participants for the entire length of the study. Another research assistant followed 34 participants for approximately half of the length of the study and these participants were then followed by another research assistant for the remainder of the study. The fourth research assistant followed the remaining 29 participants. Over the course of the study, 11 of the participants discontinued participating in the study. At month 4, one distressed group participant, one self-harm group participant, and one comparison group participant discontinued the study. At month 5, one distressed group participant discontinued. At month 7, three distressed group participants discontinued. Then at month 9, two self-harm group participants and one comparison group participant discontinued. At month 10, one self-harm group participant discontinued. Thus, throughout the study, five distressed, four self-harm, and two comparison participants stopped participating in the study. Demographic information of the participants by group for Study 2 is shown in Table 6.

Table 5

Study 2: Number of Participants by Grade and Gender for the Distressed, Self-Harm, and the Comparison Groups

Grade Level	Distressed Group		Self-Harm Group		Comparison Group		Total
	Male	Female	Male	Female	Male	Female	
8	3	4	3	4	3	4	21
9	2	5	2	5	2	5	21
10	3	4	2	4	3	4	20
11	3	3	6	3	4	3	22
12	0	4	2	4	3	4	17
Total	11	20	15	20	15	20	101

Table 6

Study 2: Demographic Characteristics of Participants by Group

Characteristic	Distressed		Self-Harm		Comparison		Total	
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%
<b>Grade Level</b>								
8	7	6.93	7	6.93	7	6.93	21	20.79
9	7	6.93	7	6.93	7	6.93	21	20.79
10	7	6.93	6	5.94	7	6.93	20	19.80
11	6	5.94	9	8.91	7	6.93	22	21.78
12	4	3.96	6	5.94	7	6.93	17	16.83
<b>Age</b>								
13	4	3.96	4	3.96	10	9.90	18	17.82
14	8	7.92	4	3.96	6	5.94	18	17.82
15	3	2.97	9	8.91	5	4.95	17	16.83
16	7	6.93	8	7.92	7	6.93	22	21.78
17	7	6.93	8	7.92	4	3.96	19	18.81
18	2	1.98	2	1.98	3	2.97	7	6.93
<b>Gender</b>								
Female	20	19.80	20	19.80	20	19.80	60	59.41
Male	11	10.89	15	14.85	15	14.85	41	40.59

### Longitudinal Design

Participants completed an initial baseline assessment of past and present psychological symptoms at month 1. They also completed a monthly assessment of symptoms, functioning, and alienation every month for 12 months (i.e., month 2 to month 12). Participants were seen every month for 12 months. Every month, participants were seen somewhere between 1 month minus 10 days to 1 month plus 10 days as much as possible. To simplify the data analyses for Study 2, only the data from month 1, 2, 6, and 12 will be examined.

### Measures

The participants completed a number of questionnaires. All of the questionnaires were part of a larger research study examining help-seeking behaviours. For the present study, the administered questionnaires used were the Beck Depression Inventory (BDI-II; Beck, et al., 1996), the Hopelessness Scale (H-Beck; Beck, Weissman, Lester, & Texler, 1974), the Adolescent Alienation Questionnaire (AAQ; Patterson & Santor, 2004), the Youth Aggression Questionnaire (AQY; Santor & Kusumakar, 2001), the Beck Suicide Scale (BSS; Beck & Steer, 1991), the Stress Quiz (SQ; Santor & Kusumakar, 2001), and the Negative Events Questionnaire (NE; Santor & Kusumakar, 2001). The demographic information obtained was birth date, gender, grade, and age. The list of baseline and monthly measures that were completed appears in Table 7.

Table 7

Study 2: Baseline and Monthly Measures Completed at Each Month

Where Measure was Completed	Month(s)		
	1	2 to 12	6 & 12
Completed at Home			
Demographic Information	✓		
Beck Depression Inventory (BDI-II)	✓	✓	
Hopelessness Scale (H-Beck)	✓	✓	
Adolescent Alienation Questionnaire (AAQ)	✓	✓	
Youth Aggression Questionnaire (AQY)			✓
Completed with the Interviewer			
Beck Suicide Scale (BSS)	✓	✓	
Stress Quiz (Computer Administered)	✓	✓	
Negative Events (Computer Administered)	✓	✓	



*Demographic Information.* The participants gave their demographic information at the month 1 baseline. The information was completed by self-report format and the information collected was the participant's age, birthday, and current grade level.

*Beck Depression Inventory-Second Edition (BDI-II;* Beck, et al., 1996). The BDI-II is a self-report measure for depression. It was described in detailed in the measures section for Study 1A (see Appendix D).

*Beck Hopelessness Scale (H-Beck; Beck et al., 1974).* The BHS is a 20-item self-report questionnaire that measures a person's lack of hope about their future, which measures three aspects of hopelessness: feelings about the future, loss of motivation, and expectations (Beck et al., 1974) (see Appendix I). The participants responded to the BHS on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = uncertain/unknown, 4 = agree, 5 = strongly agree). The usual age range for using the BHS is 17 to 80 years. In the present study, participants were as young as 13 years; however, the participants always completed this questionnaire in the interview with a research assistant and the participants were encouraged to ask the research assistant for clarification for any of the questions if they were having difficulties with an item. Beck et al. (1974) reported a high internal consistency rating for the BHS with a coefficient alpha of .93 and the BHS has established concurrent validity. For example, the BHS is associated with frequency and severity of suicidal ideation (Nekanda-Trepka, Bishop, & Blackburn, 1983) and with the intent to commit suicide (Dyer & Kreitman, 1984). The BHS has predictive validity since it has been shown to predict future suicide attempts in hospitalized suicide attempters (Petrie, Chamberlain, & Clarke, 1988) and completed suicides in psychiatric inpatients (Beck, Brown, & Steer, 1989).

*Adolescent Alienation Questionnaire* (AAQ; Patterson & Santor, 2004). The AAQ is a self-report questionnaire that measures the extent to which adolescents feel alienated. The AAQ was described in detail in the measure section for Study 1A. However, the response choices differed in this study. For each of the questions for Study 2 at month 1, participants were to indicate how well each applied to them in the last year by indicating one of three choices (most of the time, sometimes, and not at all) (see Appendix J). For each of the questions for Study 2 from month 2 to month 12, participants were to indicate how well each applied to them in the last month (see Appendix K).

*Youth Aggression Questionnaire* (AQY; Santor & Kusumakar, 2001). The AQY is a 30-item self-report measure examining different aggressive behaviours in the past month (see Appendix L). The participants completed the questionnaire only at month 6 and month 12. The AQY includes eleven items regarding verbal aggression, four on aggression against others, objects or pets, five regarding physical aggression after being provoked, five regarding physical aggression the participant started, and five on the use of weapons. The respondent answers each item for the past month as never, once a month or less, once a week or less, 2 to 3 times a week, or most days. The psychometric properties of this measure are not established.

*Beck Scale for Suicide Ideation* (BSS; Beck & Steer, 1991). The BSS is a 21-item self-report questionnaire that measures a respondent's attitudes and plans to commit suicide during the past week (see Appendix M). The first five items are screening items, which reduced the length of questionnaires for respondents who are not suicidal. If a respondent reports any desire to commit suicide, then the other 14 items are administered. The first 19 items are questions regarding current suicidality that are rated on a 3-point

scale ranging from 0 to 2. These 19 items can be summed for a total score between 0 to 38. The last two items are questions about a respondent's past number of suicide attempts and how serious the last attempt was according to the respondent. The usual age range for using the BSS is 17 years and older. However, in the present study, the participants always completed this questionnaire in the interview with a research assistant and the participants were encouraged to ask the research assistant for clarification for any of the questions if they were having difficulties with an item. The BSS has high internal reliability with Cronbach alpha coefficients from .87 to .97 (Beck, Steer, & Ranieri, 1988; Beck & Steer, 1991; Steer, Rissmiller, Ranieri, & Beck, 1993). The BSS also has concurrent validity since it is moderately correlated with the suicide item on the BDI-II (.58 to .69), with the BDI-II (.64 to .75), and the BHS (>.53 to .62) (Beck et al., 1988).

*Stress Questionnaire (SQ; Santor & Kusumakar, 2001).* The Stress Questionnaire is a computer administered symptom checklist that was given every month during the interview (see Appendix N). The Stress Questionnaire comprises of 23-items to measure a respondent level of stress within the last month. A respondent is presented between three to five statements and picks the best statement that describes them in the last month. One of the items gives five statements to choose from regarding how often they feel stressed, one of the items gives three statements to choose from for the amount of sleep they have been usually sleeping, and the other 21 items give four statements to choose from regarding a variety of symptoms. If there is more than one statement that describes them, then they are to choose the statement with the highest number that best fit how they felt. The items give an overall score for the level of stress. The psychometric properties of this measure are not well established.

*Negative Events Questionnaire* (NE; Santor & Kusumakar, 2001). The Negative Events Questionnaire is a computer administered questionnaire that was completed every month during the interview (see Appendix O). This questionnaire has a number of domain questions (e.g., relationships with peers and friend, family issues, school problems, health concerns, concerns with appearance, etc.) with a number of questions within each domain that ranged from seven to 18 questions. One question from a domain was given to a participant as a screen question. If the participant answered “yes” to the question, then all of the questions were given to the participant from that domain. If the participant answered “no” to the question, then the screen question from another domain was given. The domains were presented in a random order and one screen question from each domain was given to a participant. The psychometric properties of this measure have not been established.

### Procedures

Participants for this study were recruited from the same four local junior high and high schools that participated in Study 1A and 1B. Participants were first recruited for Study 2 when Study 1B was being conducted. They were informed about Study 2 and gave their contact information if interested in participating. Participants for all groups were also recruited by posting signs at their schools for the study and they made contact by phone or email if interested in participating. The recruitment sign for all participants can be found in Appendix P. Then between four to six months after Study 1B, research assistants recruited more participants from individual classrooms. Another four months later, even more participants were recruited only from the high school classrooms for the distressed group. The recruitment form for the distressed group can be found in

Appendix Q. A few of the participants were recruited by the schools' Guidance Counsellors and from the schools' Teen Health Centre Coordinators.

When contact information was obtained for adolescents who were interested in participating in the study, they were contacted either by phone or by email. At this time, they were given some information about the study and they were asked if they were still interested in participating. If they were interested in participating, they were asked if they were presently feeling sad and down and if so, for how long. If they answered yes to this question and did not have a history of self-harm behaviours, they completed the BDI-II over the phone. Their score was compiled and if it was 15 or greater for the past 2 months, or 20 or greater for the past month, they were enrolled into the study for the distressed group. Adolescents were also asked if they had a history of self-harm behaviours. If any of the participants had did have a history of self-harm behaviours, they were enrolled in the self-harm group. Lastly, adolescents were enrolled in the comparison group if they did not meet criteria for the distressed or the self-harm group and they did not have a past or present affective disorder. It took nine months to enrol all of the participants into this study.

Appointments were made with all of the participants for the baseline interview, which was month 1 of participation. Interviews were conducted individually for each participant by one research assistant. Before the baseline interview of month 1 began, adolescents were informed of the limits of confidentiality and that appropriate people would be contacted if they reported: (a) any past abuse; (b) if they was going to physically hurt someone else; and (c) if they was going to hurt themselves. During the month 1 interview, if an adolescent's distress was severe and chronic enough to warrant

treatment, a referral for mental health services was discussed with the adolescent and s/he was referred to treatment if s/he agreed to be referred to treatment. However, if an adolescent, did not want treatment, s/he were informed that s/he could ask the research assistant anytime for a referral. If any of the adolescents self-harmed themselves within the last two weeks during any of the interviews from month 1 to 12, s/he was informed that their parents were going to be contacted and informed of their self-harm behaviour.

Participants were seen every month for 12 months. For month 1 interviews, all participants were seen in person at their present school or at the local children's hospital. For month 1, all participants read and signed the informed consent form (see Appendix R). They completed all the measures at the time of the interview. After the month 1 interview was completed, the participants who were less than 16-years-of-age gave their parent(s) or guardian(s) the parental assent form. These parents/guardians were contacted by phone and parental assent was obtained for their son/daughter to participate in the study. The parental assent form can be found in Appendix S. For month 2 to 12, interviews were mainly completed in person at their school or the hospital. However, for month 2 to 12 participants sometimes had to be interviewed over the phone due to some circumstances when schools were closed (e.g., summer months, or holidays) or participants were unable to meet with a research assistant at the hospital (e.g., moved away, unable to get a drive into the hospital, or away on vacation for the summer). Also participants did not always complete some months because they either would not show for appointments, were unable to be contacted, or they dropped out of the study. The number of completed appointments is shown in Table 8. The total percentage of appointments not completed was 15.87% for the entire study and was 14.10% for the

participants while they remained enrolled in the study. For month 2 to month 12, some of the measures were completed at home and some were completed under the supervision of a research assistant (refer to Table 7). Every month, participants were seen somewhere between one month minus 10 days to 1 month plus 10 days as much as possible from the day from their previous month's interview.

After each interview, participants were compensated for participating. They were given \$20 for participating in the month 1 interview and \$10 for participating for each of the month's 2 to 12 interviews. The participants were given some of the following month's measures and were asked to complete them the evening before the following month's interview. If a participant did not complete these measures, they would be completed during the following interview.

#### Frequency of Responses for Having Friends and for Having a Girlfriend or Boyfriend

On the AAQ, if the questions "I had friends last year" and "I had a boyfriend or girlfriend last year" were answered "no" then these participants would not answer the particular section(s) of questions. The frequencies of responses are in Table 9. For Study 2, all of the analyses were conducted on the entire sample together and not by separate analyses on participants with and without a boyfriend/girlfriend. If analyses were conducted separately, the amount of power to find meaningful relationships would lower. Mean total alienation was calculated by taking the mean of the AAQ questions answered for each participant and then multiplying the amount by 64. This method was used to have comparable amounts of the level of alienation experienced.

Table 8

Study 2: Number of Interviews Completed for each Group

Month	Group			Total
	Distressed	Self-Harm	Comparison	
1	31	35	35	101
2	31	33	32	96
6	24	32	33	89
12	25	29	33	87
Total	111	129	133	373



Table 9

Study 2: Month 1 Frequency of Responses for Having Friends and for Having a Boyfriend or Girlfriend

Question	Yes	No	Total
All Participants			
Friends	96	4	101
Boyfriend/Girlfriend	40	61	101
Distressed Group			
Friends	29	2	31
Boyfriend/Girlfriend	16	15	31
Self-Harm Group			
Friends	33	2	35
Boyfriend/Girlfriend	16	19	35
Comparison Group			
Friends	34	0	34
Boyfriend/Girlfriend	8	27	35

### Analytic Method

Study 2 examined reliability and validity aspects of the AAQ and prospectively examined differences in alienation for different types of adolescents. Data was used for month 1, 2, 6, and 12. The types of analyses conducted in this study included correlations, hierarchical regression analyses, mediation analyses, and proc mixed ANOVA analyses.

Correlations were used to show relationships among contextual domains, psychological components, total alienation, and various outcome measures at different time periods. Hierarchical regression analyses were used to see which contextual domains and psychological components predicted various outcome measures. Mediation analyses examined models of a third variable being involved in the process of an independent variable affecting a dependent variable. These analyses will provide support for the sequencing of alienation and will provide support that alienation is an important construct. Proc mixed ANOVA analyses were used to show differences in alienation between groups. These analyses together provide support for the impact of adolescent alienation.

### CHAPTER 3. RESULTS: STRUCTURE OF ADOLESCENT ALIENATION

The main purpose of Study 1A was to examine the structure of responses to the AAQ. It was hypothesized for Study 1A and 1B that the 16 Packets would significantly correlate with each other, the four Contextual Domains would be strongly interrelated by having high intercorrelations, the four Psychological Components would also have high intercorrelations, and all of the Contextual Domains and Psychological Components would significantly correlate with the total Alienation score. It was also hypothesized that for Study 2 all of the Psychological Components and the Contextual Domains would significantly correlate with total Alienation at each time interval over all the participants. In terms of the two principle components analyses in Study 1A, it was hypothesized that questions from the AAQ for certain Psychological Components or for certain Contextual Domains would have factor loadings in separate factors for adolescents who did and did not have a boyfriend or girlfriend. For the confirmatory factors analyses, it was hypothesized that the factor structure of Alienation would support one of the two second-ordered models of Alienation. Lastly, it was hypothesized that internal consistencies for the AAQ in Study 1A and Study 2 at month 1 would be shown.

First descriptive, univariate, and correlations results will be explored. It is argued that the various correlations are relevant to report, even though principle components analyses and confirmatory factor analyses are conducted, since it is important to understand how total scores on the AAQ are related. Then principle components analyses and confirmatory factor analyses examine the structure of the Alienation. The internal consistencies of the AAQ will also be reported.

## Study 1A

### Descriptive and Univariate Statistics of the Adolescent Alienation Questionnaire

For each of the questions on the AAQ, the number of participants who answered, the mean, standard deviation, skewness, and kurtosis can be found in Table 10. The number of participants who answered each question varied since certain sections may not have been relevant for some participants to answer if they did not have friends or did not have a girlfriend or boyfriend in the past year, and sometimes participants missed answering questions. For these descriptive statistics, the positively worded questions on the AAQ were reversed scored. The question that was answered the most by participants ( $n = 1835$ ) was question # 1, "I spent time with people at school" and the questions and that were answered the least by participants ( $n = 1100$ ) was question # 41, "I was tormented by my girlfriend or boyfriend" and question # 49, "I was excluded from activities from my boyfriend or girlfriend". The question with the highest mean was question # 5 ( $M = 0.71$ ), "I was made fun of behind my back by people at school" and the question with the lowest mean was question # 18 ( $M = 0.11$ ), "I spent time with my friends". In terms of standard deviations, question # 5, "I was made fun of behind my back by people at school" had the highest standard deviation ( $SD = 0.75$ ) and question # 41, "I was tormented by my girlfriend or boyfriend" had the lowest standard deviation ( $SD = 0.41$ ). Refer to Table 10 for information on skewness and kurtosis for each question.

Table 10  
Study 1A: Descriptive Statistics of Questions on the AAO

Alienation Variable	n	M	SD	skewness	kurtosis
1. I spent time with people at school.	1835	0.17	0.42	2.49	5.68
2. I felt isolated from people at school.	1822	0.40	0.61	1.25	0.50
3. I felt abandoned by people at school.	1820	0.32	0.57	1.62	1.62
4. I could count on people at school.	1829	0.52	0.68	0.96	-0.31
5. I was made fun of behind my back by people at school.	1812	0.71	0.75	0.54	-1.05
6. I was made fun of directly to my face by people at school.	1821	0.57	0.75	0.88	-0.69
7. I was tormented by people at school.	1820	0.40	0.68	1.43	0.62
8. I was teased and called names by people at school.	1815	0.53	0.73	0.99	-0.45
9. I fit in with people at school.	1818	0.37	0.59	1.40	0.89
10. I was disliked by people at school.	1807	0.66	0.72	0.60	-0.86
11. I was seen as different by people at school.	1810	0.54	0.71	0.94	-0.44
12. People at school showed interest in me.	1808	0.49	0.65	0.96	-0.19
13. I was ignored by people at school.	1810	0.44	0.65	1.16	0.16
14. I felt rejected by people at school.	1817	0.38	0.63	1.41	0.78
15. I was excluded from activities by people at school.	1818	0.33	0.61	1.67	1.58
16. I felt alienated by people at school.	1814	0.27	0.56	1.97	2.78
18. I spent time with my friends.	1812	0.11	0.38	3.51	12.28
19. I felt isolated from my friends.	1795	0.29	0.53	1.64	1.77
20. I felt abandoned by my friends.	1771	0.26	0.52	1.85	2.53
21. I could count on my friends.	1786	0.32	0.59	1.70	1.77
22. I was made fun of behind my back by my friends.	1798	0.37	0.60	1.39	0.84
23. I was made fun of directly to my face by my friends.	1802	0.29	0.57	1.80	2.18
24. I was tormented by my friends.	1793	0.21	0.50	2.37	4.76
25. I was teased and called names by my friends.	1774	0.31	0.58	1.69	1.77
26. I fit in with my friends.	1781	0.25	0.57	2.16	3.41
27. I was disliked by my friends.	1797	0.23	0.51	2.19	3.89
28. I was seen as different by my friends.	1778	0.38	0.65	1.48	0.89
29. My friends showed interest in me.	1765	0.33	0.62	1.71	1.67
30. I was ignored by my friends.	1776	0.36	0.53	1.93	2.80
31. I felt rejected by my friends.	1780	0.20	0.48	2.36	4.81
32. I was excluded from activities by my friends.	1791	0.28	0.56	1.88	2.49
33. I felt alienated by my friends.	1785	0.16	0.44	2.76	7.05
35. I spent time with my boy/girlfriend.	1123	0.24	0.53	2.21	3.87
36. I felt isolated from my boy/girlfriend.	1114	0.27	0.53	1.80	2.35
37. I felt abandoned by my boy/girlfriend.	1118	0.24	0.54	2.13	3.56
38. I could count on my boy/girlfriend.	1112	0.41	0.66	1.36	0.54
39. I was made fun of behind my back by my boy/girlfriend.	1112	0.13	0.40	3.31	10.60
40. I was made fun of directly to my face by my boy/girlfriend.	1110	0.15	0.43	3.08	8.93
41. I was tormented by my boy/girlfriend.	1100	0.14	0.41	3.00	8.62
42. I was teased and called names by my boy/girlfriend.	1104	0.16	0.44	2.90	7.83
43. I fit in with my boy/girlfriend.	1074	0.34	0.64	1.67	1.44
44. I was disliked by my boy/girlfriend.	1089	0.15	0.45	3.05	8.50
45. I was seen as different by my boy/girlfriend.	1094	0.28	0.61	1.99	2.57
46. My boy/girlfriend showed interest in me.	1097	0.28	0.59	2.08	3.00
47. I was ignored by my boy/girlfriend.	1095	0.19	0.48	2.48	5.39
48. I felt rejected by my boy/girlfriend.	1091	0.18	0.48	2.78	6.79
49. I was excluded from activities by my boy/girlfriend.	1100	0.19	0.49	2.58	5.72
50. I felt alienated by my boy/girlfriend.	1101	0.13	0.43	3.31	10.26
51. I spent time with my family.	1799	0.32	0.55	1.52	1.35
52. I felt isolated from my family.	1790	0.31	0.57	1.67	1.76
53. I felt abandoned by my family.	1772	0.23	0.52	2.26	4.17
54. I could count on my family.	1767	0.48	0.68	1.08	-0.12
55. I was made fun of behind my back by my family.	1784	0.19	0.49	2.63	5.98
56. I was made fun of directly to my face my family.	1775	0.22	0.52	2.28	4.23
57. I was tormented by my family.	1769	0.21	0.48	2.32	4.64
58. I was teased and called names by my family.	1759	0.27	0.55	1.93	2.72
59. I fit in with my family.	1752	0.45	0.68	1.23	0.15
60. I was disliked by my family.	1772	0.19	0.47	2.51	5.55
61. I was seen as different by my family.	1758	0.33	0.61	1.68	1.60
62. My family showed interest in me.	1751	0.44	0.69	1.26	0.17
63. I was ignored by my family.	1770	0.19	0.46	2.37	4.99
64. I felt rejected by my family.	1772	0.16	0.44	2.77	7.13
65. I was excluded from activities by my family.	1770	0.18	0.46	2.66	6.39
66. I felt alienated by my family.	1776	0.14	0.41	3.10	9.25

The frequency and percentages of “False”, “Sometimes”, and “True” responses to each of the questions on the AAQ can be found in Table 11. For Table 11, the positively worded questions were not reversed scored. The positively worded question with the highest “False” responses was question # 62 ( $n = 206$ ), “My family showed interest in me.” The negatively worded question with the highest “True” responses was question # 5 ( $n = 321$ ), “I was made fun on behind my back by people at school”. The question answered with the most “Sometimes” by participants was question # 10 ( $n = 677$ ), “I was disliked by people at school” and the question answered the least with “Sometimes” was question # 50 ( $n = 74$ ), “I felt alienated by my boyfriend or girlfriend”. The questions with the highest “False” and “True” responses may have implications for further results. Since a particular question from each of the Contextual Domains of People at School and Family were responded to the most frequently, one or both of these Contextual Domains may be shown to be the most relevant for measuring Alienation in the present research. On the other hand, since a particular question from each of the Psychological Components of Being a Target and Not Fitting-In were responded to the most frequently, one or both of them may be shown to be the most relevant for measuring Alienation in this research.

Table 11  
Study 1A: Frequency and Percentage of Responses on the AAQ

Variable	False <u>n</u>		Sometimes		True		Total
	<u>n</u>	%	<u>n</u>	%	<u>n</u>	%	
1. I spent time with people at school.	35	1.91	241	13.13	1559	84.96	1835
2. I felt isolated from people at school.	1212	66.52	494	27.11	116	6.37	1822
3. I felt abandoned by people at school.	1340	73.63	385	21.15	95	5.22	1820
4. I could count on people at school.	193	10.55	556	30.40	1080	59.05	1829
5. I was made fun of behind my back by people at school.	853	47.07	638	35.21	321	17.72	1812
6. I was made fun of directly to my face by people at school.	1063	58.37	471	25.86	287	15.76	1821
7. I was tormented by people at school.	1298	71.32	318	17.47	204	11.21	1820
8. I was teased and called names by people at school.	1106	60.94	455	25.07	254	13.99	1815
9. I fit in with people at school.	109	6.00	446	24.53	1263	69.47	1818
10. I was disliked by people at school.	871	48.20	677	37.47	259	14.33	1807
11. I was seen as different by people at school.	1068	59.00	514	28.40	228	12.60	1810
12. People at school showed interest in me.	153	8.46	584	32.30	1071	59.24	1808
13. I was ignored by people at school.	1161	64.14	493	27.24	156	8.62	1810
14. I felt rejected by people at school.	1267	69.73	402	22.12	148	8.15	1817
15. I was excluded from activities by people at school.	1353	74.42	332	18.26	133	7.32	1818
16. I felt alienated by people at school.	1429	78.78	278	15.33	107	5.90	1814
18. I spent time with my friends.	37	2.04	131	7.23	1644	90.73	1812
19. I felt isolated from my friends.	1337	74.48	391	21.78	67	3.73	1795
20. I felt abandoned by my friends.	1370	77.36	333	18.80	68	3.84	1771
21. I could count on my friends.	116	6.49	333	18.65	1337	74.86	1786
22. I was made fun of behind my back by my friends.	1246	69.30	434	24.14	118	6.56	1798
23. I was made fun of directly to my face by my friends.	1377	76.42	320	17.76	105	5.83	1802
24. I was tormented by my friends.	1492	83.21	228	12.72	73	4.07	1793
25. I was teased and called names by my friends.	1324	74.63	343	19.33	107	6.03	1774
26. I fit in with my friends.	121	6.79	207	11.62	1453	81.58	1781
27. I was disliked by my friends.	1462	81.36	257	14.30	78	4.34	1797
28. I was seen as different by my friends.	1269	71.37	348	19.57	161	9.06	1778
29. My friends showed interest in me.	141	7.99	293	16.60	1331	75.41	1765
30. I was ignored by my friends.	1390	78.27	309	17.40	77	4.34	1776
31. I felt rejected by my friends.	1480	83.15	239	13.43	61	3.43	1780
32. I was excluded from activities by my friends.	1389	77.55	302	16.86	100	5.58	1791
33. I felt alienated by my friends.	1544	86.50	189	10.59	52	2.91	1785
35. I spent time with my boy/girlfriend.	58	5.16	148	13.18	917	81.66	1123
36. I felt isolated from my boy/girlfriend.	854	76.66	215	19.30	45	4.04	1114
37. I felt abandoned by my boy/girlfriend.	903	80.77	158	14.13	57	5.10	1118
38. I could count on my boy/girlfriend.	108	9.71	237	21.31	767	68.97	1112
39. I was made fun of behind my back by my boy/girlfriend.	998	89.75	86	7.73	28	2.52	1112
40. I was made fun of directly to my face by my boy/girlfriend.	983	88.56	93	8.38	34	3.06	1110
41. I was tormented by my boy/girlfriend.	969	88.09	105	9.55	26	2.36	1100
42. I was teased and called names by my boy/girlfriend.	965	87.41	106	9.60	33	2.99	1104
43. I fit in with my boy/girlfriend.	98	9.12	169	15.74	807	75.14	1074
44. I was disliked by my boy/girlfriend.	964	88.52	84	7.71	41	3.76	1089
45. I was seen as different by my boy/girlfriend.	875	79.98	128	11.70	91	8.32	1094
46. My boy/girlfriend showed interest in me.	85	7.75	123	11.21	889	81.04	1097
47. I was ignored by my boy/girlfriend.	922	84.20	134	12.24	39	3.56	1095
48. I felt rejected by my boy/girlfriend.	948	86.89	94	8.62	49	4.49	1091
49. I was excluded from activities by my boy/girlfriend.	937	85.18	114	10.36	49	4.45	1100
50. I felt alienated by my boy/girlfriend.	990	89.92	74	6.72	37	3.36	1101
51. I spent time with my family.	77	4.28	421	23.40	1301	72.32	1799
52. I felt isolated from my family.	1331	74.36	363	20.28	96	5.36	1790
53. I felt abandoned by my family.	1457	82.22	230	12.98	85	4.80	1772
54. I could count on my family.	191	10.81	472	26.71	1104	62.48	1767
55. I was made fun of behind my back by my family.	1528	85.65	176	9.87	80	4.48	1784
56. I was made fun of directly to my face my family.	1463	82.42	225	12.68	87	4.90	1775
57. I was tormented by my family.	1465	82.82	242	13.68	62	3.50	1769
58. I was teased and called names by my family.	1375	78.17	294	16.71	90	5.12	1759
59. I fit in with my family.	194	11.07	396	22.60	1162	66.32	1752
60. I was disliked by my family.	1497	84.48	213	12.02	62	3.50	1772
61. I was seen as different by my family.	1315	74.80	308	17.52	135	7.68	1758
62. My family showed interest in me.	206	11.76	365	20.85	1180	67.39	1751
63. I was ignored by my family.	1478	83.50	244	13.79	48	2.71	1770
64. I felt rejected by my family.	1534	86.57	189	10.67	49	2.77	1772
65. I was excluded from activities by my family.	1517	85.71	195	11.02	58	3.28	1770
66. I felt alienated by my family.	1575	88.68	157	8.84	44	2.48	1776

Univariate statistics for the Contextual Domains and Psychological Components from the AAQ can be found in Table 12. The Contextual Domain with the highest mean score was People at School ( $\underline{M} = 7.08$ ,  $\underline{SD} = 6.68$ ) while Boyfriend/Girlfriend was the lowest mean score ( $\underline{M} = 3.54$ ,  $\underline{SD} = 5.03$ ). For Psychological Components, the highest mean was Not Fitting-In ( $\underline{M} = 5.92$ ,  $\underline{SD} = 5.25$ ) and the lowest mean was for Being Cut-Off ( $\underline{M} = 3.85$ ,  $\underline{SD} = 5.56$ ).

By examining the descriptive statistics of each question from the AAQ and the Contextual Domains and Psychological Components univariate statistics, some preliminary findings were shown. For the Contextual Domains, the People at School questions seem to be endorsed the most and Boyfriend/Girlfriend questions are endorsed the least. For the Psychological Components' descriptive statistics, preliminary findings do not seem as consistent but it is important to point out that the Psychological Components of Not Fitting-In had the highest mean score.



Table 12

Study 1A: Univariate Statistics of Contextual Domains and Psychological Components  
from the Adolescent Alienation Questionnaire

	<u>n</u>	<u>M</u>	<u>SD</u>	skewness	kurtosis
Contextual Domains					
People at School	1844	7.08	6.68	1.13	0.73
Friends	1820	4.26	5.34	1.77	3.12
Boyfriend/Girlfriend	1133	3.54	5.03	2.19	5.57
Family	1824	4.31	5.61	1.78	3.05
Psychological Components					
Being Alone	1851	4.95	4.84	1.28	1.97
Being a Target	1847	5.25	6.03	1.38	1.60
Not Fitting-In	1847	5.92	5.25	0.97	0.47
Being Cut-Off	1847	3.85	5.56	1.98	4.21
Alienation Total	1851	19.98	18.97	1.48	2.37

### Correlations of Packets, Contextual Domains, and Psychological Components

Correlations were computed between the 16 Packets to delineate any patterns that may be apparent among particular Contextual Domains and Psychological Components. The correlations for the 16 Packets from the AAQ can be found in Table 13. All of the correlations were positively correlated and were statistically significant ( $p < .0001$ ). The correlations ranged from as low as  $r_s = .21$  to as high as  $r_s = .66$ .

To closer examine any patterns, the Contextual Domains and the Psychological Components from the AAQ were correlated (see Table 14). All of these correlations were positive and statistically significant ( $p < .0001$ ). The Contextual Domains correlations ranged from  $r_s = .41$  to  $.70$  and the Psychological Components correlations ranged from  $r_s = .54$  to  $.74$ . All of the Contextual Domains and the Psychological Components correlated highly with the total Alienation score (range  $r_s = .72$  to  $.91$ ). These correlations seem to support the notion that all four Contextual Domains and all four Psychological Components are interrelated for measuring Alienation. It still needs to be determined if the Contextual Domains or the Psychological Components are better at describing the structure of Alienation and variance among responses. This addressed by principle components analysis and is best answered by confirmatory factor analysis.

Table 13

Study 1A: Correlations of the 16 Packets from the AAQ

	School				Friends				Boy/Girlfriend				Family			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
School																
1. Alone																
2. Target	.42															
3. Fit-In	.59	.60														
4. Cut-Off	.62	.64	.65													
Friends																
5. Alone	.60	.36	.47	.50												
6. Target	.32	.58	.41	.51	.46											
7. Fit-In	.50	.38	.50	.47	.55	.47										
8. Cut-Off	.46	.44	.44	.63	.59	.66	.57									
Boy/Girlfriend																
9. Alone	.34	.22	.31	.31	.42	.32	.35	.41								
10. Target	.27	.27	.23	.30	.31	.44	.29	.45	.35							
11. Fit-In	.37	.23	.37	.31	.39	.27	.48	.38	.62	.46						
12. Cut-Off	.30	.22	.26	.38	.39	.36	.32	.49	.56	.55	.52					
Family																
13. Alone	.38	.21	.31	.29	.37	.23	.33	.29	.28	.21	.29	.26				
14. Target	.26	.24	.22	.30	.24	.36	.28	.34	.22	.38	.25	.34	.48			
15. Fit-In	.34	.22	.33	.30	.30	.21	.37	.27	.30	.24	.40	.27	.65	.48		
16. Cut-Off	.31	.24	.23	.36	.32	.34	.31	.40	.30	.35	.30	.39	.62	.65	.61	

Notes. All coefficients are significant at  $p < .0001$ .

The shaded areas are the relevant correlations, since they are the correlations among the Contextual Domains and among the Psychological Components.

Table 14

Study 1A: Correlations of Contextual Domains and Psychological Components from the AAQ

	School	Friends	Boy/ Girlfriend	Family	Alone	Target	Fitting- In	Cut- off	Total
School									
Friends	.70								
Boy/Girlfriend	.45	.61							
Family	.41	.46	.43						
Alone	.68	.71	.66	.67					
Target	.76	.76	.58	.56	.54				
Fitting-In	.74	.72	.66	.66	.74	.62			
Cut-Off	.76	.80	.72	.63	.71	.73	.70		
Total	.85	.86	.76	.72	.85	.85	.87	.91	

Notes. All coefficients are significant at  $p < .0001$ .

The shaded areas are the relevant correlations, since they are the correlations among the Contextual Domains and among the Psychological Components. There are also shaded areas for the correlations with the total Alienation score.

### Principle Components Analyses of Adolescent Alienation Questionnaire

To examine the structure of responses to the AAQ, principle components analyses and confirmatory factor analyses were used. Principle components analyses are typically used to reduce the number of items to a subset of predictive items and to find the set of factors that can account for all the common and unique variance of the variables. The principle components analyses used varimax rotations in order to have orthogonal solutions. This allows for the factors to be uncorrelated and to be distinct. It is argued that in the proposed framework of alienation that the potential factors (e.g., psychological components, contextual domains) are distinct. Also an unrelated solution (e.g., varimax) allows for a more interpretable solution than a related solution (e.g., oblique). The factor loadings greater than .40 are shown and are considered salient. The number of factors retained was determined by Kaiser's (1960) stopping rule and by Cattell's (1966) scree test. By Kaiser's stopping rule, eigenvalues of at least 1 were retained (Bryant & Yarnold, 1995). By Cattell's scree test, eigenvalues were plotted against the factors. The factors retained were in the steep descent in this plot (Bryant & Yarnold, 1995).

When a principle components analysis is computed, a participant's data must have all questions answered to be used in the analysis. Therefore not all of the data was used for all of the participants. One factor analysis was performed on those who did not have a boyfriend or girlfriend within the past year ( $n = 532$ ) and another was completed on those who did have a boyfriend or girlfriend within the past year ( $n = 617$ ). Table 15 shows the results from the principle factor analysis for participants without a boyfriend or girlfriend. Eight factors were shown for this analysis. Table 16 shows the results from the principle factor analysis for participants with a boyfriend or girlfriend. Eleven of the

factor loadings for the first factor were from the Friends Contextual Domain. The factor loadings for the first factor ranged from .52 to .82. The factor loadings from the second factor were mainly from the People at School Contextual Domain and with two factor loadings from the Friends Contextual Domain. The factor loadings for the second factor ranged from .42 to .86. The factor loadings for the third factor were all from the Family Contextual Domain and ranged from .45 to .85. The fourth factor had factor loadings from the four positively worded items from the People at School and the four positively worded items from Friends Contextual Domains and ranged from .58 to .72. The factor loadings from the fifth factor were the four positively worded items from the Family Contextual Domain and ranged from .64 to .72. Refer to Table 15 for the factor loadings for the sixth, seventh, and eighth factors. It can be seen that the positively worded items often loaded differently on factors than the negatively worded items. From this principle components analysis, the factors mainly loaded onto the Contextual Domains rather than the Psychological Components.

Results for the second principle components analysis, examining participants with a boyfriend or girlfriend, revealed more factors, 13 in total. It was anticipated that more factors would be revealed since the questions from the Boyfriend/Girlfriend Contextual Domain were also included in this analysis. All of the factor loadings for the first factor were from the Family Contextual Domain. The factor loadings for the first factor range from .43 to .82. The factor loadings from the second factor were from the Friends Contextual Domain. The factor loadings for the second factor ranged from .49 to .73. The factor loadings for the third factor were from the Boyfriend/Girlfriend Contextual Domain and ranged from .43 to .81. The fourth factor had factor loadings from the

People at School Contextual Domain. The factor loadings for the fourth factor ranged from .49 to .75. The fifth factor had loadings from both the People at School and the Friends Contextual Domains and the loadings ranged from .40 to .81. The sixth factor had loadings from the Boyfriend/Girlfriend Contextual Domain and ranged from .64 to .82. The seventh, ninth, and eleventh factors had loadings from different positively worded questions and the loadings for these factors ranged from .41 to .80. The eighth and tenth factors had loadings from the Family Contextual Domain and the loadings ranged from .58 to .76. Refer to Table 16 for the factor loadings for the twelfth and thirteenth factors. It can be seen from this analysis that the positively worded items often loaded differently on factors than the negatively worded items, which was also shown by the first principle components analysis. The results from this principle components analysis are similar to the first principle components analysis, in that the factors mainly loaded onto the Contextual Domains rather than the Psychological Components.

The results from both of the principle components analyses support the notion that the structure of Alienation should be explored by Contextual Domains instead of Psychological Components. These analyses also show that the positively worded items often loaded differently on factors than the negatively worded items. The main difference between the principle components analysis for participants without a boyfriend or girlfriend from the principle components analysis for participants with a boyfriend or girlfriend is the order of the Contextual Domains of the first few factors. It was shown that for participants without a boyfriend or girlfriend the factors are generally: 1) Friends, 2) People at School, and 3) Family. For the participants with a boyfriend or girlfriend the

factors are generally: 1) Family, 2) Friends, 3) Boyfriend/Girlfriend, and 4) People at School.

### Confirmatory Factor Analyses of Adolescent Alienation Questionnaire

Although the results of the principle components analyses showed that Alienation should be viewed in terms of Contextual Domains, it is important to conduct confirmatory factor analyses to examine the utility of viewing responses to questions in terms of Contextual Domains and Psychological Components. By using confirmatory factor analyses, the proposed framework of Alienation can be tested. Confirmatory factor analyses were used to compare alternative models of Alienation in terms of their overall agreement with the data. The data from the AAQ was analyzed by confirmatory factor analyses to test the proposed framework of Alienation. A confirmatory factor analysis determines if the numbers of factors and the loadings of the measured variables on them correspond to the pre-established theory. With a confirmatory factor analysis, the number of factors is hypothesized with associated specified subset of measured variables.

For the following confirmatory factor analyses, all of the questions from the AAQ were used. AAQ items that did not load onto factors from the principle components analyses were not deleted for the confirmatory factor analyses since the original proposed framework of Alienation was to be tested.

For the following confirmatory factor analyses, only the complete data for participants with a boyfriend or girlfriend was used ( $n = 532$ ) since the proposed framework of Alienation includes an impact component of a boyfriend/girlfriend. The confirmatory factor analyses were performed using the LISREL 8.54 computer program (Jöreskog & Sörbom, 2003). In the models tests by the confirmatory factor analyses, the



packets are indicators, and the contextual domains and psychological components are latent variables. Three different confirmatory factor analyses were conducted to test three different proposed models of Alienation which include: 1) a first-order single factor model of Alienation with 16 Packets (see Appendix T); 2) a second-order four factor Contextual Domains model of Alienation (see Appendix U); and 3) a second-order four factor Psychological Components model of Alienation (see Appendix V).

The fit for the models were tested with the following goodness-of-fit indices: the chi-squared statistic ( $\chi^2 / \text{df}$ ), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), non-normed fit index (NNFI), and root-mean-square error of approximation (RMSEA). A suggested minimally acceptable value for the  $\chi^2 / \text{df}$  is less than 3 for a good fit model (Kline, 1998). AGFI, CFI, and NNFI values greater than .90 indicate adequate fit (Bentler & Bonett, 1980; Hatcher, 1994). RMSEA values less than 0.10 indicate adequate fit (Bentler & Bonett, 1980).

The goodness-of-fit indices results from the three confirmatory factor analyses can be found in Table 17. The confirmatory factor analysis for the first-order single factor model of Alienation showed that the  $\chi^2 / \text{df}$ , AGFI, CFI, NNFI, and RMSEA goodness-of-fit indicators do not support this model being an adequate fit since all of the fit indexes are not acceptable values. The confirmatory factor analysis for the second-order four factor Psychological Components model of Alienation also showed that the  $\chi^2 / \text{df}$ , AGFI, CFI, NNFI, and RMSEA goodness-of-fit indicators do not support this model. The second-order four factor Contextual Domains model of Alienation was also examined by a confirmatory factor analysis. This analysis showed that the  $\chi^2 / \text{df}$ , AGFI, and RMSEA goodness-of-fit indicators do not support this model but the CFI and NNFI

goodness-of-fit indicators do support this model. The second-order four factor Psychological Components model of Alienation fit the data the best from the three models tested. The confirmatory factor analysis for the second-order four factor Psychological Components model of Alienation includes four latent factors (People at School, Friends, Boyfriend/Girlfriend, and Family) define the general factor, Alienation.

The results from the principle components analyses and the confirmatory factor analyses do not support the first-order 16 Packet model (see Appendix T) nor the Psychological Components model (see Appendix V) but they did show support the Contextual Domains model of Alienation (see Appendix U).

Table 15

Study 1A: Principle Components Analysis of AAQ for Participants without aBoyfriend/Girlfriend (Varimax Rotation, >.40, n = 532)

Variable	Factor							
	1	2	3	4	5	6	7	8
1. I spent time with people at school.				.62				
2. I felt isolated from people at school.							.60	
3. I felt abandoned by people at school.							.65	
4. I could count on people at school.				.59				
5. I was made fun of behind my back by people at school.		.79						
6. I was made fun of directly to my face by people at school.		.82						
7. I was tormented by people at school.		.76						
8. I was teased and called names by people at school.		.86						
9. I fit in with people at school.				.65				
10. I was disliked by people at school.		.72						
11. I was seen as different by people at school.		.49						.60
12. People at school showed interest in me.				.61				
13. I was ignored by people at school.		.56						
14. I felt rejected by people at school.		.62						
15. I was excluded from activities by people at school.		.58						
16. I felt alienated by people at school.		.47					.43	
18. I spent time with my friends.				.72				
19. I felt isolated from my friends.	.66							
20. I felt abandoned by my friends.	.70							
21. I could count on my friends.				.58				
22. I was made fun of behind my back by my friends.	.63	.42						
23. I was made fun of directly to my face by my friends.	.63							
24. I was tormented by my friends.	.64							
25. I was teased and called names by my friends.	.52	.45						
26. I fit in with my friends.				.58				
27. I was disliked by my friends.	.67							
28. I was seen as different by my friends.								.66
29. My friends showed interest in me.				.65				
30. I was ignored by my friends.	.78							
31. I felt rejected by my friends.	.82							
32. I was excluded from activities by my friends.	.76							
33. I felt alienated by my friends.	.76							
35. I spent time with my family.					.70			
36. I felt isolated from my family.			.52					
37. I felt abandoned by my family.			.69					
38. I could count on my family.					.72			
39. I was made fun of behind my back by my family.			.54			.61		
40. I was made fun of directly to my face by my family.			.45			.72		
41. I was tormented by my family.			.51			.63		
42. I was teased and called names by my family.						.74		
43. I fit in with my family.					.72			
44. I was disliked by my family.			.70					
45. I was seen as different by my family.			.54					.49
46. My family showed interest in me.					.64			
47. I was ignored by my family.			.74					
48. I felt rejected by my family.			.82					
49. I was excluded from activities by my family.			.78					
50. I felt alienated by my family.			.85					
Eigenvalues	15.1	4.9	3.5	2.4	1.7	1.5	1.2	1.0

Table 16

**Study 1A: Principle Components Analysis of AAQ for Participants with a Boyfriend/Girlfriend (Varimax Rotation,  $>.40$ ,  $n = 617$ )**

Variable	Factor												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. I spent time with people at school.									.75				
2. I felt isolated from people at school.				.62									
3. I felt abandoned by people at school.				.64									
4. I could count on people at school.											.41		
5. I was made fun of behind my back by people at school.					.75								
6. I was made fun of directly to my face by people at school.					.79								
7. I was tormented by people at school.					.72								
8. I was teased and called names by people at school.					.81								
9. I fit in with people at school.									.69				
10. I was disliked by people at school.					.53								
11. I was seen as different by people at school.				.49								.52	
12. People at school showed interest in me.									.53				
13. I was ignored by people at school.				.57	.40								
14. I felt rejected by people at school.				.68									
15. I was excluded from activities by people at school.				.71									
16. I felt alienated by people at school.				.75									
18. I spent time with my friends.									.46		.44		
19. I felt isolated from my friends.		.49											
20. I felt abandoned by my friends.		.55											
21. I could count on my friends.											.60		
22. I was made fun of behind my back by my friends.		.56			.45								
23. I was made fun of directly to my face by my friends.		.55			.45								
24. I was tormented by my friends.		.61											
25. I was teased and called names by my friends.		.60			.44								
26. I fit in with my friends.									.52		.40		
27. I was disliked by my friends.		.66											
28. I was seen as different by my friends.												.74	
29. My friends showed interest in me.											.73		
30. I was ignored by my friends.		.73											
31. I felt rejected by my friends.		.70											
32. I was excluded from activities by my friends.		.64											
33. I felt alienated by my friends.		.70											
35. I spent time with my boy/girlfriend.							.80						
36. I felt isolated from my boy/girlfriend.			.69										
37. I felt abandoned by my boy/girlfriend.			.75										
38. I could count on my boy/girlfriend.							.79						
39. I was made fun of behind my back by my boy/girlfriend.						.64							
40. I was made fun of directly to my face by my boy/girlfriend.						.82							
41. I was tormented by my boy/girlfriend.						.70							
42. I was teased and called names by my boy/girlfriend.						.79							
43. I fit in with my boy/girlfriend.							.73						
44. I was disliked by my boy/girlfriend.			.54										
45. I was seen as different by my boy/girlfriend.			.43									.54	
46. My boy/girlfriend showed interest in me.							.66						
47. I was ignored by my boy/girlfriend.			.75										
48. I felt rejected by my boy/girlfriend.			.81										
49. I was excluded from activities by my boy/girlfriend.			.69										
50. I felt alienated by my boy/girlfriend.			.68										
51. I spent time with my family.								.68					
52. I felt isolated from my family.	.57												
53. I felt abandoned by my family.	.68												
54. I could count on my family.								.74					
55. I was made fun of behind my back by my family.	.56									.58			
56. I was made fun of directly to my face my family.	.43									.74			
57. I was tormented by my family.										.67			
58. I was teased and called names by my family.										.76			
59. I fit in with my family.								.71					
60. I was disliked by my family.	.72												
61. I was seen as different by my family.	.54											.53	
62. My family showed interest in me.								.58					
63. I was ignored by my family.	.75												
64. I felt rejected by my family.	.82												
65. I was excluded from activities by my family.	.75												
66. I felt alienated by my family.	.72												
Eigenvalues	16	5.0	3.6	3.6	2.4	1.9	1.6	1.6	1.4	1.3	1.2	1.1	1.0

Table 17

Study 1A: Goodness-of-Fit Indicators of Alienation Models for Participants withComplete Data

Model	<u>df</u>	$\chi^2$	$\chi^2 / \underline{df}$	AGFI	CFI	NNFI	RMSEA
First-Order							
Single Factor	104	1573.42	15.13	0.61	0.85	0.82	0.18
Second-Order							
Contextual Domains	100	652.70	6.53	0.79	0.94	0.93	0.11
Psychological Components	100	1510.43	15.10	0.59	0.85	0.82	0.18

Note. AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root-mean-square error of approximation.

### Internal Consistency Alphas for the Adolescent Alienation Questionnaire

Internal consistency reliability assesses the consistency of results across the items. In other words, internal consistency estimates how well different items measure the same construct. The internal consistency alphas for the 16 Packets, four Contextual Domains and four Psychological Components with all of the items and also without the positively worded items can be seen in Table 18. Internal consistencies were computed with Cronbach alphas. According to Nunnally (1978), internal consistency values .60 and greater are considered acceptable. Clark and Watson (1995) recommend that internal consistency values of .80 or better.

For each of the 16 Packets, four questions were included for each Cronbach alpha. The 16 Packets internal consistency alphas ranged from .55 to .89. For most of the Packets, the internal consistencies were within acceptable values of at least .60. For the few Packets that the internal consistency alpha were less than .60, the internal consistency alphas were improved to values greater than .60 when the Cronbach alpha were calculated deleting the positively worded questions from the analyses. These analyses had between two or three questions in each analysis. When the Cronbach alphas were calculated for the Contextual Domains or the Psychological Components, 16 questions were used in each analysis. The Cronbach alphas for the Psychological Components and Contextual Domains were all high and range from .81 to .92. These results support internal consistency of the Contextual Domains and Psychological Components for the AAQ.

Table 18

Study 1A: Internal Consistency Alpha for 16 Packets, Contextual Domains, and Psychological Components for the AAQ

Psychological Components	Number of Questions	Cronbach Alpha with All Items	Cronbach Alpha without Positive Items
People at School			
Being Alone	4	.61	.79
Being a Target	4	.88	same
Fitting-In	4	.65	.65
Being Cut-Off	4	.87	same
Friends			
Being Alone	4	.62	.76
Being a Target	4	.86	same
Not Fitting-In	4	.61	.54
Being Cut-Off	4	.88	same
Boyfriend/Girlfriend			
Being Alone	4	.58	.73
Being a Target	4	.84	same
Not Fitting-In	4	.55	.62
Being Cut-Off	4	.88	same
Family			
Being Alone	4	.74	.78
Being a Target	4	.86	same
Not Fitting-In	4	.70	.61
Being Cut-Off	4	.89	same
Contextual Domains			
People at School	16	.91	.91
Friends	16	.90	.92
Boyfriend/Girlfriend	16	.88	.91
Family	16	.92	.92
Psychological Components			
Being Alone	16	.82	.82
Being a Target	16	.89	same
Not Fitting-In	16	.81	.77
Being Cut-Off	16	.91	same

## Study 1B

### Univariate Statistics of Adolescent Alienation Questionnaire

Univariate statistics for the Contextual Domains and Psychological Components from the AAQ can be found in Table 19. The Contextual Domain with the highest mean score was People at School ( $M = 6.78$ ,  $SD = 6.52$ ) while Boyfriend/Girlfriend had the lowest mean score ( $M = 4.03$ ,  $SD = 5.32$ ). For Psychological Components, the highest mean was Not Fitting-In ( $M = 6.17$ ,  $SD = 5.52$ ) and the lowest mean was for Being Cut-Off ( $M = 3.94$ ,  $SD = 5.67$ ). By comparing mean scores from Study 1A and 1B, the same Contextual Domain and Psychological Component had the highest and lowest scores.

### Correlations of Packets, Contextual Domains, and Psychological Components

To examine relationships among Packets, Contextual Domains, and Psychological Components, correlations were computed (see Table 20). All of the correlations were positively correlated and statistically significant ( $p < .0001$ ). The correlations ranged from  $r_s = .26$  to  $.69$ . The Contextual Domains and the Psychological Components from the AAQ were also correlated (see Table 21). All of these correlations were positive and statistically significant ( $p < .0001$ ). The Contextual Domains' correlations ranged from  $r_s = .47$  to  $.71$  and the Psychological Components' correlations ranged from  $r_s = .59$  to  $.77$ . All of the Contextual Domains and the Psychological Components correlated highly with the total Alienation score (range  $r_s = .76$  to  $.91$ ). These correlations seem to support the notion that all four Contextual Domains and all four Psychological Components are relevant for measuring Alienation.



Table 19

Study 1B: Univariate Statistics of Contextual Domains and Psychological Components  
from the AAQ

	<u>n</u>	<u>M</u>	<u>SD</u>	skewness	kurtosis
Contextual Domains					
People at School	1765	6.78	6.52	1.09	0.56
Friends	1718	4.49	5.74	1.58	1.79
Boyfriend/Girlfriend	1059	4.03	5.32	1.81	3.17
Family	1727	4.40	5.86	1.65	2.32
Psychological Components					
Being Alone	1770	5.23	5.08	1.15	1.07
Being a Target	1769	4.95	6.20	1.53	2.12
Not Fitting-In	1770	6.17	5.52	0.78	-0.22
Being Cut-Off	1768	3.94	5.67	1.79	3.04
Alienation Total	1770	20.28	19.69	1.31	1.26

Table 20

Study 1B: Correlations of the 16 Packets from the AAQ

	School				Friends				Boy/Girlfriend				Family			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
School																
1. Alone																
2. Target	.42															
3. Fit-In	.59	.57														
4. Cut-Off	.61	.67	.63													
Friends																
5. Alone	.65	.38	.51	.56												
6. Target	.39	.59	.43	.55	.52											
7. Fit-In	.50	.36	.56	.49	.63	.51										
8. Cut-Off	.49	.44	.43	.64	.65	.70	.62									
Boy/Girlfriend																
9. Alone	.40	.28	.36	.39	.49	.36	.45	.42								
10. Target	.30	.30	.29	.32	.38	.48	.34	.44	.44							
11. Fit-In	.36	.26	.41	.33	.43	.35	.50	.39	.64	.47						
12. Cut-Off	.33	.27	.28	.36	.42	.42	.39	.49	.51	.71	.50					
Family																
13. Alone	.42	.26	.36	.35	.42	.28	.35	.36	.33	.29	.34	.28				
14. Target	.31	.36	.27	.38	.40	.45	.35	.46	.30	.45	.30	.37	.52			
15. Fit-In	.35	.23	.40	.34	.41	.29	.45	.36	.33	.30	.41	.28	.71	.51		
16. Cut-Off	.37	.31	.30	.42	.43	.39	.36	.48	.29	.41	.34	.42	.66	.69	.61	

Notes. All coefficients are significant at  $p < .0001$ .

The shaded areas are the relevant correlations, since they are the correlations among the Contextual Domains and among the Psychological Components.

Table 21

Study 1B: Correlations of Contextual Domains and Psychological Components from the AAQ

	School	Friends	Boy/ Girlfriend	Family	Alone	Target	Fitting- In	Cut- off	Total
School									
Friends	.71								
Boy/Girlfriend	.47	.61							
Family	.48	.54	.47						
Alone	.71	.75	.67	.71					
Target	.79	.77	.64	.61	.59				
Fitting-In	.73	.74	.67	.69	.76	.61			
Cut-Off	.77	.83	.70	.69	.74	.77	.69		
Total	.86	.88	.76	.77	.87	.86	.87	.91	

Note. All coefficients are significant at  $p < .0001$ .

The shaded areas are the relevant correlations, since they are the correlations among the Contextual Domains, Psychological Components and total Alienation scores.

## Study 2

### Correlations of Contextual Domains and Psychological Components for Each Month and for Each Group

To examine relationships between Contextual Domains and Psychological Components, correlations were computed over all the participants and for each group at the four different time periods. The correlations at month 1 can be found in Table 22. The correlations over all the participants between the Contextual Domains or Psychological Components with the mean total Alienation score ranged from  $r_s = .58$  to  $.88$  and were all statistically significantly ( $p < .0001$ ). The correlations between the Contextual Domains and Psychological Components with the mean total Alienation scores for the distressed group ranged from  $.44$  ( $p < .05$ ) to  $.89$  ( $p < .0001$ ), self-harm group ranged from  $.45$  ( $p > .05$ ) to  $.92$  ( $p < .0001$ ), and comparison group ranged from  $.42$  ( $p < .05$ ) to  $.87$  ( $p < .0001$ ). Most of these correlations show moderate to very strong relationships but all of the correlations with Boyfriend/Girlfriend were not statistically significant.

The correlations at month 2 can be found in Table 23. The correlations over all the participants between the Contextual Domains or Psychological Components with the mean total Alienation score ranged between  $.23$  ( $p > .05$ ) to  $.88$  ( $p < .0001$ ). The correlations between the Contextual Domains and Psychological Components with the mean total Alienation scores for the distressed group ranged from  $.45$  ( $p > .05$ ) to  $.90$  ( $p < .0001$ ), self-harm group ranged from  $.48$  ( $p > .05$ ) to  $.91$  ( $p < .0001$ ), and comparison group ranged from  $.09$  ( $p > .05$ ) to  $.87$  ( $p < .0001$ ). Most of these correlations show

moderate to very strong relationships but all of the correlations with Boyfriend/Girlfriend were not statistically significant.

The correlations at month 6 can be found in Table 24. The correlations over all the participants between the Contextual Domains and Psychological Components with the mean total Alienation score ranged between .60 ( $p < .001$ ) to .91 ( $p < .0001$ ). The correlations between the Contextual Domains and Psychological Components with the mean total Alienation scores for the distressed group ranged from .49 ( $p > .05$ ) to .93 ( $p < .0001$ ), self-harm group ranged from .64 ( $p > .05$ ) to .92 ( $p < .0001$ ), and comparison group ranged from .80 ( $p < .01$ ) to .96 ( $p < .0001$ ). Most of these correlations show strong to very strong relationships.

The correlations at month 12 can be found in Table 25. The correlations over all the participants between the Contextual Domains and Psychological Components with the mean total Alienation score ranged between .61 ( $p < .0001$ ) to .90 ( $p < .0001$ ). The correlations between the Contextual Domains and Psychological Components with the mean total Alienation scores for the distressed group ranged from .59 ( $p < .01$ ) to .88 ( $p < .0001$ ), self-harm group ranged from .76 ( $p < .0001$ ) to .94 ( $p < .0001$ ), and comparison group ranged from .10 ( $p > .05$ ) to .88 ( $p < .0001$ ). Again most of these correlations show moderate to very strong relationships.

Most of the correlations are positive and statistically significant with the mean total Alienation scores. However, the Boyfriend/Girlfriend Contextual Domain often did not significantly correlate with the mean total Alienation score. This may be due to the fact the number of participants for these correlations were small ( $n$  ranged from 8 to 37).

Table 22

Study 2: Month 1 Contextual Domains and Psychological Components Correlations

Domain or Component	1	2	3	4	5	6	7	8	9
All Participants (range 40 to 101)									
1. School									
2. Friends	.71 <sup>d</sup>								
3. Boy/Girlfriend	.15	.27							
4. Family	.35 <sup>c</sup>	.45 <sup>d</sup>	.27						
5. Alone	.69 <sup>d</sup>	.70 <sup>d</sup>	.57 <sup>d</sup>	.63 <sup>d</sup>					
6. Target	.70 <sup>d</sup>	.69 <sup>d</sup>	.22	.58 <sup>d</sup>	.48 <sup>d</sup>				
7. Fitting-In	.70 <sup>d</sup>	.69 <sup>d</sup>	.39 <sup>a</sup>	.69 <sup>d</sup>	.75 <sup>d</sup>	.55 <sup>d</sup>			
8. Cut-Off	.72 <sup>d</sup>	.77 <sup>d</sup>	.66 <sup>d</sup>	.60 <sup>d</sup>	.72 <sup>d</sup>	.69 <sup>d</sup>	.63 <sup>d</sup>		
9. Total	.83 <sup>d</sup>	.85 <sup>d</sup>	.58 <sup>d</sup>	.73 <sup>d</sup>	.86 <sup>d</sup>	.79 <sup>d</sup>	.87 <sup>d</sup>	.88 <sup>d</sup>	
Distressed Group (range 16 to 31)									
1. School									
2. Friends	.73 <sup>d</sup>								
3. Boy/Girlfriend	.17	.46							
4. Family	.08	.24	-.15						
5. Alone	.75 <sup>d</sup>	.81 <sup>d</sup>	.63 <sup>b</sup>	.33					
6. Target	.76 <sup>d</sup>	.69 <sup>d</sup>	-.28	.30	.48 <sup>b</sup>				
7. Fitting-In	.65 <sup>d</sup>	.66 <sup>d</sup>	.40	.47 <sup>b</sup>	.76 <sup>d</sup>	.43 <sup>a</sup>			
8. Cut-Off	.60 <sup>d</sup>	.62 <sup>d</sup>	.78 <sup>d</sup>	.31	.66 <sup>d</sup>	.54 <sup>b</sup>	.40 <sup>a</sup>		
9. Total	.85 <sup>d</sup>	.88 <sup>d</sup>	.54 <sup>a</sup>	.44 <sup>a</sup>	.89 <sup>d</sup>	.76 <sup>d</sup>	.81 <sup>d</sup>	.79 <sup>d</sup>	
Self-Harm Group (range 16 to 35)									
1. School									
2. Friends	.69 <sup>d</sup>								
3. Boy/Girlfriend	-.22	.04							
4. Family	.41 <sup>a</sup>	.53 <sup>b</sup>	.43						
5. Alone	.60 <sup>c</sup>	.67 <sup>d</sup>	.14	.68 <sup>d</sup>					
6. Target	.53 <sup>b</sup>	.65 <sup>d</sup>	.45 <sup>a</sup>	.68 <sup>d</sup>	.34 <sup>a</sup>				
7. Fitting-In	.67 <sup>d</sup>	.70 <sup>d</sup>	.26	.78 <sup>d</sup>	.78 <sup>d</sup>	.51 <sup>c</sup>			
8. Cut-Off	.75 <sup>d</sup>	.84 <sup>d</sup>	.37	.71 <sup>d</sup>	.71 <sup>d</sup>	.70 <sup>d</sup>	.74 <sup>d</sup>		
9. Total	.75 <sup>d</sup>	.85 <sup>d</sup>	.45	.84 <sup>d</sup>	.83 <sup>d</sup>	.76 <sup>d</sup>	.89 <sup>d</sup>	.92 <sup>d</sup>	
Comparison Group (range 8 to 35)									
1. School									
2. Friends	.64 <sup>c</sup>								
3. Boy/Girlfriend	-.08	.34							
4. Family	-.02	.12	.43						
5. Alone	.38 <sup>a</sup>	.43 <sup>a</sup>	.73 <sup>a</sup>	.59 <sup>c</sup>					
6. Target	.83 <sup>d</sup>	.68 <sup>d</sup>	-.02	.11 <sup>b</sup>	.28				
7. Fitting-In	.59 <sup>c</sup>	.62 <sup>d</sup>	.35	.50 <sup>b</sup>	.31	.46 <sup>b</sup>			
8. Cut-Off	.78 <sup>d</sup>	.74 <sup>d</sup>	.47	-.04	.38 <sup>a</sup>	.66 <sup>d</sup>	.37 <sup>a</sup>		
9. Total	.87 <sup>d</sup>	.83 <sup>d</sup>	.55	.42 <sup>a</sup>	.62 <sup>d</sup>	.79 <sup>d</sup>	.78 <sup>d</sup>	.77 <sup>d</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 23

Study 2: Month 2 Contextual Domains and Psychological Components Correlations

Domain or Component	1	2	3	4	5	6	7	8	9
All Participants (range 37 to 95)									
1. School									
2. Friends	.72 <sup>d</sup>								
3. Boy/Girlfriend	.06	.12							
4. Family	.51 <sup>d</sup>	.52 <sup>d</sup>	.00						
5. Alone	.73 <sup>d</sup>	.75 <sup>d</sup>	.46 <sup>b</sup>	.68 <sup>d</sup>					
6. Target	.71 <sup>d</sup>	.60 <sup>d</sup>	.15	.60 <sup>d</sup>	.52 <sup>d</sup>				
7. Fitting-In	.75 <sup>d</sup>	.79 <sup>d</sup>	.14	.68 <sup>d</sup>	.70 <sup>d</sup>	.58 <sup>d</sup>			
8. Cut-Off	.76 <sup>d</sup>	.80 <sup>d</sup>	.14	.70 <sup>d</sup>	.77 <sup>d</sup>	.57 <sup>d</sup>	.69 <sup>d</sup>		
9. Total	.86 <sup>d</sup>	.86 <sup>d</sup>	.23	.78 <sup>d</sup>	.87 <sup>d</sup>	.77 <sup>d</sup>	.88 <sup>d</sup>	.88 <sup>d</sup>	
Distressed Group (range 14 to 31)									
1. School									
2. Friends	.78 <sup>d</sup>								
3. Boy/Girlfriend	.19	.28							
4. Family	.29	.43 <sup>a</sup>	-.11						
5. Alone	.59 <sup>c</sup>	.71 <sup>d</sup>	.63 <sup>a</sup>	.49 <sup>b</sup>					
6. Target	.73 <sup>d</sup>	.55 <sup>b</sup>	.12	.34	.22				
7. Fitting-In	.77 <sup>d</sup>	.80 <sup>d</sup>	.33	.56 <sup>b</sup>	.68 <sup>d</sup>	.48 <sup>b</sup>			
8. Cut-Off	.63 <sup>c</sup>	.82 <sup>d</sup>	.34	.64 <sup>c</sup>	.68 <sup>d</sup>	.37 <sup>b</sup>	.71 <sup>d</sup>		
9. Total	.85 <sup>d</sup>	.90 <sup>d</sup>	.45	.63 <sup>c</sup>	.79 <sup>d</sup>	.66 <sup>d</sup>	.90 <sup>d</sup>	.86 <sup>d</sup>	
Self-Harm Group (range 15 to 32)									
1. School									
2. Friends	.64 <sup>d</sup>								
3. Boy/Girlfriend	.16	.22							
4. Family	.45 <sup>a</sup>	.45 <sup>b</sup>	.38						
5. Alone	.71 <sup>d</sup>	.74 <sup>d</sup>	.55 <sup>a</sup>	.70 <sup>d</sup>					
6. Target	.62 <sup>c</sup>	.59 <sup>c</sup>	.65 <sup>b</sup>	.68 <sup>d</sup>	.65 <sup>d</sup>				
7. Fitting-In	.60 <sup>c</sup>	.80 <sup>d</sup>	.27	.52 <sup>b</sup>	.57 <sup>c</sup>	.54 <sup>b</sup>			
8. Cut-Off	.82 <sup>d</sup>	.80 <sup>d</sup>	.30	.70 <sup>d</sup>	.85 <sup>d</sup>	.69 <sup>d</sup>	.61 <sup>c</sup>		
9. Total	.80 <sup>d</sup>	.86 <sup>d</sup>	.48	.75 <sup>d</sup>	.89 <sup>d</sup>	.83 <sup>d</sup>	.81 <sup>d</sup>	.91 <sup>d</sup>	
Comparison Group (range 8 to 32)									
1. School									
2. Friends	.69 <sup>d</sup>								
3. Boy/Girlfriend	.01	.11							
4. Family	.56 <sup>c</sup>	.33	-.26						
5. Alone	.66 <sup>d</sup>	.58 <sup>c</sup>	.74 <sup>a</sup>	.45 <sup>a</sup>					
6. Target	.65 <sup>d</sup>	.63 <sup>c</sup>	-.19	.68 <sup>d</sup>	.30				
7. Fitting-In	.75 <sup>d</sup>	.47 <sup>b</sup>	.08	.87 <sup>d</sup>	.56 <sup>c</sup>	.60 <sup>c</sup>			
8. Cut-Off	.78 <sup>d</sup>	.49 <sup>b</sup>	-.14	.53 <sup>b</sup>	.42 <sup>a</sup>	.50 <sup>b</sup>	.60 <sup>c</sup>		
9. Total	.89 <sup>d</sup>	.67 <sup>d</sup>	.09	.85 <sup>d</sup>	.69 <sup>d</sup>	.78 <sup>d</sup>	.91 <sup>d</sup>	.75 <sup>d</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 24

Study 2: Month 6 Contextual Domains and Psychological Components Correlations

Domain or Component	1	2	3	4	5	6	7	8	9
All Participants (range 35 to 87)									
1. School									
2. Friends	.67 <sup>d</sup>								
3. Boy/Girlfriend	.46 <sup>a</sup>	.52 <sup>b</sup>							
4. Family	.69 <sup>d</sup>	.56 <sup>d</sup>	.23						
5. Alone	.84 <sup>d</sup>	.71 <sup>d</sup>	.58 <sup>c</sup>	.81 <sup>d</sup>					
6. Target	.77 <sup>d</sup>	.64 <sup>d</sup>	.47 <sup>b</sup>	.58 <sup>d</sup>	.59 <sup>d</sup>				
7. Fitting-In	.76 <sup>d</sup>	.72 <sup>d</sup>	.62 <sup>d</sup>	.73 <sup>d</sup>	.76 <sup>d</sup>	.51 <sup>d</sup>			
8. Cut-Off	.83 <sup>d</sup>	.81 <sup>d</sup>	.42 <sup>a</sup>	.76 <sup>d</sup>	.80 <sup>d</sup>	.72 <sup>d</sup>	.63 <sup>d</sup>		
9. Total	.91 <sup>d</sup>	.84 <sup>d</sup>	.60 <sup>c</sup>	.84 <sup>d</sup>	.92 <sup>d</sup>	.79 <sup>d</sup>	.86 <sup>d</sup>	.90 <sup>d</sup>	
Distressed Group (range 13 to 23)									
1. School									
2. Friends	.24								
3. Boy/Girlfriend	.09	.35							
4. Family	.30	.30	.04						
5. Alone	.67 <sup>b</sup>	.51 <sup>a</sup>	.51	.78 <sup>d</sup>					
6. Target	.83 <sup>d</sup>	.42 <sup>a</sup>	-.12	.46 <sup>a</sup>	.58 <sup>b</sup>				
7. Fitting-In	.48 <sup>a</sup>	.52 <sup>a</sup>	.61 <sup>a</sup>	.62 <sup>b</sup>	.77 <sup>d</sup>	.20			
8. Cut-Off	.69 <sup>b</sup>	.64 <sup>c</sup>	.29	.53 <sup>b</sup>	.64 <sup>c</sup>	.67 <sup>c</sup>	.42 <sup>a</sup>		
9. Total	.80 <sup>d</sup>	.63 <sup>b</sup>	.49	.74 <sup>d</sup>	.93 <sup>d</sup>	.74 <sup>d</sup>	.77 <sup>d</sup>	.81 <sup>d</sup>	
Self-Harm Group (range 13 to 32)									
1. School									
2. Friends	.65 <sup>c</sup>								
3. Boy/Girlfriend	.55	.61 <sup>a</sup>							
4. Family	.68 <sup>c</sup>	.50 <sup>b</sup>	.21						
5. Alone	.82 <sup>d</sup>	.70 <sup>d</sup>	.55	.75 <sup>d</sup>					
6. Target	.69 <sup>c</sup>	.66 <sup>d</sup>	.73 <sup>b</sup>	.51 <sup>b</sup>	.49 <sup>b</sup>				
7. Fitting-In	.75 <sup>d</sup>	.70 <sup>d</sup>	.61 <sup>a</sup>	.65 <sup>d</sup>	.69 <sup>d</sup>	.50 <sup>b</sup>			
8. Cut-Off	.86 <sup>d</sup>	.79 <sup>d</sup>	.47	.80 <sup>d</sup>	.82 <sup>d</sup>	.72 <sup>d</sup>	.61 <sup>c</sup>		
9. Total	.91 <sup>d</sup>	.85 <sup>d</sup>	.64 <sup>a</sup>	.80 <sup>d</sup>	.89 <sup>d</sup>	.77 <sup>d</sup>	.83 <sup>d</sup>	.92 <sup>d</sup>	
Comparison Group (range 9 to 32)									
1. School									
2. Friends	.91 <sup>d</sup>								
3. Boy/Girlfriend	.34	.78 <sup>a</sup>							
4. Family	.84 <sup>d</sup>	.83 <sup>d</sup>	.38						
5. Alone	.88 <sup>d</sup>	.79 <sup>d</sup>	.88 <sup>b</sup>	.81 <sup>d</sup>					
6. Target	.91 <sup>d</sup>	.92 <sup>d</sup>	-.22	.81 <sup>d</sup>	.75 <sup>d</sup>				
7. Fitting-In	.77 <sup>d</sup>	.80 <sup>d</sup>	.55	.85 <sup>d</sup>	.61 <sup>d</sup>	.63 <sup>c</sup>			
8. Cut-Off	.92 <sup>d</sup>	.90 <sup>d</sup>	-.22	.80 <sup>d</sup>	.77 <sup>d</sup>	.97 <sup>d</sup>	.60 <sup>c</sup>		
9. Total	.96 <sup>d</sup>	.96 <sup>d</sup>	.80 <sup>b</sup>	.93 <sup>d</sup>	.86 <sup>d</sup>	.93 <sup>d</sup>	.84 <sup>d</sup>	.92 <sup>d</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .



Table 25

Study 2: Month 12 Contextual Domains and Psychological Components Correlations

Domain or Component	1	2	3	4	5	6	7	8	9
All Participants (range 36 to 89)									
1. School									
2. Friends	.61 <sup>d</sup>								
3. Boy/Girlfriend	.21	.44 <sup>b</sup>							
4. Family	.50 <sup>d</sup>	.71 <sup>d</sup>	.52 <sup>b</sup>						
5. Alone	.71 <sup>d</sup>	.75 <sup>d</sup>	.51 <sup>b</sup>	.81 <sup>d</sup>					
6. Target	.60 <sup>d</sup>	.72 <sup>d</sup>	.56 <sup>c</sup>	.78 <sup>d</sup>	.67 <sup>d</sup>				
7. Fitting-In	.66 <sup>d</sup>	.71 <sup>d</sup>	.65 <sup>d</sup>	.70 <sup>d</sup>	.67 <sup>d</sup>	.42			
8. Cut-Off	.55 <sup>d</sup>	.70 <sup>d</sup>	.65 <sup>d</sup>	.84 <sup>d</sup>	.74 <sup>d</sup>	.84 <sup>d</sup>	.52 <sup>d</sup>		
9. Total	.75 <sup>d</sup>	.85 <sup>d</sup>	.61 <sup>d</sup>	.91 <sup>d</sup>	.90 <sup>d</sup>	.82 <sup>d</sup>	.81 <sup>d</sup>	.87 <sup>d</sup>	
Distressed Group (range 13 to 25)									
1. School									
2. Friends	.47 <sup>a</sup>								
3. Boy/Girlfriend	.17	.46							
4. Family	.06	.33	.77 <sup>b</sup>						
5. Alone	.37	.52 <sup>b</sup>	.83 <sup>c</sup>	.67 <sup>c</sup>					
6. Target	.37	.56 <sup>b</sup>	-.19	.66 <sup>c</sup>	.37				
7. Fitting-In	.71 <sup>d</sup>	.70 <sup>c</sup>	.79 <sup>b</sup>	.54 <sup>b</sup>	.65 <sup>c</sup>	.44 <sup>a</sup>			
8. Cut-Off	.13	.39	.79 <sup>b</sup>	.84 <sup>d</sup>	.46 <sup>a</sup>	.86 <sup>d</sup>	.38		
9. Total	.59 <sup>b</sup>	.72 <sup>d</sup>	.88 <sup>d</sup>	.79 <sup>d</sup>	.80 <sup>d</sup>	.74 <sup>d</sup>	.88 <sup>d</sup>	.72 <sup>d</sup>	
Self-Harm Group (range 12 to 30)									
1. School									
2. Friends	.63 <sup>c</sup>								
3. Boy/Girlfriend	.42	.70 <sup>a</sup>							
4. Family	.61 <sup>c</sup>	.78 <sup>d</sup>	.84 <sup>c</sup>						
5. Alone	.78 <sup>d</sup>	.81 <sup>d</sup>	.82 <sup>b</sup>	.84 <sup>d</sup>					
6. Target	.66 <sup>c</sup>	.77 <sup>d</sup>	.84 <sup>c</sup>	.88 <sup>d</sup>	.74 <sup>d</sup>				
7. Fitting-In	.63 <sup>c</sup>	.72 <sup>d</sup>	.82 <sup>b</sup>	.73 <sup>d</sup>	.78 <sup>d</sup>	.52 <sup>b</sup>			
8. Cut-Off	.61 <sup>c</sup>	.77 <sup>d</sup>	.96 <sup>d</sup>	.88 <sup>d</sup>	.83 <sup>d</sup>	.90 <sup>d</sup>	.57 <sup>b</sup>		
9. Total	.76 <sup>d</sup>	.86 <sup>d</sup>	.91 <sup>d</sup>	.94 <sup>d</sup>	.94 <sup>d</sup>	.88 <sup>d</sup>	.81 <sup>d</sup>	.92 <sup>d</sup>	
Comparison Group (range 11 to 34)									
1. School									
2. Friends	.45 <sup>a</sup>								
3. Boy/Girlfriend	-.17	-.04							
4. Family	.18	.76 <sup>d</sup>	-.02						
5. Alone	.54 <sup>b</sup>	.50 <sup>b</sup>	-.03	.57 <sup>c</sup>					
6. Target	.36	.56 <sup>c</sup>	--	.18	.50 <sup>b</sup>				
7. Fitting-In	.41 <sup>a</sup>	.63 <sup>d</sup>	.57	.69 <sup>d</sup>	.19	-.13			
8. Cut-Off	.34	.43 <sup>a</sup>	-.02	.59 <sup>c</sup>	.13	-.07	.64 <sup>d</sup>		
9. Total	.70 <sup>c</sup>	.88 <sup>d</sup>	.10	.84 <sup>d</sup>	.69 <sup>d</sup>	.40 <sup>a</sup>	.77 <sup>d</sup>	.61 <sup>c</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

### Internal Consistency Alphas for the AAQ

Cronbach alphas for the 16 Packets, Contextual Domains, and Psychological Components were calculated over all the participants at month 1 (see Table 26). The Cronbach alphas examined internal consistencies, which is a measure of reliability. All of the Cronbach alphas for the Contextual Domains were high,  $\geq .80$ , and were also high for the Psychological Components,  $\geq .76$ . The Cronbach alpha for the Contextual Domains and Psychological Components show high internal consistency and provide support for the reliability of the AAQ.

### Summary of Results: Structure of Adolescent Alienation

Based on the various results on the structure of Adolescent Alienation, support was shown for the proposed framework. These results are summarized below. For Study 1A and 1B, the 16 Packets significantly correlated with each other, the four Psychological Components significantly correlated, the four Contextual Domains significantly correlated, and all of the Psychological Components and Contextual Domains significantly correlated with total Alienation ( $p < .0001$ ). For Study 2, at each time interval over all the participants, all of the Psychological Components and all of the Contextual Domains significantly correlated with total Alienation ( $p < .001$ ), except for the correlation between the Boyfriend/Girlfriend Contextual Domain and total Alienation at month 2 ( $p > .05$ ).

From the results of the principle components analysis of participants without a boyfriend or girlfriend, factors for Contextual Domains rather than for Psychological Components were supported. Eight factors were shown, in which the first factor was the Friends Contextual Domain, the second was mainly the People at School Contextual

Table 26

Study 2: Month 1 Internal Consistency Alphas for the 16 Packets, Contextual Domains,  
and Psychological Components for the AAQ Over All Participants

Psychological Components	Number of Questions	Cronbach Alpha with All Items
People at School		
Being Alone	4	.63
Being a Target	4	.88
Not Fitting-In	4	.71
Being Cut-Off	4	.85
Friends		
Being Alone	4	.62
Being a Target	4	.86
Not Fitting-In	4	.60
Being Cut-Off	4	.77
Boyfriend/Girlfriend		
Being Alone	4	.32
Being a Target	4	.82
Not Fitting-In	4	.47
Being Cut-Off	4	.87
Family		
Being Alone	4	.75
Being a Target	4	.88
Not Fitting-In	4	.81
Being Cut-Off	4	.85
Contextual Domains		
People at School	16	.91
Friends	16	.88
Boyfriend/Girlfriend	16	.80
Family	16	.91
Psychological Components		
Being Alone	16	.76
Being a Target	16	.89
Not Fitting-In	16	.82
Being Cut-Off	16	.85

Domain, and the third was the Family Contextual Domain. The principle components analysis of participants with a girlfriend or boyfriend showed that the factor loadings also mainly loaded on Contextual Domains and 13 factors were shown. The first factor was the Family Contextual Domain, the second was the Friends Contextual Domain, the third was the Boyfriend/Girlfriend Contextual Domain, and the fourth was the People at School Contextual Domain. The confirmatory factor analyses showed that the second-order four factor Contextual Domains model of Alienation was the best fit to the data out of the three models tested. From the principle components analyses and the confirmatory factor analyses, the Contextual Domains model of Alienation is supported over the Psychological Components model.

In Study 1A, reliability was examined by internal consistency. The internal consistencies for 14 of the 16 Packets of Alienation were within the acceptable value of .60 but all of these values were within acceptable values when the positively worded items were deleted from the calculations. The four Psychological Components and the four Contextual Domains were shown to have internal consistencies ranging from .81 to .92, which shows high internal consistency and support for reliability of the AAQ. In Study 2, acceptable internal consistencies values were shown for the four Psychological Components, ranging from .76 to .89, and the four Contextual Domains, ranging from .80 to .91. Reliability was shown for the AAQ from these internal consistency values. From the above summary of results it can be seen that the structure of Adolescent Alienation was supported.

## CHAPTER 4. RESULTS: STABILITY OF ADOLESCENT ALIENATION

The stability of Alienation was examined in Study 1A, 1B and 2. In Study 1A to 1B, the stability of the AAQ was investigated by examining the test-retest reliability for participants that completed both Study 1A and 1B. For Study 2, test-retest reliabilities from month 1 to month 2 also examined the stability of the AAQ. Specific results from each of the two studies examining the stability of Alienation and are further described.

### Study 1A to Study 1B

#### Test-Retest Reliability of the Adolescent Alienation Questionnaire

To examine the consistency and stability of the AAQ, which was administered to the same participants separated by a year, test-retest reliabilities were computed. The correlations for the 16 Packets, Contextual Domains, and Psychological Components from the AAQ from Study 1A to Study 1B for participants who completed the AAQ in both years are shown in Table 27. These correlations were calculated to examine the test-retest reliabilities of the AAQ. For the 16 Packets, the correlations between Study 1A and 1B ranged from  $r_s = .16$  ( $p < .05$ ) to  $.62$  ( $p < .0001$ ). For the Contextual Domains and the Psychological Components, the highest Contextual Domain correlation was for People at School ( $r_s = .65$ ,  $p < .0001$ ) and the highest Psychological Component correlation was for Not Fitting-In ( $r_s = .61$ ,  $p < .0001$ ). The lowest Contextual Domain correlations were for Friends ( $r_s = .47$ ,  $p < .0001$ ) and Boyfriend/Girlfriend ( $r_s = .47$ ,  $p < .0001$ ) and the lowest Psychological Component correlation was for Being Cut-Off ( $r_s = .49$ ,  $p < .0001$ ). The correlations between Study 1A and Study 1B for the Contextual Domains ranged from  $r_s = .47$  ( $p < .0001$ ) to  $.65$  ( $p < .0001$ ) and for the Psychological Components ranged from  $r_s = .49$  ( $p < .0001$ ) to  $.61$  ( $p < .0001$ ). These correlations show

moderate to strong relationships, which support good test-retest reliability. The correlation for total Alienation scores from Study 1A to Study 1B was  $r_s = .62$  ( $p < .0001$ ) which shows a strong relationship and very good test-retest reliability for the AAQ. The test-retest reliabilities are mainly very good, especially since the difference in time between the two periods was one year. The longer the time period between the two administration periods, lower correlations are expected.

## Study 2

### Test-Retest Reliability for Alienation

The AAQ was administered at four different time periods in Study 2 and test-retest reliabilities were examined for the mean total Alienation score (see Table 28). The correlations between months 1 and 2 over all the participants was  $r_s = .83$  ( $p < .0001$ ), which shows a very strong relationship and very good test-retest reliability. The correlation between months 1 and 2 for the distressed group was  $r_s = .79$  ( $p < .0001$ ), which also very good test-retest reliability. The correlation between months 1 and 2 for the self-harm group was  $r_s = .81$  ( $p < .0001$ ), which shows a very good test-retest reliability. The correlation between months 1 and 2 for the comparison group was  $r_s = .61$  ( $p < .001$ ), which shows an acceptable test-retest reliability. The test-retest reliabilities between other months were generally good over all the participants and the self-harm group. The test-retest reliabilities for the distressed group and the comparison group were statistically significant between months 1 and 6 ( $p < .001$ ) but were not significant between months 1 and 12 ( $p > .05$ ). Overall good test-retest reliabilities were shown for all time periods over all the participants and the self-harm group. Good test-retest reliabilities were also shown for the distressed and comparison groups to 6 months.

Table 27

Study 1A and 1B: Test-Retest Reliability for Contextual Domains, Psychological Components, and Total Alienation from the AAO

Packet	Number of Questions	Number of Participants	Correlations between Study 1A and Study 1B
School, Alone	4	479	.44 <sup>d</sup>
School, Target	4	475	.56 <sup>d</sup>
School, Fit-In	4	475	.62 <sup>d</sup>
School, Cut-Off	4	473	.48 <sup>d</sup>
Friends, Alone	4	467	.31 <sup>d</sup>
Friends, Target	4	466	.40 <sup>d</sup>
Friends, Fit-In	4	466	.38 <sup>d</sup>
Friends, Cut-Off	4	465	.39 <sup>d</sup>
Boy/Girlfriend, Alone	4	214	.44 <sup>d</sup>
Boy/Girlfriend, Target	4	213	.16 <sup>b</sup>
Boy/Girlfriend, Fit-In	4	214	.44 <sup>d</sup>
Boy/Girlfriend, Cut-Off	4	213	
Family, Alone	4	461	.55 <sup>d</sup>
Family, Target	4	458	.33 <sup>d</sup>
Family, Fit-In	4	456	.41 <sup>d</sup>
Family, Cut-Off	4	460	.35 <sup>d</sup>
School	16	476	.65 <sup>d</sup>
Friends	16	467	.47 <sup>d</sup>
Boy/Girlfriend	16	214	.47 <sup>d</sup>
Family	16	462	.51 <sup>d</sup>
Alone	16	479	.52 <sup>d</sup>
Target	16	477	.56 <sup>d</sup>
Fit-In	16	478	.61 <sup>d</sup>
Cut-Off	16	476	.49 <sup>d</sup>
Total	64	479	.62 <sup>d</sup>

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 28

Study 2: Test-Retest Reliability of Total Alienation for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
All Participants (range 82 to 101)				
Month 1				
Month 2	.83 <sup>d</sup>			
Month 6	.68 <sup>d</sup>	.66 <sup>d</sup>		
Month 12	.54 <sup>d</sup>	.54 <sup>d</sup>	.52 <sup>d</sup>	
Distressed Group (range 25 to 31)				
Month 1				
Month 2	.79 <sup>d</sup>			
Month 6	.50 <sup>a</sup>	.65 <sup>c</sup>		
Month 12	.18	.39	.50 <sup>a</sup>	
Self-Harm Group (range 30 to 35)				
Month 1				
Month 2	.81 <sup>d</sup>			
Month 6	.61 <sup>c</sup>	.52 <sup>b</sup>		
Month 12	.85 <sup>d</sup>	.63 <sup>c</sup>	.49 <sup>b</sup>	
Comparison Group (range 32 to 35)				
Month 1				
Month 2	.61 <sup>c</sup>			
Month 6	.68 <sup>d</sup>	.63 <sup>c</sup>		
Month 12	.02	.01	.13	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .



### Summary of Results: Stability of Adolescent Alienation

Results from both studies provide support for the stability of the AAQ. The main finding from Study 1 was that the AAQ showed test-retest reliability from Study 1A to Study 1B for those participants who completed the AAQ in both studies. The test-retest reliabilities for the Contextual Domains ranged from  $r_s = .47$  to  $.65$  ( $p < .0001$ ) and the test-retest reliabilities for the Psychological Components ranged from  $r_s = .49$  to  $.61$  ( $p < .0001$ ) which are moderate to strong relationships. The test-retest reliability from Study 1A to Study 1B for total Alienation scores on the AAQ was  $r_s = .62$  ( $p < .0001$ ), which showed a strong relationship and a very good test-retest reliability of the AAQ.

In Study 2, findings were shown to support test-retest reliability of the AAQ. The test-retest reliability for the total Alienation score from month 1 to month 2 over all the participants was  $r_s = .83$  ( $p < .0001$ ) which is a very strong relationship and shows very good test-retest reliability. The test-retest reliabilities from month 1 to month 2 for the distressed group and self-harm group also showed very good test-retest reliabilities and the test-retest reliability. The comparison group showed a strong relationship and acceptable test-retest reliability. The AAQ had good test-retest for one month over all the participants and for each of the three groups. The test-retest reliability was generally also good between other months over all the participants and self-harm group. Stability of the AAQ was supported since there is evidence for good test-retest reliabilities in both studies.

## CHAPTER 5. RESULTS: IMPACT OF ADOLESCENT ALIENATION

The impact of Alienation was examined in Study 1A and Study 2. In Study 1A, impact was first examined through hierarchical regressions to see which Contextual Domains and Psychological Components predict various outcome measures. The outcome measures are Depressed Mood, Mood Problems, Thoughts of Self-Harm, Self-Harm Behaviours, and Suicidal Thoughts. It was hypothesized that some of the Contextual Domains and Psychological Components, but probably not all of them, would predict the outcome measures used in the study. Another hierarchical regression analysis was then conducted to see if the best predictive Contextual Domain or the best predictive Psychological Component is the overall best predictor of Depressed Mood. The purpose of this method is to investigate which Contextual Domain or Psychological Component of Alienation is the most relevant for predicting Depressed Mood, which is probably the most relevant for measuring Alienation. It was hypothesized that one of the Contextual Domains or one of the Psychological Components would be the most predictive of Depressed Mood.

In Study 2 at each month over all the participants, correlations were computed between Alienation and the various outcome measures. It was hypothesized that at each time interval, the total Alienation over all the participants would significantly correlate with all the outcome measures of Hopelessness, Depressed Mood, Suicidality, Negative Events, Stress, and Aggression.

In Study 2, at month 1, the impact of Alienation was examined by hierarchical regression analyses to examine which Contextual Domains and Psychological Components could predict different outcome measures. The outcome measures are

Hopelessness, Depressed Mood, Suicidality, Negative Events, and Stress. Again it was hypothesized that some of the Contextual Domains and Psychological Components, but probably not all of them, would predict the outcome measures used in the study.

To provide construct validity for the AAQ, it was examined whether Alienation scores differed between the distressed, self-harm, and comparison groups in Study 2. It was hypothesized that at each month the self-harm group would experience a higher level of Alienation than the comparison group, the distressed group would also experience a higher level of Alienation than the comparison group, and the self-harm group would experience more Alienation than the distressed group.

Also in Study 2, two mediation models were examined. The first mediation model examined whether Depressed Mood mediated the effect between Alienation and Suicidality. The second mediation model examined whether Alienation mediated the effect between Depressed Mood and Suicidality. It was hypothesized that Depressed Mood will mediate the effect between Alienation and Suicidality and this mediation model will show a better reduction in the variance explained than the other mediator model.

Lastly in Study 2, it was tested if Alienation scores at month 1 could predict various outcome measures at month 12. It was hypothesized that Alienation at month 1 would predict Depressed Mood and Suicidality at month 12. As outlined above, specific components of Study 1A and Study 2 examined the impact of Alienation.

## Study 1A

### Hierarchical Regression Analyses for Predicting Outcome Measures

Hierarchical regression analyses were completed to examine which Contextual Domains and Psychological Components predict the various outcome measures, Depressed Mood, Mood Problems, Thoughts of Self-Harm, Self-Harm Behaviours, and Suicidal Thoughts for participants with a boyfriend or girlfriend (see Table 29). The Depressed Mood was computed by taking the mean of the 21 BDI-II questions. The rest of the outcome measures that were examined came from specific questions that were included during data collection. The participants were to indicate what kinds of problems they had during the last year. The score for the Mood Problem variable came from answers to the question, “I had problems with my mood. I felt sad, anxious, or bad about myself”. The score for the Thoughts of Self-Harm variable came from answers to the question, “I thought about hurting myself on purpose”. The score for the Self-Harm Behaviours variable came from answers to the question, “I hurt myself on purpose”. Lastly, the Suicidal Thoughts variable score came from the question, “I thought seriously about killing myself at some point during the past year”. The Contextual Domains that predicted Depressed Mood scores were Family ( $p < .0001$ ), People at School ( $p < .0001$ ), and Boyfriend/Girlfriend ( $p < .05$ ). The Contextual Domains that predicted Mood Problems, Thoughts of Self-Harm, and Self-Harm Behaviours were Family and People at School ( $p < .0001$ ). For Suicidal Thoughts, the Contextual Domains of People at School ( $p < .0001$ ), Family ( $p < .0001$ ), and Boyfriend/Girlfriend ( $p < .05$ ) were predictive of Depressed Mood. From these regression analyses, both the Family and People at School Contextual Domains consistently predicted the outcome measures and the

Boyfriend/Girlfriend Contextual Domain was predictive of some outcome measures. However, the Contextual Domain of Friends was not predictive of any of the outcome measures in this study.

Table 30 shows the results from the hierarchical regression analyses for participants with a boyfriend or girlfriend of the Psychological Components predicting the same outcome measures of Depressed Mood, Mood Problems, Thoughts of Self-Harm, Self-Harm Behaviours, and Suicidal Thoughts. The Psychological Components that predicted Depressed Mood were Being Alone ( $p < .0001$ ), Being Cut-Off ( $p < .0001$ ), and Not Fitting-In ( $p < .05$ ). The Psychological Components that predicted Mood Problems, Thoughts of Self-Harm, and Self-Harm Behaviours were Being Alone ( $p < .0001$ ) and Being Cut-Off ( $p < .05$ ). For Suicidal Thoughts, the Psychological Components of Being Alone ( $p < .0001$ ), Not Fitting-In ( $p < .01$ ), and Being Cut-Off ( $p < .05$ ) were predictive of Depressed Mood. From these regression analyses, it appears that both the Being Alone and Being Cut-Off Psychological Components are consistent at predicting various outcome measures and the Not Fitting-In Psychological Component is predictive of some outcome measures. However, the Psychological Component of Being a Target was not predictive of any of the examined outcome measures in this study.

#### Best Alienation Predictor of Depressed Mood

Previously the hierarchical regression analysis of the four Contextual Domains predicting Depressed Mood scores for participants with a boyfriend or girlfriend, it was shown that the Family Contextual Domain was the first predictor variable entered ( $F(1, 971) = 223.55, p < .0001$ ). Also from the hierarchical regression analysis of the four Psychological Components predicting Depressed Mood scores for participants with a

boyfriend or girlfriend, it was shown that the Being Alone Psychological Component was the first predictor variable entered ( $F(1, 984) = 298.20, p < .0001$ ). From these analyses, it is still unknown whether the Family Contextual Domain or the Being Alone Psychological Component is the best predictor of Depressed Mood scores for participants with a boyfriend or girlfriend.

Another hierarchical regression analysis was conducted. Since there is some of the same data used in these two variables, new variables were calculated deleting the questions that are the same in each variable. In other words, the questions on being alone in the Family Contextual Domain were deleted from the new Family Contextual Domain variable and the questions on family in the Being Alone Psychological Component were deleted from the new Being Alone Psychological Component variable. In each of these new variables, AAQ questions 51, 52, 53, and 54 were not used in the following analysis. The new Family Contextual Domain variable and the new Being Alone Psychological Component variable were entered into a hierarchical regression analysis to determine which variable would be the best predictor of Depressed Mood. The results of this analysis showed that the first predictor was the Family Contextual Domain ( $F(1, 980) = 188.23, p < .0001$ ) and the second predictor was the Being Alone Psychological Component ( $F(2, 980) = 142.63, p < .0001$ ). The results suggest that the Family Contextual Domain is the best predictor of Depressed Mood scores for participants with a boyfriend or girlfriend. With this analysis, it is important to consider that the Family Contextual Domain and the Being Alone Psychological Component may just be a concomitant of Depressed Mood instead of being the best predictor of Depressed Mood.

Table 29

Study 1A: Hierarchical Regression Analyses Summary of the Contextual Domains from the AAQ Predicting Outcome Measures for Participants with a Boyfriend/Girlfriend

Outcome Measure					
Step	Variable Entered	Partial $R^2$	Model $R^2$	F	p
Depressed Mood					
1	Family	.187	.187	223.55	<.0001
2	School	.055	.242	69.64	<.0001
3	Boy/Girlfriend	.004	.246	4.83	.028
Mood Problem					
1	Family	.132	.132	148.49	<.0001
2	School	.031	.162	35.95	<.0001
Thoughts of Self-Harm					
1	Family	.085	.085	91.54	<.0001
2	School	.038	.123	42.84	<.0001
Self-Harm Behaviours					
1	School	.048	.048	49.26	<.0001
2	Family	.019	.067	20.14	<.0001
Suicidal Thoughts					
1	Family	.076	.076	79.71	<.0001
2	School	.026	.102	27.81	<.0001
3	Boy/Girlfriend	.004	.107	4.77	.029

Table 30

Study 1A: Hierarchical Regression Analyses Summary of the Psychological Components  
from the AAQ Predicting Outcome Measures for Participants with a Boyfriend/Girlfriend

Outcome Measure					
Step	Variable Entered	Partial $R^2$	Model $R^2$	F	p
Depressed Mood					
1	Being Alone	.233	.233	298.20	<.0001
2	Being Cut-Off	.014	.246	17.71	<.0001
3	Not Fitting-In	.004	.250	4.72	.030
Mood Problem					
1	Being Alone	.162	.162	191.98	<.0001
2	Being Cut-Off	.011	.173	12.84	.0004
Self-Harm Thoughts					
1	Being Alone	.086	.086	92.05	<.0001
2	Being Cut-Off	.006	.091	6.36	.012
Self-Harm Behaviours					
1	Being Alone	.086	.086	92.05	<.0001
2	Being Cut-Off	.006	.091	6.36	.012
Suicidal Thoughts					
1	Being Alone	.113	.113	125.12	<.0001
2	Not Fitting-In	.009	.122	9.58	.002



## Study 2

### Correlations of Outcome Measures for Each Month and for Each Group

Before describing the correlations between the various outcome measures, how the scores on the measures were calculated will first be discussed. Alienation, Hopelessness, Depressed Mood, Suicidality, and Stress scores were each computed by taking the mean of the number of questions on the measure and then multiplying this value by the number of questions. This method was used to have comparable amounts of the level of each construct experienced. Negative Events was computed by first taking the mean of the number of questions on each domain, then multiplying this value by the number of questions for each domain, and then all of these means were added.

The mean total Alienation scores were correlated with Hopelessness (HBeck), Depressed Mood (BDI-II), Suicidality (BSS), Negative Events (NE), and Stress level (SQ), at each month over all the participants and for each group. The correlations for month 1 are shown in Table 31. Over all the participants at month 1, all the outcome measures significantly correlated with Alienation ( $p < .01$ ). For the distressed group, Alienation only correlated with Hopelessness  $r_s = .63$  ( $p < .0001$ ). The Alienation scores for self-harm group significantly correlated with Hopelessness  $r_s = .34$  ( $p < .05$ ), Depressed Mood  $r_s = .35$  ( $p < .05$ ), and Stress  $r_s = .44$  ( $p < .01$ ). For the comparison group, Alienation only correlated with Hopelessness  $r_s = .55$  ( $p < .001$ ). It is shown that Hopelessness was the only outcome measure that significantly correlated with Alienation for all three groups at month 1.

The outcome measures over all the participants and for each group at month 2, month 6, and at month 12 can be found in Tables 32, 33, and 34. For month 6 and month

12, there was an additional outcome measure of Aggression (AQY). The correlations of outcome measures from month 2, month 6, and month 12 showed over all the participants all the outcome measure significantly correlated with Alienation ( $p < .05$ ) except for Aggression at month 12 ( $p > .05$ ). The correlations for each group at month 2, 6, and 12 showed less consistent results compared to the month 1 correlations.

#### Outcome Measures Correlations for Each Month and For Each Group

Correlations for Hopelessness, Depressed Mood, Suicidality, Negative Events, Stress level, and Aggression scores over all the participants and for each group at each month can be found in Appendix W.

Table 31

Study 2: Month 1 Correlations of Outcome Measures

				Measure					
	<u>n</u>	<u>M</u>	<u>SD</u>	AAQ	HBeck	BDI-II	BSS	NE	SQ
All Participants									
AAQ	101	22.45	18.16						
HBeck	101	46.98	13.67	.62 <sup>d</sup>					
BDI-II	101	14.75	11.44	.47 <sup>d</sup>	.56 <sup>d</sup>				
BSS	101	2.65	5.55	.30 <sup>b</sup>	.37 <sup>c</sup>	.42 <sup>d</sup>			
NE	97	28.80	24.81	.39 <sup>d</sup>	.39 <sup>d</sup>	.54 <sup>d</sup>	.31 <sup>b</sup>		
SQ	96	16.35	12.63	.52 <sup>d</sup>	.61 <sup>d</sup>	.90 <sup>d</sup>	.53 <sup>d</sup>	.60 <sup>d</sup>	
Distressed Group									
AAQ	31	29.16	17.36						
HBeck	31	52.03	13.28	.63 <sup>d</sup>					
BDI-II	31	24.68	6.70	-.02	.35				
BSS	31	1.04	3.23	.15	.35	.33			
NE	31	37.71	25.71	.25	.19	.19	.09		
SQ	31	23.35	9.98	.13	.56 <sup>b</sup>	.77 <sup>d</sup>	.37 <sup>a</sup>	.42 <sup>a</sup>	
Self-Harm Group									
AAQ	35	28.70	19.53						
HBeck	35	53.27	13.07	.34 <sup>a</sup>					
BDI-II	35	17.11	10.35	.35 <sup>a</sup>	.34 <sup>a</sup>				
BSS	35	6.74	7.39	.21	.21	.61 <sup>d</sup>			
NE	35	36.49	24.98	.16	.17	.41 <sup>a</sup>	.29		
SQ	35	20.11	12.73	.44 <sup>b</sup>	.37 <sup>a</sup>	.89 <sup>d</sup>	.67 <sup>d</sup>	.43 <sup>a</sup>	
Comparison Group									
AAQ	35	10.25	9.36						
HBeck	35	36.20	6.32	.55 <sup>c</sup>					
BDI-II	35	3.60	3.89	.16	-.07				
BSS	35	0	0	--	--	--			
NE	31	11.23	11.45	.21	-.13	.54 <sup>b</sup>	--		
SQ	30	4.73	4.55	.23	-.02	.82 <sup>d</sup>	--	.67 <sup>d</sup>	

Note. Dashed indicate the correlation was not calculated since all of the comparison group participants' Beck Suicide Scale score equalled zero.

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 32

Study 2: Month 2 Correlations of Outcome Measures

				Measure					
	<u>n</u>	<u>M</u>	<u>SD</u>	AAQ	HBeck	BDI-II	BSS	NE	SQ
All Participants									
AAQ	93	19.49	16.96						
HBeck	93	47.15	14.90	.52 <sup>d</sup>					
BDI-II	93	11.25	12.15	.47 <sup>d</sup>	.71 <sup>d</sup>				
BSS	95	2.05	5.14	.29 <sup>b</sup>	.41 <sup>d</sup>	.45 <sup>d</sup>			
NE	95	16.77	18.44	.51 <sup>d</sup>	.54 <sup>d</sup>	.59 <sup>d</sup>	.50 <sup>d</sup>		
SQ	95	12.66	12.19	.48 <sup>d</sup>	.68 <sup>d</sup>	.87 <sup>d</sup>	.50 <sup>d</sup>	.63 <sup>d</sup>	
Distressed Group									
AAQ	30	24.04	15.46						
HBeck	30	55.75	13.56	.34					
BDI-II	30	19.40	14.25	.22	.61 <sup>c</sup>				
BSS	31	1.66	4.21	.26	.62 <sup>c</sup>	.80 <sup>d</sup>			
NE	30	21.80	17.59	.18	.21	.39 <sup>a</sup>	.11		
SQ	30	18.90	11.21	.17	.69 <sup>d</sup>	.91 <sup>d</sup>	.75 <sup>d</sup>	.46 <sup>a</sup>	
Self-Harm Group									
AAQ	32	26.78	18.37						
HBeck	32	51.03	14.27	.37 <sup>a</sup>					
BDI-II	32	12.16	9.70	.52 <sup>b</sup>	.65 <sup>d</sup>				
BSS	33	4.29	7.20	.16	.29	.29			
NE	33	23.70	20.84	.48 <sup>b</sup>	.50 <sup>b</sup>	.59 <sup>c</sup>	.60 <sup>c</sup>		
SQ	33	15.94	13.23	.42 <sup>a</sup>	.45 <sup>b</sup>	.80 <sup>d</sup>	.38 <sup>a</sup>	.54 <sup>b</sup>	
Comparison Group									
AAQ	31	7.56	8.79						
HBeck	31	34.82	6.77	.23					
BDI-II	31	2.42	3.41	.05	-.01				
BSS	31	.007	0.38	-.16	-.13	-.13			
NE	32	4.91	8.52	.55 <sup>b</sup>	.17	.55 <sup>b</sup>	-.03		
SQ	32	3.44	3.93	-.03	.00	.79 <sup>d</sup>	-.20	.76 <sup>d</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 33

Study 2: Month 6 Correlations of Outcome Measures

	<u>n</u>	<u>M</u>	<u>SD</u>	Measure						
				AAQ	HBeck	BDI-II	BSS	NE	SQ	AQY
All Participants										
AAQ	87	12.37	14.13							
HBeck	87	42.39	10.82	.45 <sup>c</sup>						
BDI-II	87	5.31	7.16	.39 <sup>c</sup>	.59 <sup>d</sup>					
BSS	88	1.81	4.40	.31 <sup>b</sup>	.31 <sup>b</sup>	.32 <sup>b</sup>				
NE	88	6.68	9.25	.39 <sup>c</sup>	.44 <sup>d</sup>	.49 <sup>d</sup>	.32 <sup>b</sup>			
SQ	87	6.00	7.44	.43 <sup>d</sup>	.63 <sup>d</sup>	.80 <sup>d</sup>	.38 <sup>c</sup>	.52 <sup>d</sup>		
AQY	72	41.21	9.50	.26 <sup>a</sup>	.23 <sup>a</sup>	.36 <sup>b</sup>	.26 <sup>a</sup>	.13	.37 <sup>b</sup>	
Distressed Group										
AAQ	23	14.40	10.83							
HBeck	23	47.87	9.92	.13						
BDI-II	23	8.76	9.82	.13	.55 <sup>b</sup>					
BSS	24	0.25	1.22	.06	.35	.74 <sup>d</sup>				
NE	24	8.17	7.63	-.10	.29	.39	.13			
SQ	24	8.83	8.36	-.03	.63 <sup>b</sup>	.73 <sup>d</sup>	.77 <sup>d</sup>	.45 <sup>a</sup>		
AQY	16	40.88	6.06	.15	.09	.37	.16	.57 <sup>a</sup>	.23	
Self-Harm Group										
AAQ	32	19.33	16.52							
HBeck	32	46.13	9.33	.37 <sup>a</sup>						
BDI-II	32	7.26	6.04	.41 <sup>a</sup>	.43 <sup>a</sup>					
BSS	32	4.80	6.23	.17	.31	.31				
NE	32	10.59	11.91	.37 <sup>a</sup>	.31	.38 <sup>a</sup>	.22			
SQ	31	8.87	7.61	.47 <sup>b</sup>	.50 <sup>b</sup>	.76 <sup>d</sup>	.31	.35		
AQY	27	46.46	11.89	-.002	.001	.25	.03	-.18	.28	
Comparison Group										
AAQ	32	3.94	8.45							
HBeck	32	34.69	8.35	.33						
BDI-II	32	0.88	2.06	.006	.47 <sup>b</sup>					
BSS	32	0	0	--	--	--				
NE	32	1.66	3.39	.05	.37 <sup>a</sup>	.81 <sup>d</sup>	--			
SQ	32	1.09	2.56	.12	.29	.80 <sup>d</sup>	--	.81 <sup>d</sup>		
AQY	29	36.51	5.33	.03	.03	.19	--	-.005	-.07	

Note. Dashed indicate the correlation was not calculated since all of the comparison participants' Beck Suicide Scale score equalled zero.

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Table 34

Study 2: Month 12 Correlations of Outcome Measures

				Measure						
	<u>n</u>	<u>M</u>	<u>SD</u>	AAQ	HBeck	BDI-II	BSS	NE	SQ	AQY
All Participants										
AAQ	89	8.91	12.15							
HBeck	89	41.73	9.83	.48 <sup>c</sup>						
BDI-II	89	3.92	5.86	.53 <sup>d</sup>	.49 <sup>d</sup>					
BSS	89	1.70	4.51	.32 <sup>b</sup>	.33 <sup>b</sup>	.29 <sup>b</sup>				
NE	90	4.59	6.70	.33 <sup>b</sup>	.25 <sup>a</sup>	.52 <sup>d</sup>	.20			
SQ	90	5.11	7.60	.35 <sup>c</sup>	.46 <sup>d</sup>	.84 <sup>d</sup>	.35 <sup>c</sup>	.59 <sup>d</sup>		
AQY	86	39.49	9.74	.11	.18	.19	.02	.16	.31 <sup>b</sup>	
Distressed Group										
AAQ	25	9.44	8.44							
HBeck	25	44.76	7.74	-.07						
BDI-II	25	4.80	5.51	.12	.20					
BSS	25	0.85	3.21	.03	.26	.20				
NE	26	7.46	8.81	.13	.05	.64 <sup>c</sup>	.02			
SQ	26	6.42	7.67	.02	.19	.87 <sup>d</sup>	.37	.81 <sup>d</sup>		
AQY	24	37.56	8.61	.64 <sup>c</sup>	-.001	.36	.12	.28	.31	
Self-Harm Group										
AAQ	30	14.80	16.90							
HBeck	30	46.70	9.67	.57 <sup>b</sup>						
BDI-II	30	6.68	7.58	.54 <sup>b</sup>	.52 <sup>b</sup>					
BSS	30	4.34	6.47	.23	.23	.15				
NE	30	5.60	6.73	.34	.12	.34	.26			
SQ	30	8.03	9.74	.33	.58 <sup>c</sup>	.80 <sup>d</sup>	.23	.33		
AQY	29	44.30	12.32	-.28	-.006	-.08	-.27	-.003	.24	
Comparison Group										
AAQ	34	3.33	5.19							
HBeck	34	35.11	7.58	.24						
BDI-II	34	0.85	1.35	.39 <sup>a</sup>	.06					
BSS	34	0	0	--	--	--				
NE	34	1.50	2.25	.42 <sup>a</sup>	.16	.55 <sup>c</sup>	--			
SQ	34	1.53	2.38	.20	-.25	.41 <sup>a</sup>	--	.50 <sup>b</sup>		
AOY	33	36.66	5.83	.29	.21	.39 <sup>a</sup>	--	.15	-.08	

Note. Dashed indicate the correlation was not calculated since all of the comparison participants' Beck Suicide Scale score equalled zero.

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

### Hierarchical Regression Analyses for Predicting Outcome Measures

Separate hierarchical regression analyses were conducted for Contextual Domains predicting the different outcome measures of Depressed Mood, Suicidality, Hopelessness, Negative Events, and Stress over all the participants at month 1 (see Table 35). These analyses were conducted to examine which Contextual Domains were predictive for each of the outcome measures. For the outcome measures of Depressed Mood, Suicidality, Hopelessness, and Stress, the only Contextual Domain that predicted these measures was People at School ( $p < .05$ ). Family was the only Contextual Domain that predicted Negative Events ( $p < .01$ ). The People at School Contextual Domain was the most consistent at predicting the various outcome measures over all the participants at month 1.

Separate hierarchical regression analyses were conducted for Psychological Components predicting the different outcome measures of Depressed Mood, Suicidality, Hopelessness, Negative Events, and Stress over all the participants at month 1 (see Table 36). For the outcome measures of Depressed Mood and Negative Events, the only Psychological Component that predicted these measures was Being Alone ( $p < .0001$ ). Not Fitting-In was the only Psychological Component that predicted Suicidality ( $p < .01$ ). The Psychological Components of Not Fitting-In and Being Alone predicted Hopelessness ( $p < .01$ ). Lastly the Psychological Components of Not Fitting-In and Being Cut-Off predicted Stress ( $p < .05$ ). The Being Alone and Not Fitting-In Psychological Components were the most consistent at predicting the outcome measures.

Table 35

Study 2: Month 1 Hierarchical Regression Analyses Summary for Contextual Domains of the AAQ Predicting Outcome Measures Over All Participants

DV	Step	Predictor Variable Entered	Partial $R^2$	Model $R^2$	F	p
BDI-II						
	1	People at School	.134	.134	5.42	<.05
BSS						
	1	People at School	.310	.310	15.73	<.001
HBeck						
	1	People at School	.361	.361	19.74	<.0001
NE						
	1	Family	.248	.248	11.15	<.01
SQ						
	1	People at School	.286	.286	14.05	<.001



Table 36

Study 2: Month 1 Hierarchical Regression Analyses Summary for Psychological  
Components of the AAQ Predicting Outcome Measures Over All Participants

DV	Step	Predictor Variable Entered	Partial $R^2$	Model $R^2$	F	p
BDI-II						
	1	Being Alone	.223	.223	27.24	<.0001
BSS						
	1	Not Fitting-In	.081	.081	8.35	<.01
HBeck						
	1	Not Fitting-In	.381	.381	58.37	<.0001
	2	Being Alone	.048	.429	7.94	<.01
NE						
	1	Being Alone	.167	.167	19.05	<.0001
SQ						
	1	Not Fitting-In	.245	.245	30.49	<.0001
	2	Being Cut-Off	.049	.294	6.40	<.05

### ANOVA Analyses for Each Month on Total Alienation Scores

An approach to examine the impact of Alienation is to inspect differences on total Alienation scores between the clinical groups and the comparison group at each month. Four one-way ANOVAs were computed using Proc Mixed in SAS (SAS Institute, 1996). These four one-way ANOVAs examined group differences for each month. The results from these analyses are shown in Table 37. For each analysis, group was the between group variable and total Alienation score was the dependent variable.

The mean total Alienation scores at each month and for each group are shown in Figure 1. At month 1, the results showed a statistically significant effect for group ( $F(2, 98) = 15.63, p < .0001$ ). Post hoc contrasts were computed to examine whether groups differed from each other on Alienation scores. For the group post hoc contrasts at month 1, there were statistically significant differences between the distressed and comparison groups ( $t(98) = -4.80, p < .0001$ ) and between the self-harm and comparison groups ( $t(98) = -4.83, p < .0001$ ), but there was not a statistically significant difference between the distressed and self-harm groups ( $t(98) = -0.12, p > .05$ ). This analysis showed that at month 1, the comparison group had a lower Alienation score than both of the clinical groups but the two clinical groups did not significantly differ from each other.

At month 2, the results showed a statistically significant effect for group ( $F(2, 91) = 15.45, p < .0001$ ). Post hoc contrasts were computed to examine which groups differed from each other on total Alienation scores. For these contrasts at month 2, there were statistically significant differences between the distressed and comparison groups ( $t(91) = -4.34, p < .0001$ ) and between the self-harm and comparison groups ( $t(91) = -5.16, p < .0001$ ), but there was not a statistically significant difference between the

distressed and self-harm groups ( $t(91) = 0.73, p > .05$ ). This analysis again showed that at month 2, the comparison group had a lower Alienation score than both of the clinical groups but the two clinical groups did not significantly differ from each other.

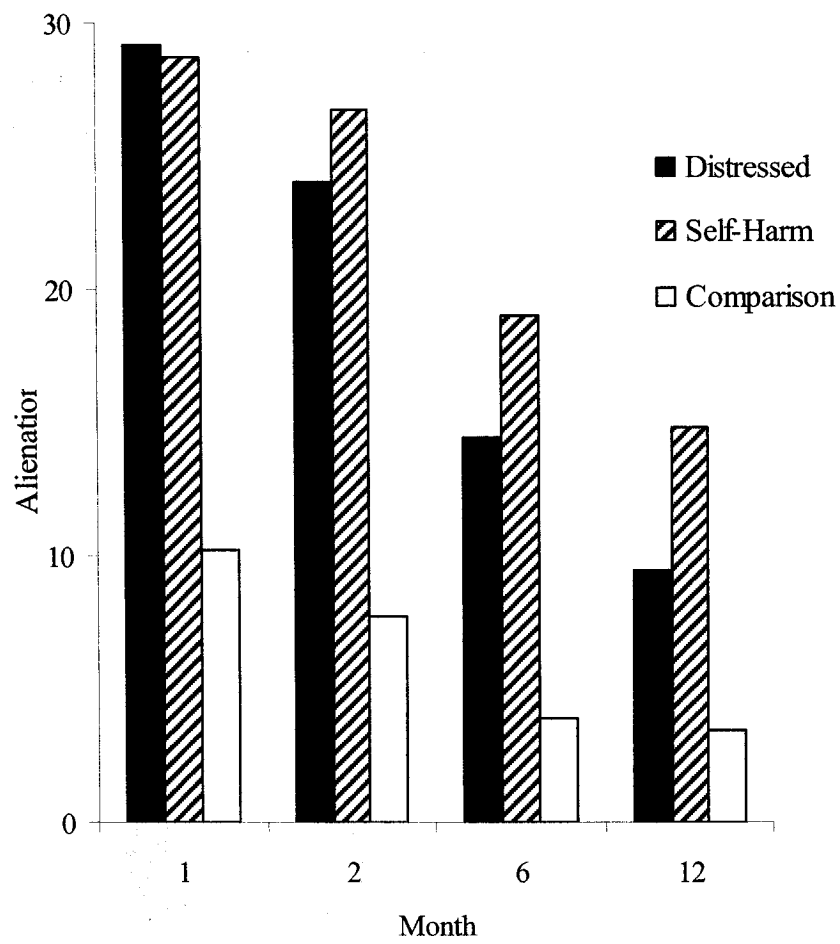
At month 6, the results showed a statistically significant effect for group ( $F(2, 85) = 12.12, p < .0001$ ). Again for the post hoc contrasts at month 6, there were statistically significant differences between the distressed and comparison groups, ( $t(85) = -43.05, p < .001$ ) and between the self-harm and comparison groups, ( $t(85) = -4.83, p < .0001$ ), but the distressed and self-harm groups did not differ from each other, ( $t(85) = 1.35, p > .05$ ). This analysis showed that at month 6, the comparison group had a lower mean Alienation than both of the clinical groups but the two clinical groups did not significantly differ from each other for mean Alienation scores, which is similar to the results of the analyses at month 1 and at month 2.

At month 12, the results showed a statistically significant effect for group ( $F(2, 85) = 7.96, p < .001$ ). For the post hoc contrasts, there were statistically significant differences between the distressed and comparison groups, ( $t(85) = -2.00, p < .05$ ) and between the self-harm and comparison groups, ( $t(985) = -3.98, p < .001$ ), but there was not a statistically significant difference between the distressed and self-harm groups, ( $t(85) = 1.75, p > .05$ ). This analysis showed that at month 12, the comparison group had a lower mean Alienation than both of the clinical groups but the two clinical groups did not significantly differ from each other for Alienation scores. Therefore at month 1, 2, 6, and 12, the two clinical groups differed from the comparison group on Alienation scores but that the two clinical groups did not significantly differ from each other. These results were consistent for all four time periods.

Table 37

Study 2: One-Way ANOVA Analyses and Post Hoc Contrasts for Each Month for Group Differences on Total Alienation Scores

Month 1				
	Numerator <u>df</u>	Denominator <u>df</u>	<u>F</u>	<u>p</u>
Group	2	98	15.63	<.0001
Contrasts		<u>df</u>	<u>t</u>	<u>p</u>
Distressed & Self-Harm Groups		98	-0.12	<u>ns</u>
Distressed & Comparison Groups		98	-4.80	<.0001
Self-Harm & Comparison Groups		98	-4.83	<.0001
Month 2				
	Numerator <u>df</u>	Denominator <u>df</u>	<u>F</u>	<u>p</u>
Group	2	91	15.45	<.0001
Contrasts		<u>df</u>	<u>t</u>	<u>p</u>
Distressed & Self-Harm Groups		91	0.73	<u>ns</u>
Distressed & Comparison Groups		91	-4.34	<.0001
Self-Harm & Comparison Groups		91	-5.16	<.0001
Month 6				
	Numerator <u>df</u>	Denominator <u>df</u>	<u>F</u>	<u>p</u>
Group	2	85	12.12	<.0001
Contrasts		<u>df</u>	<u>t</u>	<u>p</u>
Distressed & Self-Harm Groups		85	1.35	<u>ns</u>
Distressed & Comparison Groups		85	-3.05	<.001
Self-Harm & Comparison Groups		85	-4.83	<.0001
Month 12				
	Numerator <u>df</u>	Denominator <u>df</u>	<u>F</u>	<u>p</u>
Group	2	85	7.96	<.001
Contrasts		<u>df</u>	<u>t</u>	<u>p</u>
Distressed & Self-Harm Groups		85	1.75	<u>ns</u>
Distressed & Comparison Groups		85	-2.00	<.05
Self-Harm & Comparison Groups		85	-3.98	<.001



**Figure 1.** Study 2 mean total alienation scores by month and group.

### Month 1 Mediation Models

Two mediation models were examined in Study 2 (see Appendix C). The first mediation model examined whether Depressed Mood mediated the effect between Alienation and Suicidality. The second mediation model examined whether Alienation mediated the effect between Depressed Mood and Suicidality. Depressed Mood mediating the relationship between Alienation and Suicidality was based on past research (Shea, 1993; Walsh, 1987 as cited in Walsh & Rosen, 1988; Walsh & Rosen, 1988). Both Walsh (1987 as cited in Walsh & Rosen, 1988) and Shea (1993) showed a relationship between alienation and depressed mood. Also Rosen and Walsh (1988) theorized that alienation is a common component of self-harm behaviours. In Study 2, there were a limited number of Self-Harm Behaviours reported, so Suicidality was used instead. Suicidality scores were computed by taking the mean of the 21 questions on the BSS and then multiplying this value 21.

Requirements for a mediation process include the following steps: (1) the relationships between the independent variable, the mediator, and the dependent variable are to be correlated, (2) the size of the effect of the independent variable on the dependent variable must be significant, (3) the path from the independent variable to the mediator to the dependent variable must be significant, and (4) the relationship between the independent variable and the dependent variable must decrease significantly after the mediator has been controlled for in the model. To show mediation, the results must satisfy the requirement in these steps (Baron & Kenny, 1986).

*Depressed Mood as a Mediator.* Depressed Mood mediating the effect between Alienation and Suicidality was tested (see Appendix C). Alienation is the independent

variable, Depressed Mood is the mediator, and Suicidality is the dependent variable. To test step 1 of this mediation model, there were significant correlations between Alienation and Depressed Mood ( $r_s = .47, p < .0001$ ), Depressed Mood and Suicidality Mood ( $r_s = .42, p < .0001$ ), and Alienation and Suicidality Mood ( $r_s = .30, p < .01$ ) at month 1. These correlations show that the requirements for being able to test the mediation were met. To test step 2, a regression analysis was conducted in which Alienation was regressed onto Suicidality and this showed a statistically significant effect ( $F(1, 100) = 9.59, p < .01$ ),  $R^2 = .088$ . To test step 3, a regression analysis was conducted in which Alienation was regressed onto Suicidality, after controlling for Depressed Mood, and this analysis showed a statistically significant effect ( $F(2, 100) = 11.51, p < .0001$ ),  $R^2 = .012$ . To test step 4 of mediation,  $R^2 = .012 < R^2 = .088$ . Since steps 1 to 4 were shown, Depressed Mood mediated the effect between Alienation and Suicidality. All four conditions for the mediation model were met. This mediation model shows the role of a third variable, Depressed Mood, on the relationship between an independent variable, Alienation, on a dependent variable, Suicidality. Also introducing the mediator reduced the size of the beta weight from .09 to .04.

*Alienation as a Mediator.* Alienation mediating the effect between Depressed Mood and Suicidality was also tested (see Appendix C). Depressed Mood is the independent variable, Alienation is the mediator, and Suicidality is the dependent variable. To test step 1 of this mediation model, significant correlations were shown among the three variables at month 1, which were described during the first mediation model. These correlations show that the requirements for being able to test the mediation were met. To test step 2, a regression analysis was conducted in which Depressed Mood

was regressed onto Suicidality and this showed a statistically significant effect ( $F(1, 100) = 21.46, p < .0001$ ),  $R^2 = .178$ . To test step 3, a regression analysis was conducted in which Depressed Mood was regressed onto Suicidality, after controlling for Alienation, and this analysis showed a statistically significant effect ( $F(2, 100) = 11.51, p < .0001$ ),  $R^2 = .102$ . To test step 4 of mediation,  $R^2 = .102 < R^2 = .178$ . Since steps 1 to 4 were shown, Alienation mediated the effect between Depressed Mood and Suicidality. This mediation model shows the role of a third variable, Alienation, on the relationship between an independent variable, Depressed Mood, on a dependent variable, Suicidality. Also introducing the mediator reduced the size of the beta weight from .20 to .18.

*Best Mediation Model.* An inference can be made whether one of the two mediation models is probably a better model by comparing the reduction in explained variance in each of the two models. In the mediation model of Depressed Mood mediating the effect between Alienation and Suicidality, the reduction in the explained variance was  $.088 - .012 = .076$ . In the mediation model of Alienation mediating the effect between Depressed Mood and Suicidality, the reduction in the explained variance was  $.178 - .102 = .076$ . Thus the amount of reduction in the explained variance is the same in both mediation models. From these results, it cannot be inferred whether one of the mediation models is better than the other model. Both of the mediation models appear to be equally relevant.

#### Baseline Alienation Predicting Month 12 Outcome Measures

Regression analyses were conducted on whether baseline Alienation scores could predict month 12 outcome measures over all the participants. It was shown that Alienation at month 1 predicted Depressed Mood ( $F(1, 174) = 17.10, p < .0001$ ),



Suicidality ( $F(1, 174) = 5.50, p < .05$ ), Hopelessness ( $F(1, 174) = 48.32, p < .0001$ ), Negative Life Event ( $F(1, 175) = 11.01, p < .001$ ), and Stress ( $F(1, 174) = 19.44, p < .0001$ ) at month 12. However, Alienation scores at month 1 did not predict Aggression scores at month 12 ( $F(1, 170) = 17.10, p > .05$ ). Therefore Alienation scores at baseline predicted scores on all of the outcome measures at the end of the study, except Aggression scores.

#### Summary of Results: Impact of Adolescent Alienation

The impact of Alienation was examined in Study 1A and Study 2. In Study 1A, impact was first examined through hierarchical regressions to see which Contextual Domains and Psychological Components predicted various outcome measures. It was shown that the Contextual Domain of Family was the main Contextual Domain predictor of these outcome measures and the Psychological Component of Being Alone was the main Psychological Component predictor of the outcome measures. Another hierarchical regression analysis was then conducted to see if the Family Contextual Domain (without the Being Alone questions) or the Being Alone Psychological Component (without the Family questions) is the overall best predictor of Depressed Mood. This analysis showed that the Family Contextual Domain was the best predictor of Depressed Mood.

In Study 2, at each month over all the participants, correlations were computed between Alienation and the various outcome measures. It was shown at months 1, 2, and 6 that all of the outcome measures significantly correlated with Alienation over all the participants. At month 12 the outcome measures of Hopelessness, Depressed Mood, Suicidality, Negative Events, and Stress did significantly correlated with Alienation but Aggression did not significantly correlate.

In Study 2 at month 1, the impact of Alienation was examined by hierarchical regression analyses to examine which Contextual Domains and Psychological Components could predict different outcome measures. The Contextual Domain that predicted most of the outcome measures was People at School. The Psychological Components that predicted most of the outcome measures were Being Alone and Not Fitting-In.

Construct validity of the AAQ was examined to see if Alienation scores differed between the distressed, self-harm, and comparison groups. At month 1, 2, 6, and 12 the distressed group had a higher level of Alienation than the comparison group, the self-harm group had a higher level of Alienation than the comparison group, but the self-harm group did not differ from the distressed group.

Also in Study 2, two mediation models were examined. The first mediation model showed that Depressed Mood mediated the effect between Alienation and Suicidality at baseline. The second mediation model showed that Alienation mediated the effect between Depressed Mood and Suicidality. By comparing the amount of reduction in the explained variance in the mediation models, both mediation models appear to be equally relevant. These mediation models provide support that Alienation is an important construct.

Lastly validity of the AAQ was also tested by examining whether Alienation scores at month 1 could predict various outcome measures at month 12. It was shown that Alienation at month 1 was able to predict scores at month 12 on Depressed Mood, Suicidality, Hopelessness, Negative Events, and Stress, but did not predict Aggression.

## CHAPTER 6. DISCUSSION

### Overview of Findings

The current research had three main objectives, first to examine the structure of adolescent alienation, second to evaluate the stability of alienation over time, and third to determine the impact of adolescent alienation on functioning and well-being. Two studies conducted were designed to address these three main objectives.

### Structure of Adolescent Alienation

#### Objectives, Hypotheses & Findings for the Structure of Adolescent Alienation

*Correlations.* From the various results on the structure of adolescent alienation, support was shown for the proposed framework. The first objective was to examine the structure of adolescent alienation. First it was hypothesized that for Study 1A and 1B, the 16 packets would correlate with each other, the four psychological components would correlate with each other, the four contextual domains would correlate with each other, and all of the psychological components and contextual domains would correlate with total alienation (Hypothesis 1). This hypothesis was supported since all of these correlations were shown. For Study 2, it was hypothesized that at each time interval over all the participants, all of the psychological components and contextual domains would correlate with total alienation (Hypothesis 2). It was shown that this hypothesis was partially supported. In particular, at each time interval over all the participants, all of the psychological components and all the contextual domains correlated with alienation, except for the correlation between the boyfriend/girlfriend contextual domain and alienation at month 2.

These correlation findings were similar to findings shown by Dean (1961). Dean (1961) showed inter-correlation among the three categories of powerlessness, normlessness, and social isolation. Therefore in the present two studies, correlations were shown between the packets, contextual domains, psychological components, and total alienation. These findings are similar to findings by Dean (1961) since correlations are shown among the categories used in the alienation models but they differ since the contextual domains and psychological components in the present studies differ from those in Dean's (1961) study.

*Principle Components Analyses.* The structure of adolescent alienation was also examined by principle components analyses in Study 1A. One analysis was conducted for participants without a boyfriend or girlfriend and the second analysis was conducted for participants with a boyfriend or girlfriend. It was hypothesized that the principle components analyses on participants without a boyfriend or girlfriend and for participants with a boyfriend or girlfriend would show that most of the questions for certain psychological components or for certain contextual domains would have factor loadings in separate factors (Hypothesis 3). This prediction was supported. In particular, the results of the principle components analysis of participants without a boyfriend or girlfriend, factors for contextual domains rather than for psychological components were shown. Eight factors were shown, in which the first factor was the friends contextual domain, the second was mainly the people at school contextual domain, and the third was the family contextual domain. The principle components analysis of participants with a girlfriend or boyfriend showed that the factor loadings also mainly loaded on contextual domains and 13 factors were shown. The first factor was the family contextual domain,

the second was the friends contextual domain, the third was the boyfriend/girlfriend contextual domain, and the fourth was mainly the people at school contextual domain. Thus the principle components analyses support the notion that alienation should be viewed in terms of contextual domains rather than psychological components. It is also important to note that the positively worded items often loaded differently on factors than the negatively worded items in both principle components analyses.

The factor structures of previously developed alienation measures were also examined by principle components analyses. For example, the factor structure of Dean's (1961) alienation measure was examined by principle components analyses by Hensley et al. (1975). However, Hensley et al. (1975) showed a slightly different factor structure for the alienation measure than proposed by Dean (1961). Dong et al. (2002) examined the factor structure of the ASAS by principle components analysis and showed that alienation is a multi-dimensional and multi-hierarchical construct. The first hierarchy of alienation had three dimensions, which were social alienation, interpersonal alienation, and environmental alienation. The second hierarchy had nine dimensions, which included sense of non-meaning, sense of self-alienation, sense of loneliness, sense of oppression and restriction, sense of uncontrollability, sense of social isolation, natural alienation, alienation between family members, and alienation to living situation (Dong et al., 2002). A similarity between Study 1A and these past studies is that they all examined the factor structure of a particular alienation measure. The studies by Hensley et al. (1975) and Dong et al. (2002) examined the factor structures of two different alienation measures. These studies were conducted on different types of populations (e.g., college students) than the present research and the measures had different types of contextual domains

(e.g., society) and psychological components (e.g., powerlessness) than the present research.

*Confirmatory Factor Analyses.* Another method used to examine the structure of adolescent alienation was confirmatory component analyses in Study 1A. Three confirmatory factor analyses were conducted and examined: 1) a first-order single factor model of alienation with 16 packets; 2) a second-order four factor contextual domains model of alienation (see Appendix B); and 3) a second-order four factor psychological components model of alienation (see Appendix A). It was hypothesized that the factor structure of alienation would support a multidimensional view of alienation and one of the two second-ordered proposed models of alienation (Hypothesis 4). This hypothesis was supported since it was shown that the second-order four factor contextual domains model of alienation was the best fit to the data out of the three tested models. From the confirmatory factor analyses, the contextual domains model of alienation is supported over the psychological components model.

Even though the second-order four factor contextual domains model of alienation was the best fit to the data out of the three models tested, all of the goodness-of-fit indices did not meet recommended values. The  $\chi^2 / \text{df}$ , the adjusted goodness-of-fit index (AGFI), and the root-mean-square error of approximation (RMSEA) goodness-of-fit indicators did not support this model but the comparative fit index (CFI) and the non-normed fit index (NNFI) goodness-of-fit indicators did support this model. A suggested minimally acceptable value for the  $\chi^2 / \text{df}$  is less than 3 for a good fit model but there is not a definite guideline to follow for model fit (Kline, 1998). Since there is not a definite guideline to follow, other goodness-of-fit indices should be examined. According to

Kline (1998), there are problems with the AGFI (e.g., values can fall outside the 0-1 range, does not perform well in some computer simulation models) and so the fit for a model should not be based on the AGFI. The AGFI is not now frequently used as a goodness-of-fit index (Kline, 1998). The CFI and the NNFI are commonly used for model fit. These values were in acceptable values for the second-order four factor contextual domains model of alienation since these values were greater than .90.

According to Bentler and Bonett (1980), RMSEA value less than 0.10 indicate adequate fit. For the second-order four factor contextual domains model of alienation, the RMSEA value was 0.11, which is close to the acceptable value. From the various goodness-of-fit indices, it is concluded that support was shown for the second-order four factor contextual domains model of alienation over the other two tested models. Even though there are additional models that could be tested, the objective of the confirmatory factor analyses was to show initial evidence for the proposed framework of alienation which was shown. The findings show promising evidence for the second-order four factor contextual domains model of alienation.

Some previous studies have examined alienation measures factor structures by confirmatory factor analyses, such as Roberts (1987) and Lacourse et al. (2003). Roberts (1987) performed a confirmatory factor analysis to test Kohn's (1969) model of alienation. By conducting a confirmatory factor analysis, Roberts (1987) showed that the factors most strongly showing a relationship to the concept of alienation were powerlessness and self-estrangement and the factor that was the weakest to the concept of alienation was cultural estrangement. Lacourse et al. (2003) examined the Adolescent Alienation measure by confirmatory factor analysis, which was based on Seeman's

(1959) five factor model of alienation. Lacourse et al. (2003) concluded that a general factor of alienation with five dimensions fits the data well. The results also showed that self-estrangement and powerlessness best defined alienation. Normlessness and meaninglessness were less related to alienation. Both the confirmatory factor analyses conducted by Roberts (1987) and Lacourse et al. (2003) led to the conclusion that alienation is one-dimensional. However, the confirmatory factor analyses conducted in Study 1A, a multidimensional view of alienation was supported. Different findings are shown from the present studies and previous studies on alienation measures regarding dimensionality. This concept is discussed in more detail later.

*Internal Consistencies.* The final method the structure of adolescent alienation was examined was by computing internal consistencies for the AAQ in Study 1A and Study 2 at month 1. It was hypothesized that high internal consistencies would be shown for the AAQ in Study 1A and in Study 2 at month 1 (Hypothesis 5). This prediction was supported. In Study 1A, good internal consistencies were shown for 14 out of the 16 packets of alienation and all of the 16 packets showed good internal consistencies when the positively worded items were deleted from the calculations. Also in Study 1A, good internal consistencies were shown for all of the psychological components and contextual domains. In Study 2, acceptable internal consistencies values were shown for the four psychological components and the four contextual domains. Previous studies showed internal consistency for various alienation measures. Internal consistencies were shown for Skerl's (1977) measure of Adolescent Alienation, the SACS (Seidel & Vaughn, 1991), the SACS-R (Daugherty & Linton, 2000), and the ASAS (Dong et al., 2000). The



present results are consistent with previous studies that various alienation measures show good internal consistencies.

#### Summary of Findings for the Structure of Adolescent Alienation

From the various analyses on the structure of alienation, both psychological components and contextual domains appear to be relevant for the alienation framework. A second-order contextual domains model of alienation showed initial support, in which the psychological components are embedded within the contextual domains (see Appendix B). Also in both studies reliability was shown for the AAQ by good internal consistencies. From the above summary of results it can be seen that the proposed framework of adolescent alienation was supported.

#### Past Adolescent Alienation Models & Measures

Although the present studies support alienation being defined by a variety of contextual domains and psychological components, this view is inconsistent with some past alienation models. In some past alienation models, alienation was viewed by various psychological components but only one contextual domain of society (e.g., Dean, 1961; Seeman, 1972). Other past alienation models consisted of different contextual domains and psychological components, which are reviewed below.

The Adolescent Alienation measure (Lacourse et al., 2003) was structured only by psychological components using Seeman's (1959) five dimensions of alienation. The psychological components of the Adolescent Alienation measure included powerlessness, normlessness, and self-estrangement. When Lacourse et al. (2003) defined the concept of alienation by psychological components, the important element of contextual domains

was not addressed. This means that specific situations and/or relationships that a person can feel alienated was not considered.

A model that has defined alienation in terms of one contextual domain (classroom) and one psychological component (feeling rejected) is the SACS (Seidel & Vaughn, 1991). The SACS and the SACS-R appear to be sufficient at measuring social alienation in a classroom setting. However, this measure did not examine perceived alienation in other contextual domains or in terms of psychological components.

The ASAS is a scale to measure alienation in adolescents (Dong et al., 2002). The ASAS can be viewed as being defined by various psychological components (e.g., sense of loneliness dimension) and two contextual domains (family members and living situation). The main problem with using the ASAS is that it is in Chinese. Therefore, it cannot be used for English speaking adolescents. If this alienation measure was translated into English, there would probably be culture biases that would affect the validity of the ASAS.

From past alienation models, there is one model of alienation that defined alienation in terms of various contextual domains and various psychological components, which the present research supports. The Measurement of Adolescent Alienation (Skerl, 1977) is the main model of alienation that was defined by a number of contextual domains and a number of psychological components. The psychological components used were four of the five factors of Seeman's (1959) model of alienation. The factors are powerlessness, meaninglessness, normlessness, and cultural estrangement. The contextual domains used were school, family, and interpersonal relationships. Skerl's (1977) concept of interpersonal relationships included the contexts of friends, peers, and

opposite sex relationships. As a result, there were 12 scales for the Measurement of Adolescent Alienation (Skerl, 1977). Skerl (1977) showed that the scales had internal consistency reliability. There was also some support shown for validity of the scales by correlating the scales with self-reports of alienated behaviours and by comparing the scores on the scales of a group of alienated adolescents with a group of non-alienated adolescents. However, Skerl (1977) did not examine the structure of alienation by principle components analysis or confirmatory factor analysis. Not completing these types of analyses, Skerl's (1977) did not test whether his model of alienation is appropriate. Other issues with Skerl's (1977) measure of alienation are that many of the questions are confusing (e.g., "Being accepted by others my own age is not unimportant to me.") and different contextual domains (friends, peers, and opposite sex relationships) were included into one category (interpersonal relationships). Since Skerl (1977) saw the importance of contextual domains and psychological components for the structure of alienation, this model was a good early version of a model of alienation. However it would need improvement and updating to be relevant today.

Past alienation models and measures differ in terms of what contextual domains and/or psychological components were included. The present studies supports alienation being defined by a variety of contextual domains and a variety of psychological components. This view is inconsistent with some past alienation models but has some similarities with other alienation models.

#### Theoretical Implications for the Structure of Adolescent Alienation

*Multidimensionality of Alienation.* An implication for the present theoretical framework of alienation is that the structure of alienation is multidimensional since there

are contextual domains and psychological components involved in the framework. In past research, alienation has been viewed as one-dimensional (Lacourse et al., 2003; Roberts 1987) and also as multidimensional (Dong et al., 2002; Horton, 1996; Young, 1985). One implications of alienation being viewed as multidimensional is that there is likely a number of various determinants of feeling alienated and as a result alienation can be experienced differently. For example, an adolescent may feel alienated because of how he is treated by his family (a contextual domain) and by him feeling cut-off (psychological component) by various people in his life. However, another adolescent may feel alienated due to other contextual domains (e.g., people at school, friends, and boyfriend/girlfriend) and/or other psychological components (e.g., feeling alone, being a target, and not fitting-in). As a multidimensional construct, the associations alienation has with various outcomes will be more complex. For example, total scores may not be the best way to examine the level of alienation. Instead it may be important to investigate how both contextual domains and psychological components relate differently to various outcome measures. These theoretical implications for viewing alienation as multidimensional were not examined in the present studies and should be examined in future studies.

*Contextual Domains or Psychological Components or Both for a Model of Alienation.* From these studies, there are many findings that support the notion that a model of alienation should be defined by contextual domains rather than psychological components. Psychological components are still an important aspect of the model of alienation since they are embedded in the contextual domains. Conceptually, the nature of alienation for adolescents is determined by relevant relationships in their lives. In

other words, certain people, in particular the family, alienate adolescents rather than adolescents experiencing a specific feeling (e.g., being a target).

From the present research, the best supported model of alienation views alienation in terms of contextual domains, in which psychological components are embedded in the contextual domains. Most previous models of alienation have defined alienation mainly in terms of psychological components. In the present studies, evidence was provided for the contextual domains model of alienation. This means that adolescents feel alienated in certain contexts in their lives, not just by experiencing specific psychological feelings. However, when feeling alienated within a certain relationship (e.g., family), an adolescent does experience a variety of psychological experiences (e.g., being alone, being a target, not fitting-in, and being cut-off). Most of the past models of alienation have defined alienation in terms of psychological components (e.g., powerlessness and normlessness) and most have not addressed contextual domains. The present studies argue that a model of alienation needs to define the psychological components within the contextual domains. If a model of alienation does not address both of these aspects, then the model is not entirely adequate. In other words, psychometrically variability among respondents would be missed if just contextual domains or psychological components were in a measure of alienation. If a model does not include contextual domains then it should probably not be considered a model of alienation due to missing the variability among adolescents.

When a model of alienation addresses contextual domains and then psychological components are embedded within the contextual domains, it is argued that alienation can be better understood. A model of alienation for adolescents should examine the type of

relationships adolescents have with people at school, family, friends, and with their girlfriend or boyfriend. In particular, any model of alienation that does not examine the adolescents' relationships with their family would miss an important area of alienation for adolescents. All of these areas are important for seeing how alienated adolescents feel and for understanding associations with outcome measures. However, psychological components are also important to examine within the contextual domains. It is argued that the alienation framework examined in the present studies is better than previously developed models.

Since contextual domains seem to also be relevant for measuring alienation, in addition to psychological components, it appears that alienation should not be viewed as a personality trait. Dean himself acknowledges the importance of the situation as he stated that alienation might not be "a personality 'trait', but a situation-relevant variable" (Dean, 1961, p. 757). For Dean (1961) it is not just the experience of alienation but alienation is influenced by different contexts. Understanding alienation within a specific context is central to both understanding what alienation is but also central to measuring an individual's level of alienation. Recall that for Marx, alienation was grounded in the experience of exploited workers and in this sense, what it means to be alienated, is closely tied to this experience. To view alienation as a contextually dependent experience and construct, this implies assessing the psychological components of alienation (e.g., loneliness) in specific contexts (e.g., family) and then modeling the extent to which variability in scores and associations among psychological components depend on different contextual domains.

The results of the current research changed the way we measure and conduct research on alienation. From the current research, a second-order contextual domains model of alienation was the best supported model. It is concluded that both contextual domains and psychological components should be included in a model of alienation to adequately measure adolescent alienation. If either of these are lacking, the model is not adequately measuring alienation and the research conducted on alienation would not be sufficient. It is also argued that alienation probably should be viewed as a situation-relevant variable and not a personality trait.

### Stability of Adolescent Alienation

#### Objective, Hypotheses & Findings of the Stability of Adolescent Alienation

The second objective of this dissertation was to examine the stability of adolescent alienation in both studies. It was hypothesized that the four contextual domains, the four psychological components, and total alienation would show good test-retest from Study 1A to Study 1B (Hypothesis 6). This hypothesis was supported since test-retest reliabilities for the contextual domains, psychological components, and alienation scores showed moderate to strong relationships. These findings support test-retest reliability and shows stability.

The stability of adolescent alienation was also examined in Study 2 by test-retest reliability of the AAQ. It was hypothesized that the AAQ would show high test-retest reliability between month 1 and month 2 over all the participants (Hypothesis 7). This prediction was also supported since the test-retest reliabilities for alienation from month 1 to month 2 over all the participants, distressed group, self-harm group, and comparison group showed very strong to strong relationships. The test-retest reliability was also

shown for all of the groups from month 1 to month 6. Lastly test-retest reliability from month 1 to month 12 was only shown for the self-harm group. Thus the test-retest reliability of alienation was not as stable for the different groups since each group showed different patterns of stability for alienation, especially over longer periods of time. Stability of the AAQ was supported since there is evidence for good test-retest reliabilities in both studies.

This finding is consistent with other studies examining test-retest reliability of alienation measures. Girecsan and Raj (1991) showed that the Measurement of Alienation had good test-retest reliability. Addallah (1997) showed good test-retest reliability for an Arabic version of the Student Alienation Scale developed by Mau (1992). Therefore other previously developed alienation measures have shown good test-retest reliability, which is consistent with the reliability results from the present studies.

#### Theoretical Implications for the Stability of Alienation

There are theoretical implications regarding the stability of alienation since test-retest reliabilities differed for the three groups in Study 2. Stability of a construct, such as alienation, can be seen as having temporal stability. It is argued alienation should be viewed as having temporal stability depending on the situations that a person experiences.

#### Impact of Adolescent Alienation

##### Objective, Hypotheses & Findings of the Impact of Adolescent Alienation

*Hierarchical Regression Analyses.* The third objective of this dissertation was to examine the impact of adolescent alienation in Study 1A and Study 2. In Study 1A and Study 2, it was hypothesized that some, but probably not all, of the contextual domains



and psychological components would predict each of the outcome measures (Hypothesis 8). This hypothesis was supported. It was shown in Study 1A, that the family contextual domain was the main contextual domain that predicted the outcome measures and the being alone psychological component was the main psychological component that predicted the outcome measures. In Study 2 at month 1, the contextual domain that predicted most of the outcome measures was people at school and the psychological components that predicted most of the outcome measures were being alone and not fitting-in.

In Study 1A it was hypothesized that one of the psychological components or one of the contextual domains would be the most predictive of depressed mood (Hypothesis 9). If a contextual domain was the most predictive of depressed mood, the family or people at school contextual domain would probably be the most common predictor(s) of most of the outcome measures. If a psychological component was shown to be the most predictive of depressed mood, the being alone contextual domain would probably be the most predictive. Another hierarchical regression analysis was then conducted to see if the family contextual domain (without the being alone questions) or the being alone psychological component (without the family questions) was the overall best predictor of depressed mood. It was shown that the family contextual domain was the best predictor of depressed mood and this hypothesis was supported. However, it is important to consider that the family contextual domain, and even the being alone psychological component, may just be a concomitant of depressed mood instead of being the best predictor of depressed mood. The result that the family contextual domain was the best predictor of depressed mood provides evidence that alienation probably starts at home

and not in other contexts, such as at school. In the past decade there have been numerous research studies on the affects of school issues on the well-being of adolescents, such as bullying at school (e.g., Natvig, 2001). Natvig (2001) showed that students who felt alienated from school had an increased risk of bullying. In a study by Calabrese and Raymond (1989), it was shown that there are relationships between alienation and certain family factors. This result from Calabrese and Raymond (1989) is support for family being important in the role of experiencing alienation. Additional alienation research should focus on the role of the family for adolescents feeling alienated.

Past research on being alone and alienation have shown important findings relevant to the present research on the impact of alienation. Feelings of being alone are a common problem for adolescents (Brage et al., 1993) and it has been shown that 66% of junior and high school students reported loneliness as being a problem (Culp et al., 1995). Johnson (1982) showed that loneliness was positively associated with feelings of alienation, which is support for the present research results since the being alone psychological component was the best psychological component predictor of various outcomes. Another study showed an association between peer-related loneliness and scores on depression measures (Koenig & Abrams, 1999). Adolescents who feel lonely are more likely to have depressive symptoms. It has also been previously shown that adolescents can have feelings of being alone within different relationships in their lives, such as in their relationships with their parents (Marcoen & Goossens, 1993). These studies are just a few examples of research conducted on adolescent feelings of loneliness and how the findings are relevant to the present research on the impact of alienation.

Research has shown that the family can have an important impact on adolescents' well-being. Good family relations are very important for adolescents. Adolescents with poor family relationships are more likely to be less emotionally adjusted and have behavioural issues (Crosnoe, Erikson, & Dornbusch, 2002; Garnefski & Diekstra, 1996; Kees, 2002; Nada Raja, McGee, & Stanton, 1992; Overbeek, Vollebergh, Engels, & Meeus, 2003). In a related study, it was shown that mothers who were verbally aggressive and fathers who were physically aggressive predicted lower peer relationship intimacy (Schlatter, 2001). In addition to adolescents having poor family relationships, they also had poorer emotional adjustment, more behavioural difficulties, more stress, lower self-concept, less family togetherness, lower quality and less intense relationships with peers, perform worse in school, and were less competent in friendships and romantic relationships (Field, Diego, & Sanders, 2001; Mboya, 1996; Roychaudhury & Basu, 1998; Weigel, Devereux, Leigh, & Ballard-Reisch, 1998). Good family relationships are very important for the well-being of adolescents.

Previous research conducted on the effects of the family on feelings of alienation showed important findings relevant to the present research on the impact of alienation. Calabrese and Raymond (1989) showed relationships between alienation and certain family factors. Rutkowski (1979) examined the relationship between adolescent alienation and the adolescent's perception of their early relationship with their parents showed that there was a relationship between alienation and early parent-child relationship in terms of the factors of love, rejection, and affection between the parent and child at an early age. In a study by Webb (1995), it was concluded that family relations contribute to the amount of alienation experienced by adolescents, since

alienation was less in families with good communication, where at least one adult is seen as an authority figure, and where there is a certain level of satisfaction within the family. These past research studies and the present research show supports the notion that the family has an important role for adolescents feeling alienated.

The impact of adolescent alienation was supported since certain contextual domains and psychological components predicted some of the outcome measures. In Study 1A, family was the main contextual domain predictor of the outcome measures and being alone was the main psychological component predictor of the outcome measures. The family contextual domain was the main predictor of most of the outcome measures.

*Relationships with Outcome Measures.* For Study 2, it was hypothesized that the total alienation over all the participants would correlate with all of the outcome measures of hopelessness, depressed mood, suicidality, negative events, stress, and aggression (only month 6 and month 12) at each time interval (Hypothesis 10). This prediction was mainly supported. It was shown at months 1, 2, and 6 that all of the outcome measures correlated with alienation over all the participants. At month 12 the outcome measures of hopelessness, depressed mood, suicidality, negative events, and stress did correlated with alienation but aggression did not.

The impact of alienation in Study 2 was examined by seeing which month 12 outcome measures could be predicted from month 1 alienation scores over all the participants. It was hypothesized that month 1 alienation would predict month 12 depressed mood and suicidality (Hypothesis 13). This hypothesis was supported alienation at month 1 predicted scores at month 12 on depressed mood, suicidality, hopelessness, negative events, and stress level, but did not predict aggression scores.

Past research has shown that alienation is associated with various outcomes, such as depressed mood (Abdallah, 1997; Daugherty & Linton, 2000; Torres-Rivera, 1988), self-harm behaviours (Shea, 1993; Walsh, 1987 as cited in Walsh & Rosen, 1988), hopelessness (Olivier, 1998), thoughts of suicide (Lacourse et al., 2001; Wenz, 1979), negative events (Seidman, 1996; Torres-Rivera, 1988), stress (Daugherty & Linton, 2000), and aggression (Bond, 1990; Sankey & Huon, 1999; Slater, 2003; Williamson & Cullingford, 1998). The present studies are consisted with past research showing relationships between alienation and various outcome measures. These results show evidence for concurrent validity for the AAQ.

*Group Differences in Alienation.* For examining the impact of alienation, it was important to examine how adolescent alienation differs between the three groups of participants at the different months for Study 2. It was hypothesized that at each month, both the self-harm and distressed groups would experience higher levels of alienation than the comparison group and the self-harm group would experience more alienation than the distressed group (Hypothesis 11). This hypothesis was partially supported. It was shown that at each time interval, the distressed and self-harm groups had higher levels of alienation than the comparison group but the self-harm group did not differ from the distressed group. The two clinical groups of adolescents experienced more alienation than the comparison group of adolescents. This result provides support for construct validity for the AAQ, even though a difference was not shown between the two clinical groups of adolescents. It is possible that the difference was not shown due to how the self-harm group was defined. The self-harm group consisted of adolescents who had previously self-harmed themselves. If the self-harm group of adolescent was defined in a

more restricted manner, such as defining the group on specific behaviours (e.g., cutting) or limiting the time frame of their last self-harm act (e.g., within the last month), a difference in alienation scores between the two clinical groups may have been shown.

Differences in alienation scores between groups of adolescents were shown in previous studies. Seidel and Vaughn (1991) showed that adolescents with a learning disability who dropped out of school experienced more social alienation from teachers and classmates than adolescents with a learning disability who did not dropout of school. In a study by Calabrese and Adams (1990) on delinquent adolescents, incarcerated adolescents were compared to non-incarcerated adolescents by completing an alienation measure. The incarcerated adolescents had higher levels of total alienation, isolation, and powerlessness (Calabrese & Adams, 1990). Previous research has shown that adolescents with a learning disability who dropped out of school and incarcerated adolescents experience higher levels of alienation than their comparison groups. Study 2 is the first study that showed that distressed adolescents and adolescents who have self-harmed also experience higher levels of alienation than comparison adolescents.

*Mediation Models.* Study 2 also examined the impact of alienation by testing two mediation models, which were depressed mood mediating the relationship between alienation and suicidality, and alienation mediating the relationship between depressed mood and suicidality. It was hypothesized that depressed mood would mediate the effect between alienation and suicidality, and this mediation model would show a better reduction in the variance explained than the other mediator model (Hypothesis 12). This hypothesis was partially supported since depressed mood did mediate the effect between alienation and suicidality. However, this mediation model did not show a better

reduction in the variance explained than the other mediator model. These mediation models provide support that alienation is an important construct.

Although there is not a developed theory on the relationships between depressed mood, alienation, and suicidality, there are previous developed theories regarding other constructs that are relevant. For example, the hopelessness theory of depression postulates individuals with a cognitive vulnerability, who then experience negative events, are possibly feeling hopeless, which then may lead to symptoms of hopelessness depression (Hankin, Abramson, & Siler, 2001). The hopelessness theory of depression was developed by Abramson, Metalsky, and Alloy (1988). Hopelessness depression is a symptom of depression that involves a negative cognitive style (Joiner, Steer, Abramson, Alloy, Metalsky, & Schmidt, 2001). For adolescents, there have been previous studies that have supported the hopelessness theory of depression (e.g., Hankin et al., 2001). A continuation of the research conducted in the hopelessness theory of depression could examine the role of alienation in this model. Research could examine the influence of alienation, instead of the role of negative events, on hopelessness depression. This suggestion would further support the notion that hopelessness may directly affect depressive symptoms and may indirectly affect suicidal ideation (Yang & Clum, 1994).

#### Summary of Findings for the Impact of Adolescent Alienation

The impact of adolescent alienation was examined in Study 1A and Study 2. One of the main findings from Study 1A was that the contextual domains and psychological components predicted depressed mood, mood problems, thoughts of self-harm, self-harm behaviours, and suicidal thoughts. The contextual domain of family was the main contextual domain predictor of the outcome measures and the psychological component

of being alone was the main psychological component predictor of the outcome measures. Lastly, evidence was provided that the family contextual domain was the best predictor of depressed mood.

From the Study 2 findings, some of the contextual domains and psychological components were able to predict various outcome measures at month 1. Also levels of alienation were higher for the two clinical groups than the comparison group at month 1, 2, 6, and 12. Alienation at baseline was able to predict scores on various outcome measures at the end of the study, such as depressed mood, suicidality, hopelessness, negative events, and stress. Another important finding in Study 2 was that it was shown that depressed mood mediated the effect between alienation and suicidality, and alienation mediated the effect between depressed mood and suicidality.

#### Theoretical Implications for the Impact of Alienation

The results on alienation being associated with various outcome measures and the mediation models provide theoretical implications regarding the impact of alienation. Because alienation was shown to be associated with the various outcome measures, it provided evidence that alienation is an important construct. Also since it was shown that depressed mood mediated the relationship between alienation and suicidality and alienation mediated the relationship between depressed mood and suicidality, there is more support that alienation is a relevant construct. If alienation is measured in research conducted on the relationship between depressed mood and suicide ideation, this can improve the predictability of this relationship. There is a large amount of research conducted that shows a relationship between depressed mood and suicidal ideation. If alienation is also measured, the predictability of the relationship between depressed mood



and suicide ideation relationship can be better understood. Alienation should be view as an important construct to measure in adolescent research and also should be considered when dealing with adolescent who have clinical issues, such as depression and suicidal thoughts.

### Implications for Treatment & Prevention of Adolescent Alienation

#### Treatment for Adolescent Alienation

There is limited research conducted on examining effective psychotherapies for treating adolescents experiencing alienation. To date, there is only one study that examined the effect of a program, which is not psychotherapy, on adolescent alienation. Cross (1999) designed a study to examine the effects of an outdoor adventure program on perceptions of alienation in at-risk adolescents. The at-risk adolescents attended a four day rock climbing program. At the end of the climbing program, the at-risk adolescents were less alienated than the comparison group. Cross (1999) concluded that the outdoor adventure program had a positive effect on feelings of alienation experienced by the adolescents. Since this is the only study examining the effects of a program on adolescent alienation, more research is needed in this area.

There are limited treatment effects on adolescent alienation studied but different researchers have provided suggestions for treating adolescents who feel alienated. For example, Wilkerson, Protinsky, Maxwell, and Lentner (1982) suggested group psychotherapy using the theoretical concepts of Erikson's ego identity. This type of group psychotherapy would involve discussing the concepts of personal identity and group identity. Personal identity is seeing oneself as a positive and functional individual

and group identity is having positive experiences as belonging to a peer group (Wilkerson et al., 1982).

Other researchers have suggested other forms of involvement for adolescents who are alienated, but they are not formal psychological treatments. Calabrese and Schumer (1986) suggested that alienated adolescents should get involved in community service activities which may help reduce level of alienation experienced. Calabrese (1988) gave a valuable suggestion for helping adolescents who feel alienated. Calabrese (1988, p. 191) stated, "Perhaps the single most important way to reduce alienation among adolescents is to increase human contact between the adolescent and a significant adult who demonstrates a sense of love". For example, this adult could be a parent. This statement supports the finding in the present research that the family contextual domain is the strongest predictor of depressed mood. Thus any treatment developed for lowering adolescent alienation should center on involving the relationship an alienated adolescent has with her family, in particular her parents.

Although the family contextual domain appears to be the most important aspect of adolescent alienation, the other contextual domains are also important to improve an alienated adolescent's life, in particular people at school, friends, and boyfriend/girlfriend contextual domains. With this in mind, developing a psychological treatment for alienated adolescents, a systems treatment approach should be implemented. It has been shown that adolescents who show good mental health and adaptive coping strategies have positive communication and trusting relationships with parents and family and also have feelings of trust and security with their friends (Levitt, Guacci-Franco, & Levitt, 1993; Newman & Newman, 1991; Nada Raja et al., 1992). For alienated adolescents,

developing the communication and trusting relationships with parents/family and also developing trusting and secure relationships with friends are very important. According to Newman and Newman (2001), alienated adolescents have issues with forming interpersonal bonds that provide feelings of acceptance and emotional support. Developing interpersonal relationships is vital for alienated adolescents. There is a need for support and to teach adolescents to avoid risk behaviours and to build positive support systems (Reifsteck, 2001).

*Evidence-Based Psychotherapies for Depression.* The present framework of alienation was able to distinguish between clinical samples of distressed and self-harm adolescents from a comparison group of adolescents. Since adolescents who are distressed and who have a history of self-harm behaviours appear to experience higher levels of alienation, some of the standard treatments for depression and self-harm behaviours in adolescents may be relevant to implement for adolescents experiencing alienation. Since there are few evidence-based research studies examining effective psychotherapies for adolescents who self-harm, the treatment used for depressed adolescents will be examined.

Many research studies have been completed that show the effectiveness of cognitive-behavioural therapy in treating adolescent depression (e.g., Clarke, DeBar, & Lewinsohn, 2003; Ettelson, 2003; Weersing & Brent, 2003). Interpersonal therapy (IPT) is also an effective treatment for adolescent depression (Mufson & Dorta, 2003; Santor & Kusumakar, 2001). Research has also compared cognitive-behavioural therapy (CBT), systemic-behavioural family therapy (SBFT), and nondirective supportive therapy (NST) for adolescent depression (Gaynor, Weersing, Kolko, Birmaher, Heo, & Brent, 2003;

Kolko, Brent, Baugher, Bridge, & Birmaher, 2000). Kolko et al. (2000) showed that at a 2-year follow-up after treatment termination, NST and CBT tended to show greater reduction in anxiety symptoms than SBFT. SBFT also tended to impact family conflict and parent-child relationship problems more than CBT. Research also shows that school-based counselling may be effective in reducing depression in adolescents (Manning, 2003). So the main treatment interventions used for adolescent depression are CBT, IPT, SBFT, and school-based counselling.

When determining the most appropriate form of therapy for alienated adolescents, it is important to remember that according to the present framework of alienation, alienation is defined by the contextual domains of alienation rather than the psychological components. The CBT model does not seem the most appropriate for addressing adolescent alienation since CBT treatment involves cognitive restructuring, attribution retraining, and self-monitoring. The CBT treatment involves addressing psychological well-being rather than interpersonal relationships. It is also important to point out the fact that the family contextual domain of alienation is often the main contextual domain determining higher levels of alienation. Thus if the family is the main problem area for an adolescent who is alienated, the SBFT may be the most appropriate form of treatment to implement. On the other hand, if adolescent alienation is determined mainly by people at school, than maybe school-based counselling could be implemented. However, many alienated adolescents may experience issues in more instances than just at school or in the family. If this is the case, IPT should be used for adolescent alienation. In the IPT model, interpersonal problems areas are identified and then addressed in treatment

(Mufson & Dorta, 2003). IPT would address different interpersonal areas that an alienated adolescent is having difficulties.

### Prevention for Adolescent Alienation

There are some specific interventions that can be implemented to prevent feelings of alienation in adolescents. Newman and Newman (2001) state that participating in group functions can provide adolescents with a sense of purpose and meaning and can contribute to positive mental health. Parents, teachers, and community leaders need to emphasize to adolescents the importance of participating in family, school, and community groups (Newman & Newman, 2001).

Schools can develop preventive program so adolescents do not develop strong feelings of alienation. Schools can guide preventive programs around previously developed school based interventions for bullying. Some schools have started to implement prevention strategies for certain issues, such as bullying and suicide (Stephens, 1997). In an example of these prevention strategies, some of the main areas of focus are: the establishment of clear behavioural standards, provision of adequate adult supervision, enforcement of consistent rules, and parental involvement. Although these main areas of focus are more relevant for bullying, by lowering bullying in schools, schools can indirectly help lower the feelings of alienation from people at school.

### Methodological Strengths & Weaknesses

#### Strengths

These studies show that the AAQ is a reliable and valid measure of adolescent alienation. The present alienation framework not only includes psychological components as aspects of alienation but it also includes contextual domains as a vital

aspect to examine for adolescent alienation. The AAQ is a measure that will be useful for the study of adolescent alienation. These studies have some important strengths that warrant mentioning. One of the most relevant strengths of Study 1 is that large sample sizes were used. One of strengths of Study 2 is that it was a longitudinal study. Lastly, another strength of the present research is that it examined alienation in school based samples of adolescents in Study 1. In addition, alienation levels were compared between clinical samples of adolescents and a comparison sample in Study 2.

### Weaknesses & Future Research

There are some limitations of the AAQ and its psychometric properties that should be discussed. One limitation that is often associated with using self-report measures with adolescents is that they may have difficulties with interpreting certain questions, such as the positively worded questions. A study should be conducted that changes the positively worded items to negatively worded items to see if this changes what items load on what factors by principle components analysis and to see if the second-order four factor contextual domains model of alienation can show a better fit through confirmatory factor analysis.

There is also a potential limitation of the present studies supporting the notion that the framework of alienation should be examined mainly by contextual domains instead of psychological components. It is a possibility that this finding may be an artefact of the way in which the AAQ was designed. On the AAQ, all of the people at school questions are first, followed by the friend questions, followed by the boyfriend/girlfriend questions, and finally the family questions. A potential future study to be conducted on the AAQ would be to rearrange the items on the AAQ so they are not all in the order of contextual

domains. However, it would be difficult to understand the flow of the questions if they were presented in a total random order. A study could be conducted in which the items are ordered by psychological components. It would be interesting to see if this change would affect the framework of alienation.

Another possible limitation of the AAQ is that it does not differentiate between the people at school that an adolescent has contact and family members. When the AAQ was developed, the people at school contextual domain was mainly to encompass the adolescent's peer group. However, an adolescent may also feel alienated from other people at school, such as their teachers. The AAQ also does not differentiate between various family members, such as mother, father, and siblings. Although the family contextual domain was shown to be a very important factor in the level of alienation an adolescent feels, it does not explain which family members have the most influence on adolescent alienation.

The AAQ may not assess all of the relevant contextual domains or psychological components, which is a limitation. Examples of other possible contextual domains and psychological components are those that previously developed alienation models have included, such as society (contextual domain) and powerlessness (psychological component). Even though there might be other contextual domains and psychological components that could be included in a model of adolescent alienation, it is argued that the present framework is good due to the results supporting the structure, stability, and impact of adolescent alienation.

Another limitation is that the AAQ was not tested against another alienation measure. This would provide some more support for validity of the AAQ and it may also

provide some evidence for measuring the distinction between contextual domains and psychological components. A limitation of the present research is that it cannot be definitely stated if contextual domains or psychological components are actually the best at predicting various outcomes. However, it would be difficult to separately assess these since it has been shown that the psychological components are embedded within the contextual domains. Even though this is the case, a future study should be conducted comparing the AAQ with another alienation measure.

An important limitation of the present studies is that differences in the amount of alienation experienced between distressed adolescents and adolescents who have previously self-harmed was not shown. It is possible that this difference was not shown due to how the self-harm group was defined. The self-harm group consisted of adolescents who have previously self-harmed themselves in some way in the past. If the self-harm group of adolescent was defined in a more restricted manner, a difference in alienation scores between the two clinical groups may have been more likely to be shown. There is also another limitation of the present studies in terms of the self-harm group. Over the course of a year, there were not enough self-harm behaviours to use this variable as the dependent variable in the mediation models. A future study could have more participants and/or follow the participants for a longer period of time and there would probably be more self-harm behaviours.

Other research studies should be conducted on the general topic of adolescent alienation. For example, a study examining the relationship between alienation and bullying would be interesting. Bullying is presently a very relevant research area and it has similarities with alienation in terms of the people at school and friends contextual



domains of alienation. A study that has a clinically depressed group of adolescent as compared to a comparison group would be relevant for the study of adolescent alienation. Lastly, a treatment effectiveness study should be conducted to see which psychotherapy may be the most appropriate type of treatment for adolescent alienation. If these mentioned research studies were conducted, they would provide relevant information for adolescents who are alienated.

## Footnotes

<sup>1</sup> In Kohn's (1969) model of alienation, he developed items that revolved around some of Seeman's factors, which measured the components of powerlessness, normlessness, and cultural estrangement. Kohn's (1969) model of alienation can be viewed as being defined by psychological components, which is an essential feature of the present framework of alienation. Kohn (1969) defined these factors somewhat differently from Seeman (1959). For example, Kohn (1969) defined powerlessness as a lack of personal efficacy, self-estrangement as detachment from self, purposelessness in life, and negative self-evaluation, normlessness as believing one will achieve personal goals without restraint, and cultural estrangement as an inability to have common values and opinions as other types of people. A study conducted by Roberts (1987) performed a confirmatory factor analysis to test Kohn's (1969) model of alienation. The data used by Roberts (1987) was originally collected by Kohn and Schooler in 1964 (as cited by Roberts, 1987), as part of a study on employment and psychological functioning. Participants were re-interviewed 10 years later with the same questionnaire, with two changes, which were including an item for meaninglessness (defined as the world not being understandable) and dropping one of the powerlessness items since it was not a significant indicator of powerlessness (Roberts, 1987). This provided 10-year longitudinal data used by Roberts (1987). By conducting a confirmatory factor analysis, Roberts (1987) showed that the factors most strongly showing a relationship to the concept of alienation were powerlessness and self-estrangement and the factor that was the weakest to the concept of alienation was cultural estrangement. The main concern of Kohn's (1969) concept of alienation is that it mainly focuses on the feelings (i.e.,

psychological components) associated with alienation and does not explicitly address the specific situations of society that a person can feel alienated (i.e., contextual domains). According to the present framework of alienation, it is problematic to mainly focus on how people feel without more situations besides society that people experience these feelings. The main concern with Kohn's (1969) model of alienation is it does not relate the psychological components to more contextual domains other than society.

<sup>2</sup> In developing the Alienation Scale, Ray (1982) tried to assemble all of the items from published alienation scales. Ray (1982) gathered 168 items and administered them to 138 adults. Each item was correlated with the total score of the 168 items. The items that correlated the highest were selected for the 20-item scale. Ten of the items are positively worded and the other ten items are negatively worded. An example of a question from this scale is: "These days a person doesn't really know whom he can count on". There are five main limitations with the Alienation Scale (Ray, 1982): 1) the measure was developed for adults; 2) it would be better to reduce the number of items on the scale by a principle components analysis rather than by correlations; 3) some of the items on the scale seem irrelevant and outdated (e.g., "We are the hollow men, we are the stuffed men, learning together, headpiece filled with straw."); 4) the measure was not developed from a model or construct of alienation to be tested; and 5) the items were not constructed around specific feelings and/or specific situations as most alienation scales are developed. Thus, this alienation measure does not appear to inform us about psychological components or contextual domains, as the present framework of alienation believes are relevant.

<sup>3</sup> The MMPI-A Adolescent-Alienation scale (A-aln) was developed to identify adolescents who are interpersonally isolated and have a negative view about social interactions (Archer, 1992). There are 20 items for the A-aln. This scale has both positively (e.g., “I am liked by most people who know me.”) and negatively (e.g., “I have no close friends.”) worded items. The MMPI-A A-aln can be viewed as being defined by psychological components (e.g., “People often disappoint me.”) and contextual domains (e.g., “My parents do not understand me very well.”) but some of the questions cannot be clearly distinguished as either psychological components nor contextual domains (e.g., “Anyone who is able and willing to work hard has a good chance of succeeding.”), which is a concern regarding this measure. Another concern of the A-aln is it was not developed based on a specific model of adolescent alienation, which should be the starting point for developing an adolescent alienation measure.

## References

- Abdallah, T. (1997). Reliability and validity of Palestinian Student Alienation Scale. Adolescence, 32, 367-371.
- Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1988). The hopelessness theory of depression: Does the research test the theory? In L. Y. Abramson (Ed.), Social cognition and clinical psychology: A synthesis (pp. 33-65). New York: Guilford Press.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4<sup>th</sup> ed.). Washington, DC: Author.
- Archer, R. P. (1992). MMPI-A: Assessing adolescent psychopathology. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ayduk, O., Downey, G., & Kim, M. (2001). Rejection sensitivity and depressive symptoms in women. Personality and Social Psychology Bulletin, 27, 868-877.
- Baker, C. C. (1983). An investigation of the relationship between locus of control, classroom environment and alienation in junior high gifted students: An application of Lewin's theory. Dissertation Abstracts International, 44, 331A.
- Baron, R., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182.
- Beck, A. T., Brown, G., & Steer, R. A. (1989). Prediction of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. Journal of Consulting and Clinical Psychology, 57, 309-310.
- Beck A. T., & Steer, R. A. (1991). Manual for Beck scale for suicidal ideation. New York: Pennsylvania Corporation.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Manual for the Beck Depression Inventory manual (2<sup>nd</sup> ed.). San Antonio: TX: Psychological Corporation.

Beck, A. T., Steer, R. A., Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. Clinical Psychology Review, 8, 77-100.

Beck, A. T., Steer, R. A., & Ranieri, W. F. (1988). Scale for suicide ideation: Psychometric properties of a self-report version. Journal of Clinical Psychology, 44, 499-505.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. Journal of Consulting and Clinical Psychology, 42, 861-865.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. Psychological Bulletin, 88, 588-606.

Blane, H. T., Hill, M. J., & Brown, E. (1968). Alienation, self-esteem and attitudes toward drinking in high-school students. Quarterly Journal of Studies on Alcohol, 29, 350-354.

Blumenkrantz, D., & Tapp, J. T. (1977). Alienation and education: A model for empirical study. Journal of Educational Research, 71, 104-109.

Bond, D. M. (1990). The alienation of aggressive children: A correlational analysis among child and maternal measures of depression and behavior. Dissertation Abstracts International, 50, 3684B.

Bond, L., Carlin, J. B., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. British Medical

Journal, 323, 480-484.

Borg, M. G. (1998). The emotional reactions of school bullies and their victims. Educational Psychology, 18, 433-444.

Brage, D., Meredith, W., & Woodworth, J. (1993). Correlates of loneliness among midwestern adolescents. Adolescence, 28, 685-693.

Bryant, F. B., & Yarnold, P. R. (1995). Principal-components analysis and exploratory and confirmatory factor analysis. In L. G. Grimm & P. R. Yarnold (Eds.), Reading and understanding multivariate statistics (pp. 99-136). Washington, DC: American Psychological Association.

Burbach, H. J. (1972). The development of a contextual measure of alienation. Pacific Sociological Review, 15, 225-234.

Burbach, H. J., & Thompson, M. A. (1971). Alienation among college freshmen: A comparison of Puerto Rican, black, and white students. Journal of College Student Personnel, 12, 248-252.

Bush, J. W. (1982). Alienation, self-alienation and the stress-illness connection. Dissertation Abstracts International, 42, 3409B.

Butcher, J. N., Williams, C. L., Graham, J. R., Archer, R. P., Tellegen, A., Ben-Porath, Y. S., & Kaemmer, B. (1992). MMPI-A (Minnesota Multiphasic Personality Inventory-Adolescent): Manual for administration, scoring, and interpretation. Minneapolis, MN: University of Minnesota Press.

Calabrese, R. L. (1987). Adolescence: A growth period conducive to alienation. Adolescence, 22, 929-938.

Calabrese, R. L. (1988). The effects of family factors on levels of adolescent

alienation. High School Journal, 71, 187-191.

Calabrese, R. L. (1989). The effects of mobility on adolescent alienation. High School Journal, 73, 41-46.

Calabrese, R. L., & Adams, J. (1990). Alienation: A cause of juvenile delinquency. Adolescence, 25, 435-440.

Calabrese, R. L., & Fisher, J. E. (1988). The effects of teaching experience on levels of alienation. Journal of Psychology, 122, 147-153.

Calabrese, R. L., & Poe, J. (1990). Alienation: An explanation of high dropout rates among African American and Latino students. Educational Research Quarterly, 14, 22-26.

Calabrese, R. L., & Raymond, E. J. (1989). Alienation: Its impact on adolescents from stable environments. Journal of Psychology, 123, 397-404.

Calabrese, R. L., & Schumer, H. (1986). The effects of service activities on adolescent alienation. Adolescence, 21, 675-687.

Cattell, R. (1966). The meaning and strategic use of factor analysis. In R. B. Cattell (Ed.), Handbook of multivariate experimental psychology (pp. 174-243). Chicago: Rand McNally.

Champion, K. M. (1998). Bullying in middle school: Exploring the individual and interpersonal characteristics of the victim. Dissertation Abstracts International, 59, 1362B.

Clarke, G. N., DeBar, L. L., & Lewinsohn, P. M. (2003). Cognitive-behavioral group treatment for adolescent depression. In A. E. Kazlin & J. R. Weisz (Eds.), Evidence-based psychotherapies for children and adolescents (pp. 120-134). New York:



Guilford Press.

Clarke, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. Psychological Assessment, 7, 309-319.

Collins, B. (1981). A study of the relationship of alienation to the constructs of inclusion, achievement and affiliation in a selected private school. Dissertation Abstracts International, 41, 5049A.

Craig, W. M., & Pepler, D. J. (2003). Identifying and targeting risk for involvement in bullying and victimization. Canadian Journal of Psychiatry, 48, 577-582.

Craig, W. M. & Yossi, J. (2004). Bullying and fighting. World Health International Report. World Health Organization.

Crosnoe, R., Erikson, K. G., & Dornbusch, S. M. (2002). Protective functions of family relationships and school factors on the deviant behaviour of adolescent boys and girls: Reducing the impact of risky friendships. Youth and Society, 33, 515-544.

Cross, D. R. (1999). The effects of an outdoor adventure program on perceptions of alienation and feelings of personal control among at-risk adolescents. Dissertation Abstracts International, 59, 2900A.

Culp, A. M., Clyman, M. M., & Culp, R. E. (1995). Adolescent depressed mood, reports of suicide attempts, and asking for help. Adolescence, 30, 827-837.

Daugherty, T. K., & Linton, J. M. (2000). Assessment of social alienation: Psychometric properties of the SACS-R. Social Behavior and Personality, 28, 323-328.

Dean, D. G. (1961). Alienation: Its meaning and measurement. American Sociological Review, 26, 753-758.

Dong, Y., Jinfu, Z., & Xiting, H. (2002). Adolescents Students' Alienation: Its

scale manufacture and theoretical construction. Acta Psychologica Sinica, 34, 407-413.

Dyer, J. A., & Kreitman, N. (1984). Hopelessness, depression and suicidal intent in parasuicide. British Journal of Psychiatry, 144, 127-133.

East, P. L., Hess, L. E., & Lerner, R. M. (1987). Peer social support and adjustment of early adolescent peer groups. Journal of Early Adolescence, 7, 153-163.

Ettelson, R. G. (2003). The treatment of adolescent depression. Dissertation Abstracts International, 64, 1899B.

Field, T., Diego, M., & Sanders, C. E. (2001). Adolescent suicidal ideation. Adolescence, 36, 241-248.

Fleming, J. E., Offord, D. R., & Boyle, M. H. (1989). Prevalence of childhood and adolescent depression in the community: Ontario Child Health Study. British Journal of Psychiatry, 155, 647-654.

Garnefski, N., & Diekstra, R. (1996). Perceived social support from family, school, and peers: Relationship with emotional and behavioural problems among adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 1657-1664.

Gaspar de Matos, M., Barrett, P., Dadds, M., & Shortt, A. (2003). Anxiety, depression, and peer relationships during adolescence: Results from the Portuguese national health behaviour in school-aged children survey. European Journal of Psychology of Education, 18, 3-12.

Gaynor, S. T., Weersing, V. R., Kolko, D. J., Birmaher, B., Heo, J., & Brent, D. A. (2003). The prevalence and impact of large sudden improvements during adolescent therapy for depression: A comparison across cognitive-behavioral, family, and supportive

therapy. Journal of Consulting and Clinical Psychology, 71, 386-393

Gireesan, P., & Raj, S. S. (1991). Measurement of alienation: Development of an inventory. Psychological Studies, 36, 210-214.

Gould, J. R. (2004). A prevention program for adolescent substance abuse: Self-agency, community participation and religious perception. Dissertation Abstracts International, 64, 3718A.

Groth-Marnat, G. (1990). Handbook of psychological assessment (2<sup>nd</sup> ed.). Oxford, England: John Wiley & Sons.

Gupta, S. P. (1986). Student's Academic Alienation Scale: Development and standardization. Indian Journal of Psychometry and Education, 17, 17-28.

Hammen, C. L., Burge, D., Daley, S. E., Davila, J., Paley, B., & Rudolph, K. D. (1995). Interpersonal attachment cognitions and prediction of symptomatic responses to interpersonal stress. Journal of Abnormal Psychology, 104, 436-443.

Hankin, B. L., Abramson, L. Y., & Siler, M. (2001). A prospective test of the hopelessness theory of depression in adolescence. Cognitive Therapy and Research, 25, 607-632.

Harvey, D. L., Warner, L. G., Smith, L., & Harvey, E. S. (1983). Critical analysis of Seeman's concept of alienation. Humboldt Journal of Social Relations, 11, 16-52.

Hatcher, L. (1994). A step-by-step approach to using the SAS(R) system for factor analysis and structural equation modeling. Cary, NC: SAS Institute

Hathaway, S. R., & McKinley, J. C. (1970). Minnesota Multiphasic Personality Inventory. Minnesota, MN: National Computer Systems.

Hensley, D. R., Hensley, W. E., & Munro, H. P. (1975). Factor structure of

Dean's alienation scale among college students. Psychological Reports, 37, 555-561.

Herkimer County Risk Assessment Profile (2000). Available:

<http://www.herkimerhealthnet.com/>

Hodgkins, N. M. (2001). The relationship of parental acceptance/rejection to hope and shame in adolescents. Dissertation Abstracts International, 62, 550B.

Horton, M. (1996). Alienation and social identity: The bringing together of two theoretical paradigms. In G. M. Breakwell, & E. Lyons (Eds.), Changing European identities: Social psychological analyses of social change (pp. 429-442): Woburn, MA: Butterworth-Heinemann.

Jinfu, Z., & Dong, Y. (2003). A study of adolescent students' alienation and development. Psychological Science, 26, 415-418.

Johnson, J. L. (1982). An attribution model of loneliness. Dissertation Abstracts International, 42, 3033B.

Joiner, T. E., Steer, R. A., Abramson, L. Y., Alloy, L. B., Metalsky, G. I., & Schmidt, N. B. (2001). Hopelessness depression as a distinct dimension of depressive symptoms among clinical and non-clinical samples. Behaviour Research and Therapy, 39, 523-536.

Joiner, T. E., Lewinsohn, P. M., & Seeley, J. R. (2002). The core of loneliness: Lack of pleasurable engagement-more so than painful disconnection-predicts social impairment, depression onset, recovery from depressive disorders among adolescents. Journal of Personality Assessment, 79, 472-491.

Jöreskog, K. G., & Sörbom, D. (2003). LISREL 8.54. Chicago: Scientific Software International.

- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. Educational and Psychological Measurement, 20, 141-151.
- Kelly, K. M. (2001). Individual differences in reactions to rejection. In M. R. Leary (Ed.), Interpersonal rejection (pp. 291-315). London: Oxford University Press.
- Kees, M. R. (2002). Linking marital conflict, peer relationships, and social support: Evidence from rural adolescents. Dissertation Abstracts International, 63, 1565B.
- Klein, D. N., Lewinsohn, P. M., & Seeley, J. R. (1997). Psychosocial characteristics of adolescents with a past history of dysthymic disorder: Comparison with adolescents with past histories of major depressive and non-affective disorders, and never mentally ill controls. Journal of Affective Disorders, 42, 127-135.
- Kline, R. B. (1998). Principles and practice of structural equation modeling. New York: Guilford Press.
- Knapp, R. J. (1976). Authoritarianism, alienation, and related variables: A correlational and factor-analytic study. Psychological Bulletin, 83, 194-212.
- Koenig, L. J., & Abrams, R. F. (1999). Adolescent loneliness and adjustment: A focus on gender differences. In K. J. Rotenberg & S. Hymel (Eds.), Loneliness in childhood and adolescence (pp. 296-322). New York: Cambridge University Press.
- Kohn, M. L. (1969). Class and conformity: A study in values. Oxford, UK: Dorsey.
- Kolko, D. J., Brent, D. A., Baugher, M., Bridge, J., & Birmaher, B. (2000). Cognitive and family therapies for adolescent depression: Treatment specificity, mediation, and moderation. Journal of Consulting and Clinical Psychology, 68, 603-614.

Lacourse, E., Claes, M., & Villeneuve, M. (2001). Heavy metal music and adolescent suicidal risk. Journal of Youth and Adolescence, *30*, 321-332.

Lacourse, E., Villeneuve, M., & Claes, M. (2003). Theoretical structure of adolescent alienation: A multigroup confirmatory factor analysis. Adolescence, *38*, 639-650.

Lane, E. J., & Daugherty, T. K. (1999). Correlates of social alienation among college students. College Student Journal, *33*, 7-9.

Larson, R., & Asmussen, L. (1991). Anger, worry, and hurt in early adolescence: An enlarging world of negative emotions. In M. E. Colten & S. Gore (Eds.), Adolescent stress: Causes and consequences (pp. 21-41). Hawthorne, NY: Aldine de Gruyter.

Laukkanen, E., Pölkki, P., Oranen, L., Viinamäki, H., & Lehtonen, J. (2002). Factors predicting long-term rejection at school. European Journal of Psychiatry, *16*, 47-55.

Levitt, M. J., Guacci-Franco, N., & Levitt, J. L. (1993). Convoys of social support in childhood and early adolescence: Structure and function. Developmental Psychology, *29*, 811-818.

Lewinsohn, P. M., Clarke, G. N., Seeley, J. R., & Rohde, P. (1994). Major depression in community adolescents: Age at onset, episode duration, and time to recurrence. Journal of the American Academy of Child and Adolescent Psychiatry, *33*, 809-818.

Lipman, E. L. (2003). Don't let anyone bully you into thinking bullying is not important! Canadian Journal of Psychiatry, *48*, 575-576.

Lopez, C. R. (2002). Peer victimization and rejection in early adolescence.

Dissertation Abstracts International, 62, 5970B.

Mackey, J., & Ahlgren, A. (1977). Dimensions of adolescent alienation. Applied Psychological Measurement, 1, 219-232.

Manderscheid, R. W., Silbergeld, S., & Dager, E. Z. (1976). Alienation: A response to stress. Journal of Cybernetics, 5, 91-105.

Manning, J. S. (2003). Difficult-to-treat depressions: A primary care perspective. Journal of Clinical Psychiatry, 64, 24-31.

Marcoen, A., & Goossens, L. (1993). Loneliness, attitude towards aloneness, and solitude: Age differences and developmental significance during adolescence. In S. Jackson & H. Rodriguez-Tomé (Eds.), Adolescence and its social worlds (pp. 197-227). Hillsdale, NJ: Lawrence Erlbaum Associates.

Mau, R. Y. (1992). The validity and development of a concept: Student alienation. Adolescence, 27, 731-741.

Mboya, M. M. (1996). Perceived family and school environments and their relationships to African adolescents' self-concepts. School Psychology International, 17, 133-148.

Miyashita, K., & Kobayashi, T. (1981). A developmental study of alienation and adjustment during adolescence. Japanese Journal of Educational Psychology, 29, 297-305.

Mufson, L., & Dorta, K. P. (2003). Interpersonal psychotherapy for depressed adolescents. In A. E. Kazlin & J. R. Weisz (Eds.), Evidence-based psychotherapies for children and adolescents (pp. 148-164). New York: Guilford Press.

Nada Raja, S., McGee, R., & Stanton, W. R. (1992). Perceived attachments to

parents and peers and psychological well-being in adolescence. Journal of Youth and Adolescence, 21, 471-485.

Natvig, G. K. (2001). School-related stress experience as a risk factor for bullying behaviour. Journal of Youth and Adolescence, 30, 561-575.

Nekanda-Trepka, C. J., Bishop, S., & Blackburn, I. M. (1983). Hopelessness and depression. British Journal of Clinical Psychology, 22, 49-60.

Newman, B. M., & Newman, P. R. (1999). Development through life: A psychosocial approach (7<sup>th</sup> ed.). Scarborough, ON, Nelson Canada.

Newman, B. M., & Newman, P. R. (2001). Group identity and alienation: Giving the we its due. Journal of Youth and Adolescence, 30, 515-538.

Newman, P. R., & Newman, B. M. (1976). Early adolescence and its conflict: Group identity versus alienation. Adolescence, 11, 261-274.

Nunnally, J. C. (1978). Psychometric theory (2<sup>nd</sup> ed.). New York: MacGraw Hill.

O'Donnell, D. A. (2002). The mediating role of alienation in the development of maladjustment in youth exposed to community violence. Dissertation Abstracts International, 63, 1570B.

Oerlemans, K., & Jenkins, H. (1998). There are aliens in our school. Issues in Educational Research, 8, 117-129.

Offord, D. R., Boyle, M. H., Szatmari, P., Rae-Grant, N., Links, P. S., Cadman, D. T., Byles, J. A., Crawford, J. W., Blun, H. M., Byrne, C., Thomas, H., & Woodward, C. A. (1987). Ontario Child Health Study II: Six-month prevalence of disorder and rates of services utilization. Archives of General Psychiatry, 44, 832-836.

Olivier, G. (1998). A dialogue of touchstones: An analysis of existential guilt,



meaning making, alienation and loneliness. Dissertation Abstracts International, 59, 2428B.

Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell Publishers.

Overbeek, G., Vollebergh, W., Engels, R. C. M. E., & Meeus, W. (2003). Parental attachment and romantic relationships: Associations with emotional disturbance during late adolescence. Journal of Counseling Psychology, 50, 28-39.

Patterson, R. L., & Santor, D. (2004). Psychometric properties of the Adolescent Alienation Questionnaire. Poster session presented at the 65<sup>th</sup> annual meeting of the Canadian Psychological Association, St. John's, NL.

Pattison, E. M., & Kahan, J. (1983). The deliberate self-harm syndrome. American Journal of Psychiatry, 140, 867-872.

Paulson, C. M. (1984). Adolescent alienation and labelling. Dissertation Abstracts International, 44, 3315A.

Petrie, K., Chamberlain, K., & Clarke, D. (1988). Psychological predictors of future suicidal behaviour in hospitalized suicide attempters. British Journal of Clinical Psychology, 27, 247-257.

Pulvino, C. J., & Hansen, J. C. (1972). Relevance of "needs" and "press" to anxiety, alienation, and GPA. Journal of Experimental Education, 40, 70-75.

Ray, J. J. (1982). Toward a definitive alienation scale. Journal of Psychology, 112, 67-70.

Reifsteck, J. B. (2001). A risk classification and protective factor assessment procedure for adolescents in educational settings. Dissertation Abstracts International, 62,

1596B.

Rigby, K. (2003). Consequences of bullying in schools. Canadian Journal of Psychiatry, 48, 583-590.

Roberts, B. R. (1987). A confirmatory factor-analytic model of alienation. Social Psychology Quarterly, 50, 346-351.

Robson, K. (2003). Peer alienation: Predictors in childhood and outcomes in adulthood. Working Papers of the Institute for Social and Economic Research, paper 2003-21. Colchester, Essex: University of Essex.

Roland, E. (2002). Bullying, depressive symptoms and suicidal thoughts. Educational Research, 44, 55-67.

Roychaudhury, P., & Basu, J. (1998). Parent-child relationship, school achievement and adjustment of adolescent boys. Journal of Personality and Clinical Studies, 14, 53-58.

Rutkowski, K. A. (1979). The relationship between adolescent alienation and the adolescent's perception of early parent-child relationships. Dissertation Abstracts International, 40, 1970A.

Sankey, M., & Huon, G. F. (1999). Investigating the role of alienation in a multicomponent model of juvenile delinquency. Journal of Adolescence, 22, 95-107.

Santor, D. A., & Kusumakar, V. (2001). Open trial of interpersonal therapy in adolescents with moderate to severe major depression: Effectiveness of novice IPT therapists. Journal of the American Academy of Child and Adolescent Psychiatry, 40, 236-240.

Santor, D. A., & Kusumakar, V. (2001). Negative Events Questionnaire.

Unpublished questionnaire.

Santor, D. A., & Kusumakar, V. (2001). Stress Quiz. Unpublished questionnaire.

Santor, D. A., & Kusumakar, V. (2001). Youth Aggression Questionnaire.

Unpublished questionnaire.

Santor, D. A., Kusumakar, V., Poulin, C., & LeBlanc J. (2001). Problems Questionnaire. Unpublished questionnaire.

Santor, D., Messervey, D., & Kusumakar, V. (2000). Measuring peer pressure, popularity, and conformity in adolescent boys and girls: Predicting school performance, sexual attitudes, and substance abuse. Journal of Youth and Adolescence, 29, 163-182.

SAS Institute. (1996). SAS/STAT software Changes and Enhancements Through Release 6.11. Cary, NC: SAS Institute Inc.

Schlatter, A. K. (2001). Parental aggression and adolescent peer relationships. Dissertation Abstracts International, 61, 5031A.

Seeman, M. (1959). On the meaning of alienation. American Sociological Review, 24, 783-791.

Seeman, M. (1972). Alienation and engagement. In A. Campbell & P. E. Converse (Eds.), The human meaning of social change (pp. 467-527). New York: Russell Sage.

Seeman, M. (1975). Alienation studies. Annual Review of Sociology, 1, 91-123.

Seeman, M. (1991). Alienation and anomie. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), Measures of personality and social psychological attitudes (pp. 291-371). Toronto, ON: Academic Press.

Seidel, J. F., & Vaughn, S. (1991). Social alienation and the learning disabled

school dropout. Learning Disabilities Research and Practice, 6, 152-157.

Seidman, J. J. (1996). The relationship among alienation, sense of school membership, perception of competence, extent of stress and academic achievement among middle school students. Dissertation Abstracts International, 56, 3062A.

Shea, S. J. (1993). Personality characteristics of self-mutilating male prisoners. Journal of Clinical Psychology, 49, 576-585.

Sexton, M. E. (1983). Alienation, dogmatism, and related personality characteristics. Journal of Clinical Psychology, 39, 80-86.

Shoho, A. R., Katims, D. S., & Wilks, D. (1997). Perceptions of alienation among students with learning disabilities in inclusive and resource settings. High School Journal, 81, 28-36.

Skerl, J. A. (1977). The measurement of adolescent alienation: Volume I & II. Dissertation Abstracts International, 37, 5369A.

Slater, M. D. (2003). Alienation, aggression, and sensation seeking as predictors of adolescent use of violent film, computer, and website content. Journal of Communication, 53, 105-121.

Sommer, K. (2001). Coping with rejection: Ego-defensive strategies, self-esteem, and interpersonal relationships. In M. R. Leary (Ed.), Interpersonal rejection (pp. 167-188). New York: Oxford University Press.

Spencer, M. B. (1988). Self-concept development. New Directions for Child Development, 42, 59-72.

Steer, R. A., Rissmiller, D. J., Ranieri, W. F., & Beck, A. T. (1993). Dimensions of suicidal ideation in psychiatric inpatients. Behaviour Research and Therapy, 31, 229-

Stephens, R. D. (1997). National trends in school violence: Statistics and prevention strategies. In A. P. Goldstein & J. C. Conoley (Eds.), School violence intervention: A practical handbook (pp. 72-90). New York: Guilford Press.

Torres-Rivera, M. A. (1989). The role of trait anxiety and alienation on the emergence and maintenance of depressive symptomatology. Dissertation Abstracts International, 49, 4027B.

Travis, R. (1993). The MOS alienation scale: An alternative to Srole's anomia scale. Social Indicators Research, 28, 71-91.

Walsh, B. W., & Rosen, P. M. (1988). Self-mutilation: Theory, research, and treatment. New York: Guilford Press.

Webb, F. J. (1995). Adolescents, alienation, and aids: Ecological influences on adolescent safer sex behavior. Dissertation Abstracts International, 56, 370A.

Weersing, V. R., & Brent, D. A. (2003). Cognitive-behavioral therapy for adolescent depression: Comparative efficacy, mediation, moderation, and effectiveness. In A. E. Kazlin & J. R. Weisz (Eds.), Evidence-based psychotherapies for children and adolescents (pp. 135-147). New York: Guilford Press.

Weigel, D. J., Devereux, P., Leigh, G. K., & Ballard-Reisch, D. (1998). A longitudinal study of adolescents' perceptions of support and stress: Stability and change. Journal of Adolescent Research, 13, 158-177.

Wenz, F. V. (1979). Sociological correlates of alienation among adolescent suicide attempts. Adolescence, 14, 19-30.

Wilkerson, J., Protinsky, H. O., Maxwell, J. W., & Lentner, M. (1982). Alienation

and ego identity in adolescents. Adolescence, 17, 133-139.

Williamson, I., & Cullingford, C. (1998). Adolescent alienation: Its correlates and consequences. Educational Studies, 24, 333-343.

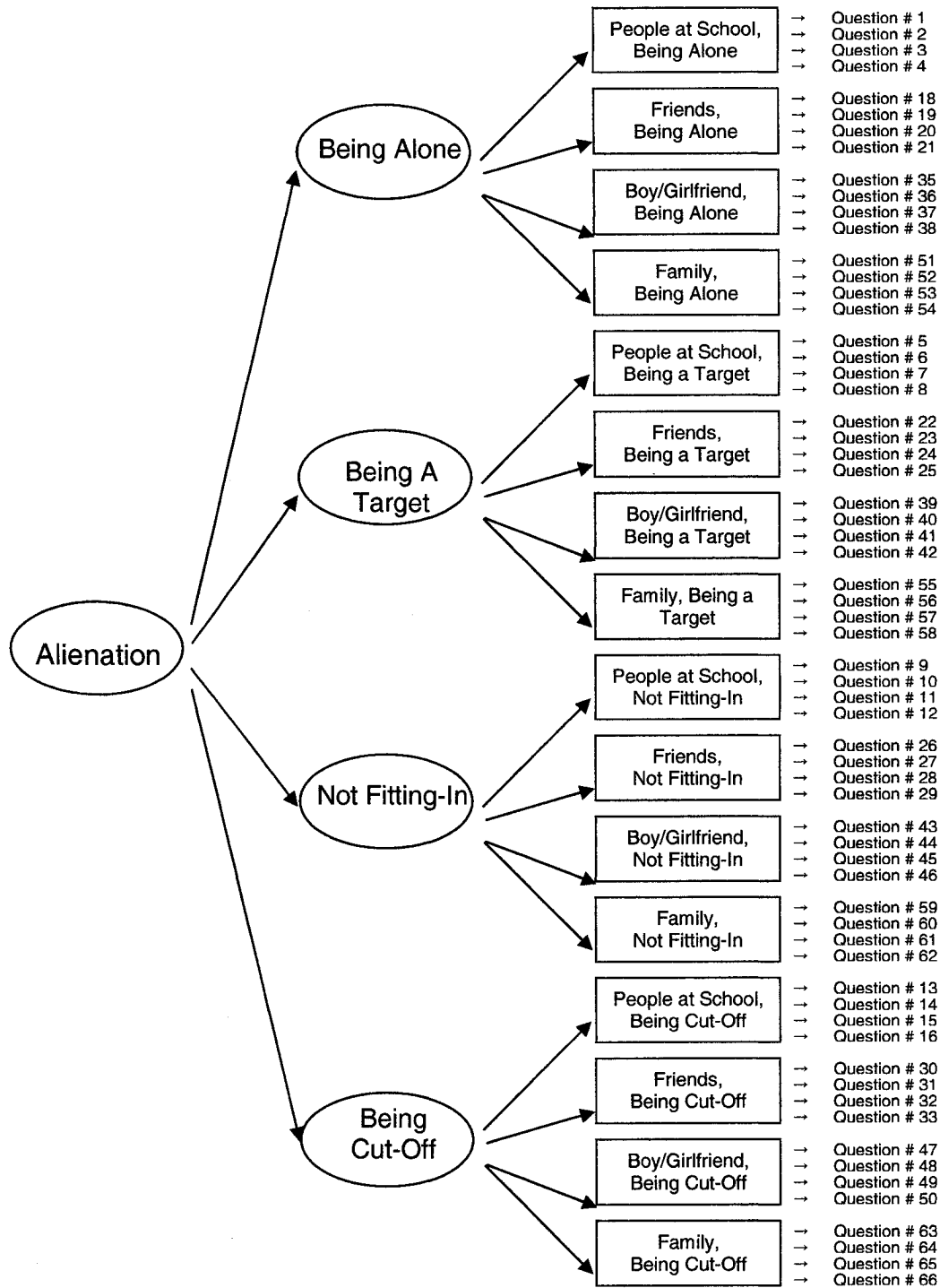
Yang, B., & Clum, G. A. (1994). Life stress, social support, and problem-solving predictive of depressive symptoms, hopelessness, and suicide ideation in an Asian student population: A test of a model. Suicide and Life-Threatening Behavior, 24, 127-139.

Young, M. R. R., & Bradley, M. T. (1998). Social withdrawal: Self-efficacy, happiness, and popularity in introverted and extroverted adolescents. Canadian Journal of School Psychology, 14, 21-35.

Young, T. J. (1985). Adolescent suicide: The clinical manifestation of alienation. High School Journal, 69, 55-60.

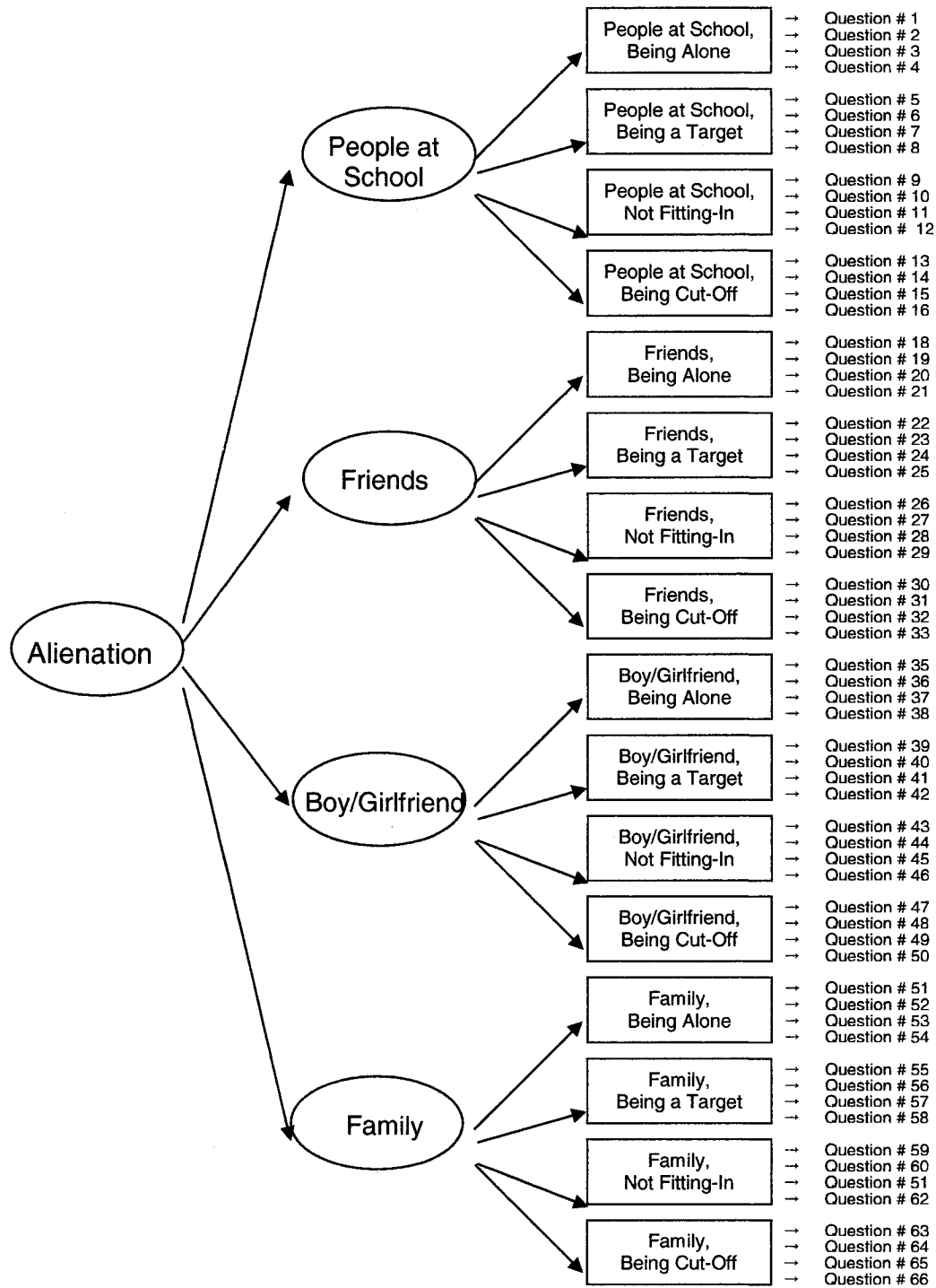
## Appendix A

### Model of Alienation by Psychological Components



## Appendix B

### Model of Alienation by Contextual Domains

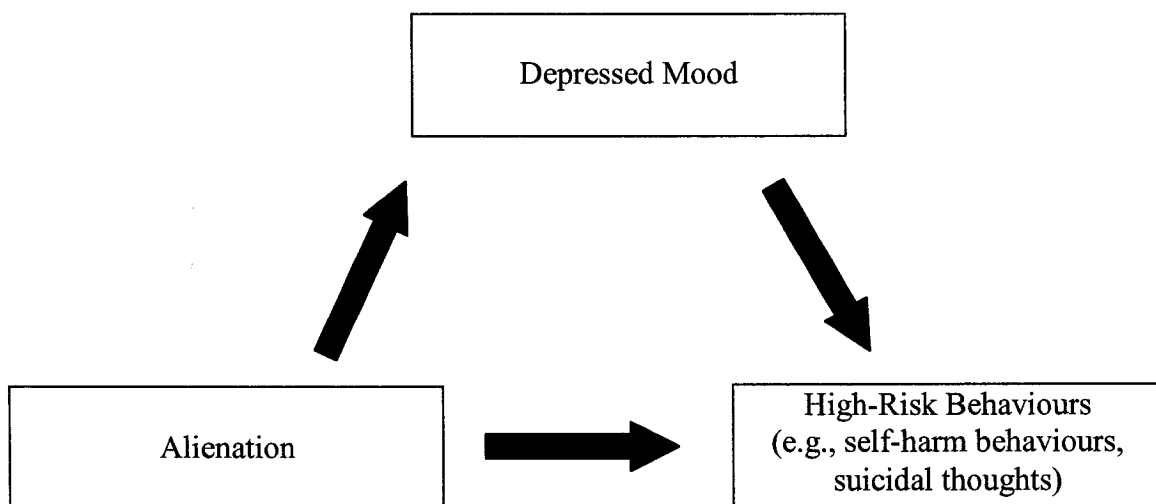




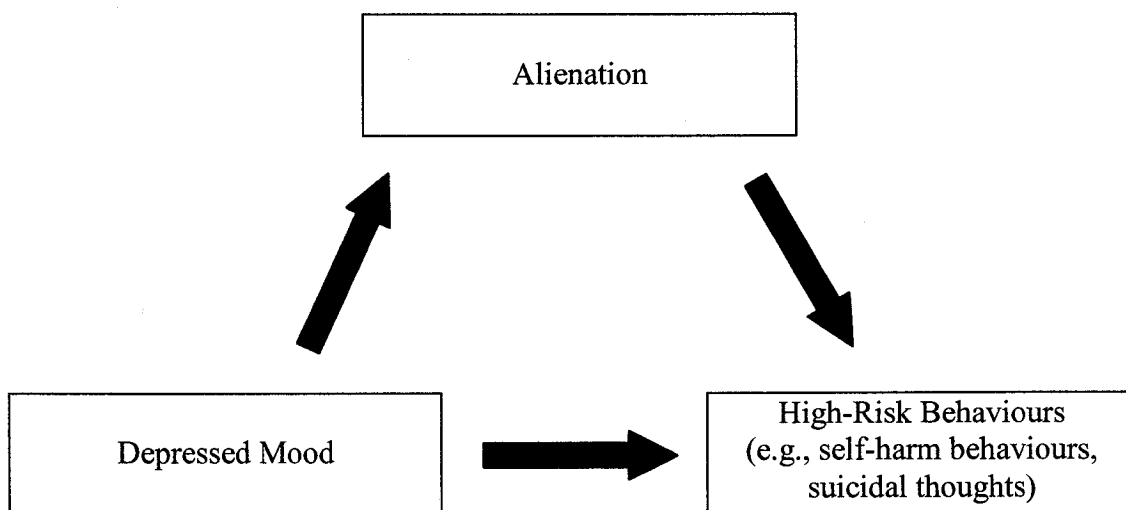
## Appendix C

### Sequencing of Alienation

#### Depressed Mood as a Mediator



#### Alienation as a Mediator



## Appendix D

### Beck Depression Inventory – Second Edition (BDI-II)

**Instructions:** This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past 2 weeks, including today**. Place a check (✓) beside the statement you have picked. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

**1. Sadness**

- ☐ I do not feel sad.
- ☐ I feel sad much of the time.
- ☐ I am sad all the time.
- ☐ I am so sad or unhappy that I can't stand it.

**2. Pessimism**

- ☐ I am not discouraged about my future.
- ☐ I feel more discouraged about my future than I used to be.
- ☐ I do not expect things to work out for me.
- ☐ I feel my future is hopeless and will only get worse.

**3. Past Failure**

- ☐ I do not feel like a failure.
- ☐ I have failed more than I should have.
- ☐ As I look back, I see a lot of failures.
- ☐ I feel I am a total failure as a person.

**4. Loss of Pleasure**

- ☐ I get as much pleasure as I ever did from the things I enjoy.
- ☐ I don't enjoy things as much as I used to.
- ☐ I get very little pleasure from the things I used to enjoy.
- ☐ I can't get any pleasure from the things I used to enjoy.

**5. Guilty Feelings**

- ☐ I don't feel particularly guilty.
- ☐ I feel guilty over many things I have done or should have done.
- ☐ I feel quite guilty most of the time.
- ☐ I feel guilty all of the time.

6. **Punishment Feelings**  
\_\_\_ I don't feel I am being punished.  
\_\_\_ I feel I may be punished.  
\_\_\_ I expect to be punished.  
\_\_\_ I feel I am being punished.
7. **Self-Dislike**  
\_\_\_ I feel the same about myself as ever.  
\_\_\_ I have lost confidence in myself.  
\_\_\_ I am disappointed in myself.  
\_\_\_ I dislike myself.
8. **Self-Criticalness**  
\_\_\_ I don't criticize or blame myself more than usual.  
\_\_\_ I am more critical of myself than I used to be.  
\_\_\_ I criticize myself for all of my faults.  
\_\_\_ I blame myself for everything bad that happens.
9. **Suicidal Thoughts or Wishes**  
\_\_\_ I don't have any thoughts of killing myself.  
\_\_\_ I have thoughts of killing myself, but I would not carry them out.  
\_\_\_ I would like to kill myself.  
\_\_\_ I would kill myself if I had the chance.
10. **Crying**  
\_\_\_ I don't cry anymore than I used to.  
\_\_\_ I cry more than I used to.  
\_\_\_ I cry over every little thing.  
\_\_\_ I feel like crying, but I can't.
11. **Agitation**  
\_\_\_ I am no more restless or wound up than usual.  
\_\_\_ I feel more restless or wound up than usual.  
\_\_\_ I am so restless or agitated that it's hard to stay still.  
\_\_\_ I am so restless or agitated that I have to keep moving or doing something.
12. **Loss of Interest**  
\_\_\_ I have not lost interest in other people or activities.  
\_\_\_ I am less interested in other people or things than before.  
\_\_\_ I have lost most of my interest in other people or things.  
\_\_\_ It's hard to get interested in anything.

13. **Indecisiveness**  
\_\_\_ I make decisions about as well as ever.  
\_\_\_ I find it more difficult to make decisions than usual.  
\_\_\_ I have much greater difficulty in making decisions than I used to.  
\_\_\_ I have trouble making any decisions.
14. **Worthlessness**  
\_\_\_ I do not feel I am worthless.  
\_\_\_ I don't consider myself as worthwhile and useful as I used to.  
\_\_\_ I feel more worthless as compared to other people.  
\_\_\_ I feel utterly worthless.
15. **Loss of Energy**  
\_\_\_ I have as much energy as ever.  
\_\_\_ I have less energy than I used to have.  
\_\_\_ I don't have enough energy to do very much.  
\_\_\_ I don't have enough energy to do anything.
16. **Changes in Sleeping Pattern**  
\_\_\_ I have not experienced any change in my sleeping pattern.  
\_\_\_ I sleep somewhat more than usual.  
\_\_\_ I sleep somewhat less than usual.  
\_\_\_ I sleep a lot more than usual  
\_\_\_ I sleep a lot less than usual.  
\_\_\_ I sleep most of the day.  
\_\_\_ I wake up 1-2 hours early and can't get back to sleep.
17. **Irritability**  
\_\_\_ I am no more irritable than usual.  
\_\_\_ I am more irritable than usual.  
\_\_\_ I am much more irritable than usual.  
\_\_\_ I am irritable all the time.
18. **Changes in Appetite**  
\_\_\_ I have not experienced any change in my appetite.  
\_\_\_ My appetite is somewhat less than usual.  
\_\_\_ My appetite is somewhat greater than usual.  
\_\_\_ My appetite is much less than before.  
\_\_\_ My appetite is much greater than usual.  
\_\_\_ I have no appetite at all.  
\_\_\_ I crave food all the time.

**19. Concentration Difficulty**

- ☐ I can concentrate as well as ever.
- ☐ I can't concentrate as well as usual.
- ☐ It's hard to keep my mind on anything for very long.
- ☐ I find I can't concentrate on anything.

**20. Tiredness or Fatigue**

- ☐ I am no more tired or fatigued than usual.
- ☐ I get more tired or fatigued more easily than usual.
- ☐ I am too tired or fatigued to do a lot of the things I used to do.
- ☐ I am too tired or fatigued to do most of the things I used to do.

**21. Loss of Interest in Sex**

- ☐ I have not noticed any recent change in my interest in sex.
- ☐ I am less interested in sex than I used to be.
- ☐ I am much less interested in sex now.
- ☐ I have lost interest in sex completely

## Appendix E

### Problems Questionnaire

Section 3. <i>Problems</i>		Page 3
Please indicate what kinds of problems you have had since last year and how long they lasted.		
I had problems getting along with my close friends.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems getting along with other students at school.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems doing well at school.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems getting along with family members.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems getting along with my boyfriend / girlfriend.	<input type="checkbox"/> Don't have a boyfriend/girlfriend <input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems controlling my behavior. I yelled at people, broke things and/or hit people in anger.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems with my mood. I felt sad, anxious, or bad about myself.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I thought about hurting myself on purpose.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I hurt myself on purpose.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems with my physical health.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year
I had problems with alcohol or drugs.	<input type="checkbox"/> Not at all <input type="checkbox"/> For just a day or two at a time <input type="checkbox"/> For more than a week at a time <input type="checkbox"/> For more than 2 weeks at a time	<input type="checkbox"/> For more than a month at a time <input type="checkbox"/> For more than 3 months at a time <input type="checkbox"/> For more than 6 months at a time <input type="checkbox"/> Most of the time since last year

## Appendix F

### Study 1A and Study 1B Adolescent Alienation Questionnaire

Section 9. <i>Alienation Questionnaire</i>		Page 13	
Read each of the following questions carefully. Please indicate how well each applied to you in the last year by marking one of the following: False, Sometimes, or True.			
<b>Since Last Year.....</b>			
<b>(Part 1: People at School)</b>			
	False	Sometimes	True
1. I spent time with people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I felt isolated from people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I felt abandoned by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I could count on people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I was made fun of behind my back by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I was made fun of directly to my face by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I was tormented by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I was teased and called names by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I fit in with people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I was disliked by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I was seen as different by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. People at school showed interest in me. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I was ignored by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I felt rejected by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I was excluded from activities by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I felt alienated by people at school. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>(Part 2: My Friends)</b>			
17. I had friends last year. (If No go to part 3) .....	Yes <input type="radio"/>	No <input type="radio"/>	
	False	Sometimes	True
18. I spent time with my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I felt isolated from my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I felt abandoned by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I could count on my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I was made fun of behind my back by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I was made fun of directly to my face by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I was tormented by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I was teased and called names by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I fit in with my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I was disliked by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I was seen as different by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. My friends showed interest in me. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I was ignored by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I felt rejected by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I was excluded from activities by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. I felt alienated by my friends. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MAKE NO MARKS IN THIS AREA			
			01003

*Since Last Year.....***(Part 3: My Boyfriend or Girlfriend)**

- |  | Yes                   | No                    |                       |
|--|-----------------------|-----------------------|-----------------------|
| 34. I had a boyfriend or girlfriend last year. (If No go to part 4) .....    | <input type="radio"/> | <input type="radio"/> |                       |
|  | False                 | Sometimes             | True                  |
| 35. I spent time with my boyfriend or girlfriend. ....                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 36. I felt isolated from my boyfriend or girlfriend. ....                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 37. I felt abandoned by my boyfriend or girlfriend. ....                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 38. I could count on my boyfriend or girlfriend. ....                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 39. I was made fun of behind my back by my boyfriend or girlfriend. ....     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 40. I was made fun of directly to my face by my boyfriend or girlfriend. ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 41. I was tormented by my boyfriend or girlfriend. ....                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 42. I was teased and called names by my boyfriend or girlfriend. ....        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 43. I fit in with my boyfriend or girlfriend. ....                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 44. I was disliked by my boyfriend or girlfriend. ....                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 45. I was seen as different by my boyfriend or girlfriend. ....              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 46. My boyfriend or girlfriend showed interest in me. ....                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 47. I was ignored by my boyfriend or girlfriend. ....                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 48. I felt rejected by my boyfriend or girlfriend. ....                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 49. I was excluded from activities by my boyfriend or girlfriend. ....       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 50. I felt alienated by my boyfriend or girlfriend. ....                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**(Part 4: My Family)**

- |  | False                 | Sometimes             | True                  |
|--|-----------------------|-----------------------|-----------------------|
| 51. I spent time with my family. ....                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 52. I felt isolated from my family. ....                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 53. I felt abandoned by my family. ....                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 54. I could count on my family. ....                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 55. I was made fun of behind my back by my family. ....      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 56. I was made fun of directly to my face by my family. .... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 57. I was tormented by my family. ....                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 58. I was teased and called names by my family. ....         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 59. I fit in with my family. ....                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 60. I was disliked by my family. ....                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 61. I was seen as different by my family. ....               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 62. My family showed interest in me. ....                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 63. I was ignored by my family. ....                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 64. I felt rejected by my family. ....                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 65. I was excluded from activities by my family. ....        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 66. I felt alienated by my family. ....                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



Study 1A and 1B Parental Assent



**Dalhousie University**

## Annual Survey on Distress and Help-Seeking

Dear Parent and Student,

Once again, we at Dalhousie will be conducting our yearly survey to assess a variety of questions concerning distress and how young people seek help. Next week, the student in your home will be given the opportunity to complete the survey. Questions concern mood and well-being, how and why young person seek help for problems, as well as risk behaviours, such as drinking and drug use. This year students will also be asked to allow us to link results of the survey to their school grades and to the types of services you use at school, namely the guidance office and the teen health centre. This is important information that will allow us to understand the impact of mental health on school performance and understand whether or not students who report mental health difficulties prefer to make use of guidance services or teen health centre services.

We have worked hard to find a way that protects your privacy, but that allows us to link these important pieces of information. At the end of the school year, Dr. Santor will be given students grades, guidance and teen health centre use statistics and the information we use to link people from year to year (day of birth, month of birth, year of birth, gender, grade). **No person will be identified by name and no name will be released to Dr. Santor by the school. The information provided to Dr. Santor is entered into a database at Dalhousie and is then linked to the annual survey information in a computer. It will not be possible to identify any individual by name or identify the school the individual attends, or the place where the individual lives.** We'll also make sure that no one from the school ever gets a chance to see the survey. I and my research staff from Dalhousie will be at the school on the day of the survey. This way, no one from the school will see a student's survey, and no one handling the questionnaires will ever know who you are.

Any student interested in participating need only indicate their interest on the day of the survey. Any student or parent who does not wish to participate in the survey should return this notice to their classroom teacher, the principle, or the Teen Health Coordinator. Someone from Dalhousie will ensure that any student who does not wish to participate in the survey is not given a survey to complete. If you have any questions or concerns about the survey, please feel free to contact Dr. Santor (494-8962 or [dsantor@is.dal.ca](mailto:dsantor@is.dal.ca)). He would be pleased to talk to you about your concerns, or make alternate arrangements for completing the survey if you so choose.


If the student in your home is not interested in participating, please complete the following.

Student's Name: \_\_\_\_\_

Parent's Signature: \_\_\_\_\_

## Appendix H

### Study 1A and 1B Youth Consent

	<b>Dalhousie University</b>	<b>Department of Psychology</b> Halifax, Nova Scotia Canada B3H 4J1 Tel: (902) 494-3714 Fax: (902) 494-6585 dsantor@is.dal.ca
 <b>INFORMATION SHEET AND INFORMED CONSENT</b>		
<b>Study Title:</b>	<b>Precipitants of Help-Seeking, Help-Seeking Resources and Attitudes towards Help-Seeking</b>	
<b>Main Researcher:</b>		
Darcy A. Santor, Ph.D.,	Department of Psychology, Dalhousie University, Halifax, NS, Canada, B3H 4J1. Tel: (902) 494-6962 Fax: (902) 494-6585 dsantor@is.dal.ca	
<b>Co-Researchers:</b>		
Vivek Kusumaker, MD,	Director, Mood Disorders Group, Department of Psychiatry, Dalhousie University and Chief of Psychiatry, IWK Grace Health Centre.	
Christiane Poulin, MD,	Associate Professor, Community Health and Epidemiology Faculty of Medicine, Dalhousie University.	
John LeBlanc, M.D.,	Departments of Pediatrics and Psychiatry, Dalhousie University & IWK Grace Health Centre.	
<b>Who you can call for more information:</b>		
Darcy A. Santor, Ph.D.,	Department of Psychology, Dalhousie University, Halifax, NS, Canada, B3H 4J1. Tel: (902) 494-6962 Fax: (902) 494-6585 dsantor@is.dal.ca	

## Introduction.

We invite you to take part in a research study being conducted at Dalhousie University. Taking part is entirely voluntary. You may decide to stop taking part at any time. If you decide not to take part, you will not be treated any differently by your teacher or the school, and your performance at school will not be viewed badly. The study is described below. This description tells you about the risks, inconvenience, or discomfort which you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. Please ask the person giving you this information any questions you may have.

## Why are we doing this study?

In an earlier survey, we asked young people about the problems they experience and whether they got the help they needed. Results of this survey showed that 33% of young persons experience problems that they felt they needed help and that 15% of young persons indicated that they wanted to talk to a mental health professional but didn't.

The purpose of the project is to find out what kinds of problems young people are dealing with and to find out what kinds of help young people have and would like to have. We would like you to participate in a survey study. As in past years, we will ask you to complete a questionnaire about distress, risk factors, and help-seeking.

## Who can participate?

You may participate in this study if you

- are at least 12 years of age
- are able to understand the types of questions being asked and are able to decide whether or you want to be in the study.

## Who will be conducting the research?

In order to ensure anonymity, all data collection will be supervised by qualified research staff. No staff member will handle any of the questionnaires at any time. A research staff member from Dalhousie or the IWK Grace will be on hand to supervise every single class.

## What will you be asked to do?

You will be asked to complete a series of questions asking about stress you may experience at school, about any emotional and behavioral problems you may be concerned about, about risk-behaviours you may be exposed to, as well as about your school performance and how you feel about yourself.

This year we will also be asking you to allow us to interview some of the survey results with your school grades and to the types of services you use at school, namely the guidance office and the teen health centre. We are asking young people to do this in order to better understand the impact of stress and difficulties on school performance. We would also like to know whether students who are stressed use the guidance services or the teen health centre, or both services at all. Principals at the individual schools and the Superintendent of schools have given us permission to collect

this information provided that we follow strict guidelines that protect your privacy and ensure your confidentiality and anonymity.

We have worked hard to find a way that protects your privacy. At the end of the school year, Dr. Santor will be given students' grades, guidance, and Teen Health Centre use statistics and the information we use to link people from year to year (day of birth, month of birth, year of birth, gender, grade). No person will be identified by name and no name will be released to Dr. Santor by the school. The information provided to Dr. Santor is entered into a database at Dalhousie and is then linked to the annual survey information on a computer. It will not be possible to identify any individual by name or identify the school the individual attends, or the place where the individual lives.

## Possible risks and discomforts.

There are no known risks associated with completing this type of questionnaire. Some of the questions may be difficult for some people to answer or they may raise some concerns that you may have yourself or your friends.

Currently, we offer young people a number of possibilities to express their concerns, including teachers, guidance counselors, as well as use of the Teen Health Centres. Any young person who would like to speak to any of the professionals available to them are encouraged to do so.

## Possible benefits.

The aim of the study is to better understand what influences young people's lives, how young people seek help and whom they prefer to seek help from. Completing a questionnaire contributes to our knowledge about young persons and will be used to enhance the kinds of services offered through the Teen Health Centres.

## Compensation

Each young person who participates in the survey will be given a McDonald's gift certificate for a Happy Meal.

## Confidentiality

The questions we will ask you are personal. We have worked hard to find a way that protects your privacy, but that allows us to see how things change as you move through junior and senior high school. To do this, we do not need your name or any other information that might readily identify who you are. In fact, we're going to ask you for just 5 pieces of information, and we're going to make sure that no one from the school ever gets a chance to see your questionnaire. This way, no one will be able to identify you, and no one handling the questionnaires will ever know who you are.

Once information is entered in to a database, the surveys are destroyed. Information in the database is stored on a dedicated computer, that cannot be accessed by anyone other than the research staff and which cannot be hacked from another computer over the internet. Only a

court order or a research integrity audit by the ethics board can access this information. But keep in mind, there is no information to identify you.

If you are still concerned about your privacy, please feel free to contact Dr. Santor. He would be happy to talk to you about your concerns, and will welcome any suggestion that would allow you to participate in the study and ensure that your information is safe. If you prefer, you can mail the questionnaire to Dr. Santor at the Dept. of Psychology, Dalhousie University, Halifax, NS, B3H 4J1, hand it to him directly on the day of the survey, or drop it off at the Department of Psychology directly. He can be reached at 494-6962.

## Questions?

Any questions concerning the study can be directed to Darcy A. Santor, Ph.D. either in writing (Department of Psychology, Dalhousie University, Halifax, Canada, B3H 4J1.), by e-mail ([dsantor@is.dal.ca](mailto:dsantor@is.dal.ca)) or by phone (494-6962). A copy of the consent form will be provided if you wish.

## What if I don't want to participate?

Taking part is entirely voluntary and you may stop at any time. Deciding not to take part or deciding to stop even after you have started will not affect the way in which staff or school treat you and you will not be treated badly if you choose to stop or withdraw from the study.

## Problems or concerns?

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics / Integrity coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance: (902) 494-1462.

## Permission to take part in the study.

I have read this information sheet describing the study. I have had the chance to ask questions and talk about my concerns, which have been answered to my satisfaction. I give my permission to take part in this study. I understand that taking part is voluntary and that I can stop at any time and not be in the study. If I decide to stop I will form Dr. Santor of my decision.

\_\_\_\_\_  
Printed Name of Young Person

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Person  
Obtaining Consent

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## Appendix I

### Beck Hopelessness Scale (H-Beck)

Read each of the following statements carefully and decide whether you agree or disagree with each of the statements and how much. Record your answers using the scale to the right of each question. If you strongly agree, circle '5'. If you strongly disagree, circle '1'. If you are uncertain about how you feel or don't know, circle '3'. Use the number that corresponds to the way you feel.

1.....2.....3.....4.....5					
Strongly Disagree	Disagree	Uncertain Don't Know	Agree	Strongly Agree	
1. I look forward to the future with hope and enthusiasm.	1	2	3	4	5
2. I might as well give up because I can't make things better for myself.	1	2	3	4	5
3. When things are going badly, I am helped by knowing they can't stay that way forever.	1	2	3	4	5
4. I can't imagine what my life would be like in 10 years.	1	2	3	4	5
5. I have enough time to accomplish the things I most want to do.	1	2	3	4	5
6. In the future, I expect to succeed in what concerns me most.	1	2	3	4	5
7. My future seems dark to me.	1	2	3	4	5
8. I expect to get more of the good things in life than the average person.	1	2	3	4	5
9. I just don't get the breaks, and there's no reason to believe I will in the future.	1	2	3	4	5
10. My past experiences have prepared me well for my future.	1	2	3	4	5
11. All I can see ahead of me is unpleasantness rather than pleasantness.	1	2	3	4	5
12. I don't expect to get what I really want.	1	2	3	4	5
13. When I look ahead to the future, I expect I will be happier than I am now.	1	2	3	4	5
14. Things just won't work out the way I want them to.	1	2	3	4	5
15. I have great faith in the future.	1	2	3	4	5
16. I never get what I want so it's foolish to want anything.	1	2	3	4	5
17. It is very unlikely that I will get any real satisfaction in the future.	1	2	3	4	5
18. The future seems vague and uncertain to me.	1	2	3	4	5
19. I can look forward to more good times than bad times.	1	2	3	4	5
20. There's no use in really trying to get something I want because I probably won't get it.	1	2	3	4	5

## Appendix J

### Study 2 Month 1 Adolescent Alienation Questionnaire

**Read each of the following questions carefully. Please indicate how well each applied to you in the last month by checking one of the following: Most of the Time, Sometimes, or Not at All.**

#### ***In the Last Year.....***

##### ***(Part 1: People at School)***

	Most of the Time	Sometimes	Not at All
1. I spent time with people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I felt isolated from people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I felt abandoned by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I could count on people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I was made fun of behind my back by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I was made fun of directly to my face by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I was tormented by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I was teased and called names by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I fit in with people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I was disliked by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I was seen as different by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. People at school showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I was ignored by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I felt rejected by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I was excluded from activities by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I felt alienated by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### ***(Part 2: My Friends)***

I had friends in the last month.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	If no, go to part 3.
	Most of the Time	Sometimes	Not at All
17. I spent time with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I felt isolated from my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I felt abandoned by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I could count on my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I was made fun of behind my back by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I was made fun of directly to my face by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I was tormented by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I was teased and called names by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I fit in with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I was disliked by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I was seen as different by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. My friends showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I was ignored by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I felt rejected by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. I was excluded from activities by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I felt alienated by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ***In the Last Year.....***

### ***(Part 3: My Boyfriend or Girlfriend)***

I had a boyfriend or girlfriend in the last month.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	If no, go to part 4.
	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
33. I spent time with my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I felt isolated from my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I felt abandoned by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I could count on my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I was made fun of behind my back by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. I was made fun of directly to my face by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I was tormented by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I was teased and called names by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. I fit in with my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I was disliked by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. I was seen as different by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. My boyfriend or girlfriend showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I was ignored by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. I felt rejected by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. I was excluded from activities by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. I felt alienated by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### ***(Part 4: My Family)***

	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
49. I spent time with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I felt isolated from my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. I felt abandoned by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. I could count on my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. I was made fun of behind my back by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. I was made fun of directly to my face by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. I was tormented by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. I was teased and called names by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. I fit in with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. I was disliked by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. I was seen as different by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. My family showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. I was ignored by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. I felt rejected by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. I was excluded from activities by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. I felt alienated by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Appendix K

### Study 2 Month 2 to Month 12 Adolescent Alienation Questionnaire

**Read each of the following questions carefully. Please indicate how well each applied to you in the last month by checking one of the following: Most of the Time, Sometimes, or Not at All.**

#### ***In the Last Month.....***

##### ***(Part 1: People at School)***

	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
1. I spent time with people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I felt isolated from people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I felt abandoned by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I could count on people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I was made fun of behind my back by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I was made fun of directly to my face by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I was tormented by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I was teased and called names by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I fit in with people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I was disliked by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I was seen as different by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. People at school showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I was ignored by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I felt rejected by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I was excluded from activities by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I felt alienated by people at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### ***(Part 2: My Friends)***

I had friends in the last month.    Yes <input type="checkbox"/> No <input type="checkbox"/> If no, go to part 3.			
	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
17. I spent time with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I felt isolated from my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I felt abandoned by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I could count on my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I was made fun of behind my back by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I was made fun of directly to my face by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I was tormented by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. I was teased and called names by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. I fit in with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. I was disliked by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I was seen as different by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. My friends showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I was ignored by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. I felt rejected by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. I was excluded from activities by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I felt alienated by my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ***In the Last Month.....***

### ***(Part 3: My Boyfriend or Girlfriend)***

I had a boyfriend or girlfriend in the last month.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	If no, go to part 4.
	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
33. I spent time with my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I felt isolated from my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I felt abandoned by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I could count on my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I was made fun of behind my back by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. I was made fun of directly to my face by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I was tormented by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I was teased and called names by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. I fit in with my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I was disliked by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. I was seen as different by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. My boyfriend or girlfriend showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I was ignored by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. I felt rejected by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. I was excluded from activities by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. I felt alienated by my boyfriend or girlfriend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### ***(Part 4: My Family)***

	<b>Most of the Time</b>	<b>Sometimes</b>	<b>Not at All</b>
49. I spent time with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I felt isolated from my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. I felt abandoned by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52. I could count on my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. I was made fun of behind my back by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. I was made fun of directly to my face by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
55. I was tormented by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. I was teased and called names by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. I fit in with my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. I was disliked by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59. I was seen as different by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. My family showed interest in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. I was ignored by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62. I felt rejected by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. I was excluded from activities by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64. I felt alienated by my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix L

### Youth Aggression Questionnaire (AQY)

From time to time, you may become angry. Please indicate how frequently you have done each of the following in the past month, using the scale below.

A = Never  
B = Once a month or less  
C = Once a week or less  
D = 2 to 3 times a week  
E = Most days

**In the *Past Month*, how often did you ...**

- 1 Taunt, tease or annoy an *adult* living at home?
- 2 Taunt, tease or annoy *someone your own age* (not including family members)?
- 3 Raise your voice or shout at a *brother or sister* living at home?
- 4 Raise your voice or shout at an *adult* living at home?
- 5 Raise your voice or shout at *someone your own age* not including family members?
- 6 Swear or yell at a *brother or sister* living at home?
- 7 Swear or yell at an *adult* living at home?
- 8 Swear or yell at *someone your own age* (not including family members)?
- 9 Verbally threaten to hit or hurt a *brother or sister* living at home?
- 10 Verbally threaten to hit or hurt an *adult* living at home?
- 11 Verbally threaten to hit or hurt *someone your own age* (not including family members)?

A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E

**In the *Past Month*, how often did you ...**

- 12 Slam a door, kick something, throw or break objects in anger?
- 13 Vandalize or destroy someone else's property?
- 14 Taunt, tease or annoy a pet or another animal?
- 15 Injure or torture a pet or other living animal?

A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E

**In the *Past Month*, how often did you ...**

- 16 Physically fight with a *brother or sister after being provoked*?
- 17 Physically fight with an *adult after being provoked*?
- 18 Physically fight with *someone your own age after being provoked* (not including family members)?
- 19 How often did these fights result in mild physical injury *either* to you or someone else (e.g., bumps and bruises)?
- 20 20. How often did these fights result in serious physical injury *either* to you or someone else (e.g., stitches, broken bones, or required the attention of a doctor)?

A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E

In the *Past Month*, how often did you ...

- 21 Start a physical fight with a *brother or sister* (living in the home) after being provoked?
- 22 Start a physical fight with an *adult* (living in the home) after being provoked?
- 23 Start a physical fight with *someone your own age* after being provoked (not including family members)?
- 24 How often did these fights result in mild physical injury *either* to you or someone else (e.g., bumps and bruises)?
- 25 How often did these fights result in serious physical injury *either* to you or someone else (e.g., stitches, broken bones, or required the attention of a doctor)?

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

In the *Past Month*, how often did you ...

- 26 Carry a weapon?
- 27 Threaten another person with a weapon?
- 28 Use a weapon in a fight?
- 29 Injure a person in a fight?
- 30 Do this with a gang member or as part of a gang?

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

A	B	C	D	E
---	---	---	---	---

## Appendix M

### Beck Suicide Scale (BSS)

**Please carefully read each group of statements below. Circle the one statement in each group that best describes how you have been feeling for the past week, including today. Be sure to read all of the statements in each group before making a choice.**

#### Part 1

1.     0     I have moderate to strong wish to live.  
       1     I have a weak wish to live.  
       2     I have no wish to live.
2.     0     I have no wish to die.  
       1     I have a weak wish to die.  
       2     I have a moderate to strong wish to die.
3.     0     My reasons for living outweigh my reasons for dying.  
       1     My reasons for living or dying are about equal.  
       2     My reasons for dying outweigh my reasons for living.
4.     0     I have no desire to kill myself.  
       1     I have a weak desire to kill myself.  
       2     I have a moderate to strong desire to kill myself.
5.     0     I would try to save my life if I found myself in a life-threatening situation.  
       1     I would take a chance on life or death if I found myself in a life-threatening situation.  
       2     I would not take the steps necessary to avoid death if I found myself in a life-threatening situation.

**If you have circled the zero statements in both Groups 4 and 5 above, then skip down to Group 20. If you have marked 1 or 2 in either Group 4 or 5, then go to Group 6.**

6.     0     I have brief periods of thinking about killing myself which pass quickly.  
       1     I have periods of thinking about killing myself which last for moderate amounts of time.  
       2     I have long periods of thinking about killing myself.

7.    0    I rarely or only occasionally think about killing myself.  
      1    I have frequent thoughts about killing myself.  
      2    I continuously think about killing myself.
8.    0    I do not accept the idea of killing myself.  
      1    I neither accept nor reject the idea of killing myself.  
      2    I accept the idea of killing myself.
9.    0    I can keep myself from committing suicide.  
      1    I am unsure that I can keep myself from committing suicide.  
      2    I cannot keep myself from committing suicide.
10.   0    I would not kill myself because of my family, friends, religion, possible  
          injury from an unsuccessful attempt, etc.  
      1    I am somewhat concerned about killing myself because of my family,  
          friends, religion, possible injury from an unsuccessful attempt, etc.  
      2    I am not or only a little concerned about killing myself because of my  
          family, friends, religion, possible injury from an unsuccessful attempt, etc.
11.   0    My reasons for wanting to commit suicide are primarily aimed at  
          influencing other people, such as getting with people, making people  
          happier, making people pay attention to me, etc.  
      1    My reasons for wanting to commit suicide are not only aimed at  
          influencing other people, but also represent a way of solving my problems.  
      2    My reasons for wanting to commit suicide are primarily based upon  
          escaping from my problems.
12.   0    I have no specific plan about how to kill myself.  
      1    I have considered ways of killing myself, but have not worked out the  
          details.  
      2    I have specific plan for killing myself.
13.   0    I do not have access to a method or an opportunity to kill myself.  
      1    The method that I would use for committing suicide takes time, and I  
          really do not have a good opportunity to use this method.  
      2    I have access or anticipate having access to the method that I would  
          choose for killing myself and also have or shall have the opportunity to  
          use it.
14.   0    I do not have the courage or the ability to commit suicide.  
      1    I am unsure that I have the courage or the ability to commit suicide.  
      2    I have the courage and the ability to commit suicide.

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15. 0 I do not expect to make a suicide attempt.  
 1 I am unsure that I shall make a suicide attempt.  
 2 I am sure that I shall make a suicide attempt.
16. 0 I have made no preparations for committing suicide.  
 1 I have made some preparations for committing suicide.  
 2 I have almost finished or completed my preparations for committing suicide.
17. 0 I have not written a suicide note.  
 1 I have thought about writing a suicide note or have started to write one, but have not completed it.  
 2 I have completed a suicide note.
18. 0 I have made no arrangements for what will happen after I have committed suicide.  
 1 I have thought about making some arrangements for what will happen after I have committed suicide.  
 2 I have made definite arrangements for what will happen after I have committed suicide.
19. 0 I have not hidden my desire to kill myself from people.  
 1 I have held back telling people about wanting to kill myself.  
 2 I have attempted to hide, conceal, or lie about wanting to commit suicide.
20. 0 I have never attempted suicide.  
 1 I have attempted suicide once.  
 2 I have attempted suicide two or more times.

**If you have previously attempted suicide, please continue with the next statement group.**

21. 0 My wish to die during the last suicide attempt was low.  
 1 My wish to die during the last suicide attempt was moderate.  
 2 My wish to die during the last suicide attempt was high.



## Appendix N

### Stress Questionnaire (SQ-Computer Administered)

This questionnaire consists of 23 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past month, including today. If several statements in the group seem to apply equally well, circle the highest number for that group.

Which statement best describes the way you have been feeling during the PAST MONTH including TODAY?

- 0 I do not feel stressed.
  - 1 I feel stressed but I'm able to handle it.
  - 2 I have so much stress that it's been hard to get things done.
  - 3 I am totally stressed out.
- 
- 0 I do not feel sad or down.
  - 1 I've been feeling sad and down, much more than I usually do.
  - 2 I've been feeling so sad and down that it's been hard doing things.
  - 3 Once I start feeling sad or down, there's nothing I can do to stop it.
- 
- 0 My mood doesn't change any more or less than usual.
  - 1 My moods have been changing quickly, for no particular reason.
  - 2 My mood swings have become extreme and other people have noticed.
  - 3 My mood swings are out of control and are becoming a worry.
- 
- 0 I don't worry any more than usual.
  - 1 I worry more about things than I used to.
  - 2 I have started to worry about little things that didn't used to bother me.
  - 3 I've been worrying about the same things for days and days.
- 
- 0 I don't feel any more anxious or nervous than usual.
  - 1 I've felt so anxious it makes me feel sick.
  - 2 When I start feeling anxious, I worry that it just won't stop.
  - 3 I've started having anxiety or panic attacks.
- 
- 0 No one is bothering me at school.
  - 1 People at school tease me, and it bothers me.
  - 2 People at school tease me, and it really, really upsets me.
  - 3 I am afraid to go to school because I'm being teased and bothered so much.



- 0 I don't feel any more frustrated than usual.  
1 I feel more frustrated with myself and with others.  
2 I have lost my temper over things that don't usually get to me.  
3 I am frustrated all the time and feel like I may explode.
- 0 I'm as happy as ever doing the things I enjoy.  
1 I don't enjoy things as much as I used to.  
2 Things that used to make me happy are no longer at all enjoyable.  
3 There's nothing that can make me feel happy, even for a short while.
- 0 I have a lot to look forward to.  
1 I don't have very much to look forward to.  
2 When I think about my future, I don't believe things will work out for me.  
3 My life feels hopeless and things will only get worse.
- 0 I like the kind of person I am.  
1 I dislike myself more than I used to.  
2 There's very little I like about myself.  
3 I dislike everything about me.
- 0 I feel as confident about myself as ever.  
1 My self-confidence has been low but I still do things without any difficulty.  
2 My self-confidence has been so low it's harder doing the things I usually do.  
3 I have absolutely no confidence in myself or my abilities.
- 0 I am as interested in doing things as much as ever.  
1 I am less interested in things I used to do regularly.  
2 I really have to push myself to do things that used to be easy to do.  
3 I have stopped doing things I used to do, because of how I've been feeling.
- 0 I am not having too much difficulty with school work, homework or tests.  
1 Getting school work done has become harder because of how I have been feeling.  
2 It's been hard to get any school work done because of how I have been feeling.  
3 I have missed a lot of school or work because of how I have been feeling.
- 0 I spend as much time with friends and family as I usually do.  
1 I am less interested in spending time with others, but I still do.  
2 I've started avoiding people I usually spend time with.  
3 I've been spending my time alone, as often as I possibly can.
- 0 I don't have any thoughts of killing myself.  
1 I feel life is not worth living.  
2 I've thought about killing myself.  
3 I would kill myself if I had the chance.

- 0 I don't have any thoughts of hurting myself.  
1 I've thought about hurting myself (e.g., cutting or burning).  
2 Recently, I've hurt myself on purpose.  
3 I've been harming myself on a regular basis.
- 0 I have not been behaving any differently than I usually do.  
1 I do things without thinking about them and it occasionally gets me into trouble.  
2 I act impulsively and it often gets me into trouble.  
3 I have been taking a lot of dangerous risks that have really worried others.
- 0 I usually get between 6-8 hours of sleep at night and feel rested in the morning.  
1 I can't sleep well at night and don't get enough rest to get through the next day.  
2 I have been sleeping too much, more than 10 hours a day.
- 0 I enjoy eating as much as I usually do.  
1 My eating habits have really changed. I have been eating much MORE than I usually do.  
2 My eating habits have really changed. I have been eating much LESS than I usually do.  
3 My eating habits are all messed up. Sometimes I eat far too much and then force myself to vomit or throw-up.
- 0 I have had no problems paying attention at school or at home.  
1 I have had difficulties doing work that requires a lot of attention.  
2 I can't keep my mind on what people are saying.  
3 I can't keep my mind on anything I'm doing.
- 0 I can make up my mind as well as ever.  
1 I find it more difficult to make up my mind about day to day things.  
2 I take much longer to make up my mind on things that I never had trouble doing before.  
3 I have had so much trouble deciding what to do, I've stopped doing things.
- 0 I am not feeling stressed at all.  
1 I get stressed for a few hours at a time, but I feel fine the next day.  
2 I feel stressed once or twice a week, for at least a few hours at a time.  
3 I feel stressed most days in a week, for the past 2 or 3 weeks.  
4 I have been stressed most days in a week, for at least the past 4 weeks.
- 0 I am doing as well as I usually do at school.  
1 I've had problems with school that I didn't have last month.  
2 I've been doing a lot worse this month because of how I've been feeling.  
3 I may fail one or more courses this month because of how I've been feeling.

## Appendix O

### Life Events Questionnaire (NE-Computer Administered)

#### I Had Problems Getting Along With Others (14 items)

1. I felt uncomfortable in social settings
2. I felt immature
3. I was suspicious of others
4. I was too shy
5. I was lonely
6. I was unpopular
7. People picked on me
8. I was uncomfortable talking to people
9. I felt inferior
10. people were against me
11. I embarrassed myself in front of others
12. I was criticized in front of other people
13. I looked stupid in front of others
14. I was involved in a fight(s)

#### I Had Difficulties Getting Along With My Friends and Peers (12 items)

1. I felt like I didn't fit in
2. I lost a close friend
3. My friends took advantage of me
4. my friends let my down
5. I betrayed one of my friends
6. My friends pressured me into doing something I didn't want to do
7. I snubbed one of my friends
8. My friend(s) snubbed/excluded me
9. My friend(s) betrayed me
10. I had a fight with my friend(s)
11. My friend(s) weren't there when I needed them
12. I felt my friends just didn't understand me

I Had Concerns About My Physical Appearance (16 items)

1. I was overweight
2. I felt I was too short (or too tall)
3. I had a physical handicap
4. I was too thin
5. I felt I looked too young or too old
6. someone noticed the way I looked (i.e., my physical appearance)
7. I worried I looked plain or ugly
8. I felt clumsy and awkward
9. I wasn't clean or well-groomed enough
10. I was concerned that no one would find me physically attractive
11. I didn't seem to have the right clothes
12. I felt unattractive
13. I had a scar
14. I had facial blemishes (e.g., pimples, rash, etc.)
15. I worried I was not well-developed enough (or was overdeveloped)
16. I was worried I was not developing fast enough

I Had A Poor Attitude About One Thing Or Another (12 items)

1. I wasn't interested in anything
2. I had a change in attitude
3. I didn't listen to the opinions of others
4. I didn't have an opinion about anything
5. I had a poor attitude about everything
6. I had different opinions than others
7. I didn't understand the attitudes of others
8. I had a poor attitude toward religion
9. I had a poor attitude toward school
10. I had a poor attitude toward work
11. had a poor attitude towards my family
12. I had a poor attitude towards myself

A Family Member Was Sick Or Had Emotional Problems (8 items)

1. my father was sick
2. my father had emotional problems
3. a brother was sick
4. a brother had emotional problems
5. my mother was sick
6. my mother had emotional problems
7. a sister was sick
8. a sister had emotional problems

A Family Member Had (Has) A Drug or Drinking Problem (8 items)

1. my father had (has) problems with drugs
2. my father had (has) problems with alcohol
3. a brother had (has) problems with drugs
4. a brother had (has) problems with alcohol
5. my mother had (has) problems with drugs
6. my mother had (has) problems with alcohol
7. a sister had (has) problems with drugs
8. a sister had (has) problems with alcohol

My Father Disapproved Of Or Interfered With My Lifestyle (16 items)

1. my father was too strict with me
2. my father interfered with my decisions
3. my father wasn't home enough
4. I wasn't able to talk to my father
5. my father expected too much from me
6. I was worried about my father
7. my father disapproved of my lifestyle
8. my father disapproved of my boyfriend/girlfriend
9. my father disapproved of one of my friends
10. my father disapproved of my job
11. my father disapproved of my clothes or appearance
12. my father disapproved of my dating
13. my father disapproved of the music I like
14. my father disapproved of activities I like to do
15. my father favored another brother or sister more than me
16. I was ignored by my father

My Mother Disapproved Of Or Interfered With My Lifestyle (16 items)

1. my mother was too strict with me
2. my mother interfered with my decisions
3. my mother was home enough
4. I wasn't able to talk to my mother
5. my mother expected too much from me
6. I was worried about my mother
7. my mother disapproved of my lifestyle
8. my mother disapproved of my boyfriend/girlfriend
9. my mother disapproved of one of my friends
10. my mother disapproved of my job
11. my mother disapproved of my clothes or appearance
12. my mother disapproved of my dating
13. my mother disapproved of the music I like
14. my mother disapproved of activities I like to do
15. my mother favored another brother or sister more than me
16. I was ignored by my mother

I Had Difficulties With School Work (13 items)

1. I got bad grades
2. my study habits were poor
3. I didn't have a good place to study at home
4. I felt I was taking the wrong courses
5. I didn't understand the class material
6. I missed school because of illness
7. I was thinking about dropping out of school
8. I skipped a lot of classes
9. I dropped out of school
10. I was worried about what I will do after I am finished at school
11. I wasn't interested in school
12. I was bored in school
13. I felt I was in the wrong school

I Had Social Problems At School (17 items)

1. I didn't get along with other students
2. I was in a fight with another student
3. another student picked a fight with me
4. I picked a fight with another student
5. I didn't get along with teachers
6. I didn't have any close friends at school
7. my school seemed too large
8. I felt out of place at school
9. I had a language problem in school
10. I was in a lot of trouble at school
11. I had (have) a bad reputation
12. students made fun of me
13. students though (think) I'm loser
14. other students gossip(ed) about me
15. I wasn't interested in any clubs or teams
16. I didn't qualify for a club or team
17. the teachers didn't really care about students

I Had Problems With Money (12 items)

1. I had problems budgeting money
2. I didn't make enough money
3. I didn't have a steady income
4. I had to spend money I saved
5. I owed someone money
6. I wasted money
7. I depended on others for money
8. I loaned money to friends and/or family
9. I had to give some of the money I have to my parents
10. I didn't have enough money to go on a date
11. I didn't have enough money for my car
12. I didn't have enough money for clothes

I Had Concerns About Church Or Religion (13 items)

1. I felt guilty about religion
2. I argued with my parents about religious beliefs
3. I have no religious beliefs
4. I felt confused about religious beliefs
5. I failed my religious beliefs
6. my current boyfriend/girlfriend belongs to a different religion
7. I argued with a boyfriend/girlfriend about religion
8. I wasn't able to get to church
9. my job interfered with church activities
10. I was upset by the religious beliefs of others
11. I worried about being accepted by god
12. I felt rejected by church members
13. I didn't have any friends at church

I Had Concerns About Romantic Relationships (27 items)

1. I was uncomfortable around the opposite sex
2. I wasn't able to get a date
3. I had problems with a boyfriend/girlfriend
4. I wanted to break up with a boyfriend/girlfriend
5. I lost a boyfriend/girlfriend
6. I argued with a boyfriend/girlfriend
7. my boyfriend/girlfriend wanted to get married
8. I wanted to get married
9. I needed to talk to someone about dating and/or sex, but couldn't
10. I worried about getting pregnant/my girlfriend being pregnant
11. I was pregnant/my girlfriend was pregnant
12. I was worried about sex
13. I was afraid of getting a sexually transmitted disease
14. I was worried I was have sex too often
15. I was afraid of having intercourse
16. I was worried about me/my girlfriend being pregnant
17. I thought about sex too often
18. I worried about being lesbian/gay
19. I was troubled by the sexual attitudes of friends
20. I was troubled by some unusual sexual behavior
21. I felt sexually inexperienced
22. I felt used by my boyfriend/girlfriend
23. I felt pushed into having sex
24. I felt my boyfriend/girlfriend wants a relationship just for sex
25. I had sex even though I didn't want to
26. I cheated on my boyfriend/girlfriend
27. my boyfriend/girlfriend cheated on me

I Had Sleep And/Or Eating Problems (8 items)

1. I didn't have any appetite
2. I ate in binges
3. I frequently threw up
4. I ate too much
5. I had poor eating habits
6. I didn't get enough exercise
7. I wasn't able to sleep
8. I had poor sleeping habits



I Had Health Problems (7 items)

1. I contracted a disease
2. I had problems with an ongoing health problem
3. I was frequently ill
4. I had to take medicine for an illness or disease
5. I was in an accident
6. I was injured in an accident
7. I was unhappy with doctors

I Was Abused In Some Way (Emotional, Physical or Sexual)

(12 items)

1. I was physically attacked/abused by a family member
2. I was physically attacked/abused by an acquaintance
3. I was physically attacked/abused by a boyfriend/girlfriend
4. I was physically attacked/abused by a stranger
5. I was emotionally abused by a family member
6. I was emotionally abused by an acquaintance
7. I was emotionally abused by a boyfriend/girlfriend
8. I was emotionally abused by a stranger
9. I was sexually abused by a family member
10. I was sexually abused by an acquaintance
11. I was sexually abused by a boyfriend/girlfriend
12. I was sexually abused by a stranger

I Had Difficulties At Work (18 items)

1. I didn't have a job
2. my job didn't pay enough
3. I disliked my job
4. I disliked my fellow workers
5. I was disliked by my fellow workers
6. I was afraid of failing on the job
7. I was afraid of being fired or laid off
8. I didn't want to work
9. my friends had better jobs
10. I was working in unsafe conditions
11. I lacked supervision on the job
12. my boss was critical or unfair
13. I argued with people on the job
14. I worked too many hours
15. my job created health problems for me
16. it seemed my job had no future
17. I was bored by my job
18. I seemed to lack the experience I needs to get a job

Someone In The Family Died Or Tried To Commit Suicide (16 items)

1. my mother died
2. my father died
3. my brother or sister died
4. a close relative died
5. a close friend died
6. a pet I felt close to died
7. I had thoughts of hurting myself or committing suicide
8. I tried to kill myself
9. my mother tried to kill herself
10. my father tried to kill himself
11. my brother or sister tried to kill himself/herself
12. my mother committed suicide
13. my father committed suicide
14. someone I knew committed suicide
15. a friend committed suicide
16. my brother or sister committed suicide

## Appendix P

### Study 2 Recruitment for All Participants

# Young Persons Needed for A Research Study

We at Dalhousie and the IWK are conducting a research study examining help-seeking behaviour. Being in the study involves completing questionnaires at home and meeting with one of the people running the study once a month for 12 months. Each time you meet with someone from the study, you will be paid between \$10 and \$20. If you complete the 12 months of the study, you would be given a total of \$130.

Feeling Sad (Group 1): Young people who have sad mood, hopelessness, or felt bad about themselves, lasting at least two months.

Self-Harm (Group 2): Young people who have harmed themselves (e.g., cutting or attempted suicide) in the past.

No Problems (Group 3): Young people who have not had any serious problems in the past 6 months.

Enrolment is limited to 50 people in each group, so we would like to hear from you soon!!

To see if you are eligible for the study or for more information, please contact Robin, Jenny or Megan. If you are interested, we would like to know to which of the three groups you belong.

Phone: 494-6962

or

E-mail: [dalresearch1@hotmail.dal.ca](mailto:dalresearch1@hotmail.dal.ca)

Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>	Research Study 494-6962 <a href="mailto:dalresearch1@hotmail.dal.ca">dalresearch1@hotmail.dal.ca</a>
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## Appendix Q

### Study 2 Recruitment for Distressed Group



Dalhousie University



# Research Study

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We at Dalhousie and the IWK Grace are conducting a research study examining help-seeking behavior.

For this study, we need high school students who are *feeling sad, distressed, or depressed*. Please sign up if you have sad mood, hopelessness, or felt bad about yourself, *lasting at least two months*.

For this study we especially need distressed students in the following categories:

**Grade 10 males**

**Grade 11 males**

**Grade 12 males**

**Grade 12 females**

Being in this study involves completing some questionnaires at home and meeting with Jenny or Megan once a month for 12 months.

If you want more information or are interested in participating, please either contact us at:

Phone: 494-6962

Jenny's e-mail: [thcjenny@hotmail.com](mailto:thcjenny@hotmail.com)

Megan's e-mail: [dal\\_megan@hotmail.com](mailto:dal_megan@hotmail.com)

or fill out the information below.

Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Gender: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Appendix R

Study 2 Informed Consent

## INFORMED CONSENT



5850/5980 University Ave.  
PO Box 3070,  
Halifax, NS, B3J 3G9

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**STUDY TITLE:**            **Labelling Symptoms and Predicting Help Seeking.**

**INVESTIGATORS:**

Darcy A. Santor, Ph.D., Department of Psychology, Dalhousie University  
Vivek Kusumakar, MD, Department of Psychiatry, Dalhousie University  
Christiane Poulin, MD, Community Health and Epidemiology, Dalhousie University  
John LeBlanc, M.D., Departments of Pediatrics and Psychiatry, Dalhousie University

**RESEARCH COORDINATORS:**

Gwen Romanes	Department of Psychology, Dalhousie University, Halifax
Jennifer Daw	Department of Psychology, Dalhousie University, Halifax
Robin Patterson	Department of Psychology, Dalhousie University, Halifax
Joanne Lombard	Research Coordinator, Mood Disorders Group

**FUNDING:**

Social Sciences and Humanities Research Council of Canada.

**CONTACT PERSON FOR INFORMATION OR CONCERNS ABOUT THE STUDY:**

Darcy A. Santor, Ph.D., Department of Psychology and Department of Psychiatry  
Dalhousie University, Halifax, NS B3H 4J1.  
Tel: (902) 494-6962  
Fax: (902) 494-6585  
dsantor@is.dal.ca

**INTRODUCTION:**

You are being invited to take part in a research study examining how young people decide to seek help for problems. It is important to understand the purpose of the study, what participating in this study involves, as well as the risks and benefits of taking part before you decide if you want to take part. The information in this consent form is designed to help you decide if you would like to take part in the study. We would like to answer any questions you may have.

Please keep in mind that you do not have to take part in this study. Taking part is entirely your choice. We will be asking you for your consent to participate but also require that your parents be aware of and assent to your participation in the study. The study is under the direction of Dr. D. A. Santor and is funded nationally by the Social Sciences and Humanities Research Council.

#### **PURPOSE OF THE STUDY:**

**Background:** Despite high rates of mental illness in young persons, most young people do not receive adequate care soon enough. The Ontario Health Study found that 83% of children and adolescents with a diagnosable emotional or behavioural disorder did not receive adequate care in the 6 months preceding the onset of their difficulties. Many young people often wait as long as 8 months before seeking help, and when they do want help, do not actually seek help.

**Purpose of the Study:** One purpose of the study is to find out how young people identify problems, how they decide when they need help with problems and how they go about seeking help. A second purpose is to identify the kinds of events that cause problems for young people who are at-risk for experiencing problems and offer the opportunity for referral quickly if it is needed.

#### **STUDY DESIGN:**

This study is called a longitudinal study. The proposed study investigates how 4 groups of individuals (distressed, self-harm, behavioral problem and control) define symptoms and then tracks symptoms, functioning and help seeking over the course of 12 months. Three of the 4 groups are considered high-risk groups and one group is a comparison or control group. The high-risk groups are comprised of (a) individuals with behavioural problems, (b) individuals with a history of self-harm (but who are not currently self-harming), and (c) individuals who report high levels of distress (but who are not clinically depressed). Young people will meet with one of three coordinators (Gwen Romanes, Jennifer Daw, or Robin Patterson) once a month for 12 months.

#### **WHAT PARTICIPATION INVOLVES:**

At the first visit, we will review information concerning the study and ask for your consent to participate. You will be asked some questions about any difficulties you may be experiencing in order to ensure that you are eligible to be included in one of the four groups of people participating in the study. We will also ask that your parents sign a form indicating that they know what the study is about and have allowed you to participate.

Taking part in this study involves (a) completing some questionnaires once a month for 12 months, (b) meeting with a research coordinator once the questionnaires have been completed, (c) and allowing us to publish and present the results of the study. Questions take about 3 hours to answer in the first month. After that, questions take about 1 hour. Questions cover a number of topics, including questions about moods and help-seeking as well as questions about high risk-behaviours such as self-harm and suicidal thinking. Some of the questionnaires can be completed at home and returned to the Teen Health Centre the next day. All of the questions about self-harm and suicidal thinking we be asked by one of the trained research coordinators when they meet you at the Teen Health Centre. If you prefer,

we would be pleased to meet you outside of the school at our research offices at the IWK Grace Health Centre.

***We are very concerned about self-harm behaviour and suicidal thinking. If you report any self-harm behaviour, suicidal thinking, or suicidal plans your parents will be contacted in order to arrange an appropriate referral for further assessment. Further, if help is requested or if the symptoms and difficulties reported warrant intervention, a referral for mental health services will be discussed with the young person and his or her parents (or guardian)***

The list of baseline and monthly measures to be completed appears in Table 1 below.

Measures	Month 1	Months 2 to 12	Where completed
<b><i>Demographic Information</i></b> (age, family history, etc.)	✓		Home
<b><i>Self-Report Symptom Measures</i></b>			
KSADS Interview (Section 1)	✓		THC
Depressive Experiences Questionnaire	✓		Home
BDI-II	✓	✓	Home
Hopelessness Scale	✓	✓	Home
Symptom Screen (Computer Administered)	✓	✓	THC
<b><i>Functioning Measures</i></b>			
Alienation Measure	✓	✓	Home
Quality of Life Measure	✓	✓	Home
Help-Seeking Interview	✓	✓	THC
Help-Seeking Questionnaire	✓	✓	Home
Life Events Questionnaire (Computer Administered)	✓	✓	THC
Beck Suicide Scale (BSS; Beck, 1991)	✓	✓	THC
<b><i>If the young person reports any suicidal thoughts or behaviours in the first part of the interview, a complete assessment of these symptoms will be completed.</i></b>			
<b><i>If the young person does not report any suicidal thoughts or behaviours in the first part of the interview, these questions will NOT be asked.</i></b>			
Self-Harm and Suicide Questionnaires	✓	✓	THC
Remuneration	\$20.00	\$10.00	
Total Time for Participation (at Home)	1 hr	½ hr	
Total Time for Participation (at the THC or IWK)	2 hr	½ hr	

Home = measure completed at home and returned to the Teen Health Centre the following day.

THC = Teen Health Centre.

**POTENTIAL HARM AND DISCOMFORTS:**

The questions being asked concern moods and high-risk behaviours. For some individuals, talking about these kinds of feelings can cause discomfort. However, there is no evidence that answering these questions increases the chance of high risk behaviors like self-harm, even in young people, who may be at risk for self-harming.

**POSSIBLE BENEFITS:**

Being in the study may offer some benefits for young people who experience high levels of distress, or who may be at risk for self-harm, or who may experience a sudden change in how they are doing. By meeting with you monthly, we will be able to follow how you have been doing and assist you in seeking the help you may require. Although not a direct benefit to you, we also hope to obtain valuable information concerning the kinds of events that influence moods, cause people to self-harm and seek help.

**WITHDRAWAL FROM THE STUDY:**

Before deciding to participate in this study, you should know that you do not have to take part in the study and that you may withdraw from the study at any time. Sometimes, people worry that not taking part in the study or withdrawing from the study once it has started will influence how you will be treated at school or at the IWK. Not taking part in the study or withdrawing from the study will not change how they are treated at school or at the IWK. If you decide to withdraw, we will not collect any further data. However, we will still include any data collected up until the time that you withdrew from the research study.

Should you experience the onset of any clinical difficulties that require treatment, you will be removed from the study immediately. Monthly appointments will be scheduled at your convenience and around any vacations or special events. However, if you miss scheduled appointments, you will be removed from the study.

**CONFIDENTIALITY:**

Information that is obtained for this study will be kept confidential. Your name will not appear on the questionnaires nor will names or identifying information appear in any presentation or publication, which may result from this research. Research staff will have access to your data but will not have access to any identifying information, such as your name or phone number. All information is stored securely in locked file cabinets at the IWK Grace Health Centre. The IWK Grace Research Ethics Board may wish to review the research files for the purpose of ensuring that ethical guidelines are being correctly followed. However, the identity of participants in this study will remain confidential. Only when a young person is at immediate risk for being harmed, or has been abused, or is at risk for harming someone else are we required to break confidentiality and inform the proper authorities. Should this ever be required, both you and your parents will be contacted.

**COMMUNICATION OF RESULTS & COSTS AND REIMBURSEMENTS:**

Results of the study will be made available to you upon completion of the study. Participating in this study will not result in any expense to you. In recognition of your time and commitment to the study, you will receive \$20 for the first visit, \$10 for each of the next 11 visits.



**RESEARCH RIGHTS:**

Your signature on this form will show that you have understood to your satisfaction the information about the research study. Agreeing to participate in this study does not mean that you give up your legal rights nor does it mean that the researchers give up their legal or professional responsibilities. You have the right to ask about the study at any time. Should you have any questions or concerns about the study before, during, or after the study, you may call Dr. Santor at (902) 494-6962 or write to him at the Department of Psychology, Dalhousie University, Halifax, Nova Scotia, B3J 4J1. You can also contact the IWK Grace Research Services office at 428-8765 for information about this study from an outside source. You will be given a copy of this form.

**STUDY TITLE:            Labelling Symptoms and Predicting Help Seeking.**

Participant ID: \_\_\_\_\_

Participant Initials: \_\_\_\_\_

**AUTHORIZATION TO PARTICIPATE IN THE STUDY:**

I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks in participating. I understand that I have the right to withdraw at any time without affecting how I am treated at school or at the IWK. I have received a copy of the information and consent form.

Printed Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY:**

I have explained the nature and demands of the study and judge that the participant understands the nature of and demands of the study.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**STATEMENT BY PERSON OBTAINING CONSENT:**

I have explained the nature of the consent process to ensure that they understand that participation is voluntary and that they may withdraw at any time.

Printed Name: \_\_\_\_\_

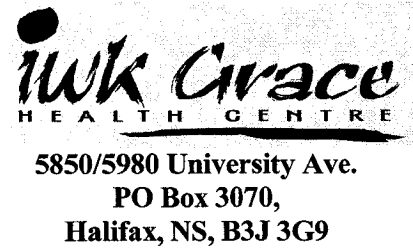
Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Appendix S

### Study 2 Parental Assent

# PARENTAL ASSENT



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**STUDY TITLE:**        **Labelling Symptoms and Predicting Help Seeking.**

**INVESTIGATORS:**

Darcy A. Santor, Ph.D., Department of Psychology, Dalhousie University  
Vivek Kusumakar, MD, Department of Psychiatry, Dalhousie University  
Christiane Poulin, MD, Community Health and Epidemiology, Dalhousie University.  
John LeBlanc, M.D., Departments of Pediatrics and Psychiatry, Dalhousie University

**RESEARCH COORDINATORS:**

Gwen Romanes	Department of Psychology, Dalhousie University, Halifax
Jennifer Daw	Department of Psychology, Dalhousie University, Halifax
Robin Patterson	Department of Psychology, Dalhousie University, Halifax
Joanne Lombard	Research Coordinator, Mood Disorders Group

**FUNDING:**

Social Sciences and Humanities Research Council of Canada.

**CONTACT PERSON FOR INFORMATION OR CONCERNS ABOUTH THE STUDY:**

Darcy A. Santor, Ph.D., Department of Psychology and Department of Psychiatry  
Dalhousie University, Halifax, NS B3H 4J1.  
Tel: (902) 494-6962  
Fax: (902) 494-6585  
dsantor@is.dal.ca

**INTRODUCTION:**

Your child is being invited to take part in a research study examining how young people decide to seek help for problems. It is important to understand the purpose of the study, what participating in this study involves, as well as the risks and benefits of taking part before deciding if you want your child to participate. The information in this consent form is designed to help you and your child decide if you would like to take part in the study. We would like to answer any questions you may have.

Please keep in mind that your child does not have to take part in this study. Taking part is entirely his or her choice. We will be asking young people for their consent to participate but also require that parents be aware of and assent to their child's participation in the study. The study is under the direction of Dr. D. A. Santor and is funded nationally by the Social Sciences and Humanities Research Council.

## **PURPOSE OF THE STUDY:**

**Background:** Despite high rates of mental illness in young persons, most young people do not receive adequate care soon enough. The Ontario Health Study found that 83% of children and adolescents with a diagnosable emotional or behavioural disorder did not receive adequate care in the 6 months preceding the onset of their difficulties. Many young people often wait as long as 8 months before seeking help, and when they do want help, do not actually seek help.

**Purpose of the Study:** One purpose of the study is to find out how young people identify problems, how they decide when they need help with problems and how they go about seeking help. A second purpose is to identify the kinds of events that cause problems for young people who are at-risk for experiencing problems and offer the opportunity for referral quickly if it is needed.

## **STUDY DESIGN:**

This study is called a longitudinal study. The proposed study investigates how 4 groups of individuals (distressed, self-harm, behavioral problem and control) define symptoms and then tracks symptoms, functioning and help seeking over the course of 12 months. Three of the 4 groups are considered high-risk groups and one group is a comparison or control group. The high-risk groups are comprised of (a) individuals with behavioural problems, (b) individuals with a history of self-harm (but who are not currently self-harming), and (c) individuals who report high levels of distress (but who are not clinically depressed). Young people will meet with one of three coordinators (Gwen Romanes, Jennifer Daw, or Robin Patterson) once a month for 12 months.

## **WHAT PARTICIPATION INVOLVES:**

At the first visit, we will review information concerning the study and will ask for your child's consent to participate. Your child will be asked some questions about any difficulties he or she may be experiencing in order to ensure that he or she is eligible to be included in one of the four groups of people participating. We will also ask that you, the parent, sign a form indicating that you know what the study is about.

**For your child,** taking part in this study involves (a) completing some questionnaires once a month, (b) meeting with a research coordinator once the questionnaires have been completed, (c) and allowing us to publish and present the results of the study. We will ask to meet with your child once a month at his or her convenience for 12 months. Questionnaires completed in the first month take about 3 hours to complete. After that, questionnaires take about 1 hour to complete. Questions cover a number of topics, including questions about moods and help-seeking as well as questions about high risk-behaviours such as self-harm and suicidal thinking. Some of the questionnaires can be completed at home and returned to the Teen Health Centre the next day. All of the questions about self-harm and suicidal thinking we be asked by one of the trained research coordinators when they meet you at the Teen Health Centre. If your child prefers, we would be pleased to meet him or her outside of school at our research offices at the IWK Grace Health Centre.

***We are very concerned about self-harm behaviour and suicidal thinking. If you report any self-harm behaviour, suicidal thinking, or suicidal plans your parents will be contacted in order to arrange an appropriate referral for further assessment. Further, if help is requested or if the symptoms and difficulties reported warrant intervention, a referral for mental health services will be discussed with the young person and his or her parents (or guardian)***

The list of baseline and monthly measures to be completed appears in Table 1 below.

Measures	Month 1	Months 2 to 12	Where completed
<b><i>Demographic Information</i></b> (age, family history, etc.)	✓		Home
<b><i>Self-Report Symptom Measures</i></b>			
KSADS Interview (Section 1)	✓		THC
Depressive Experiences Questionnaire	✓		Home
BDI-II	✓	✓	Home
Hopelessness Scale	✓	✓	Home
Symptom Screen (Computer Administered)	✓	✓	THC
<b><i>Functioning Measures</i></b>			
Alienation Measure	✓	✓	Home
Quality of Life Measure	✓	✓	Home
Help-Seeking Interview	✓	✓	THC
Help-Seeking Questionnaire	✓	✓	Home
Life Events Questionnaire (Computer Administered)	✓	✓	THC
Beck Suicide Scale (BSS; Beck, 1991)	✓	✓	THC
<b><i>If the young person reports any suicidal thoughts or behaviours in the first part of the interview, a complete assessment of these symptoms will be completed.</i></b>			
<b><i>If the young person does not report any suicidal thoughts or behaviours in the first part of the interview, these questions will NOT be asked.</i></b>			
Self-Harm and Suicide Questionnaires	✓	✓	THC
Remuneration	\$20.00	\$10.00	
Total Time for Participation (at Home)	1 hr	½ hr	
Total Time for Participation (at the THC or IWK)	2 hr	½ hr	

Home = measure completed at home and returned to the Teen Health Centre the following day.

THC = Teen Health Centre.

**POTENTIAL HARM AND DISCOMFORTS:**

The questions being asked concern moods and high-risk behaviours. For some individuals, talking about these kinds of feelings can cause discomfort. There is no evidence that answering these questions increases the chance of high risk behaviors like self-harm, even in young people, who may be at risk for self-harming.

**POSSIBLE BENEFITS:**

Being in the study may offer some benefits for young people who experience high levels of distress, or who may be at risk for self-harm, or who may experience a sudden change in how they are doing. By meeting with your child monthly, we will be able to follow how he or she has been doing and assist him or her in seeking appropriate help. Although not a direct benefit to your child, we also hope to obtain valuable information concerning the kinds of events that influence moods, cause people to self-harm and seek help.

**WITHDRAWAL FROM THE STUDY:**

Before deciding to participate in this study, you should know that your child does not have to take part in the study and that he or she may withdraw at any time. Sometimes, people worry that not taking part in the study or withdrawing from the study once it has started will influence how they will be treated at school or at the IWK. Not taking part in the study or withdrawing from the study will not change how your child is treated at school or at the IWK. If your child decides to withdraw, we will not collect any further data. However, we will still include any data collected up until the time that your child withdrew from the study.

Should any your child experience the onset of any clinical difficulties that require treatment, your child will be removed from the study immediately. Monthly appointments will be scheduled at your child's convenience and around any vacations or special events. However, if your child misses scheduled appointments, he or she will be removed from the study.

**CONFIDENTIALITY:**

Information that is obtained for this study will be kept confidential. Your child's name will not appear on the questionnaires nor will names or identifying information appear in any presentation or publication, which may result from this research. Research staff will have access to your child's data but will not have access to any identifying information, such as your child's name or phone number. All information is stored securely in locked file cabinets at the IWK Grace Health Centre. The IWK Grace Research Ethics Board may wish to review the research files for the purpose of ensuring that ethical guidelines are being correctly followed. However, the identity of participants in this study will remain confidential. Only when a young person is at immediate risk for being harmed, or has been abused, or is at risk for harming someone else are we required to break confidentiality and inform the proper authorities. Should this ever be required, both you and your child will be contacted.

**COMMUNICATION OF RESULTS & COSTS AND REIMBURSEMENTS:**

Results of the study will be made available to your child upon completion of the study. Participating in this study will not result in any expense to your child. In recognition of your child's time and commitment to the study, he or she receives \$20 for the first visit, \$10 for each of the next 11 visits.

**RESEARCH RIGHTS:**

Your signature on this form will show that you have understood to your satisfaction the information about the research study. Participating in this study does not mean that you or your child gives up your legal rights nor does it mean that the researchers give up their legal or professional responsibilities. You have the right to ask about the study at any time. Should you have any questions or concerns about the study before, during, or after the study, you may call Dr. Santor at (902) 494-6962 or write to him at the Department of Psychology, Dalhousie University, Halifax, Nova Scotia, B3J 4J1. You can also contact the IWK Grace Research Services office at 428-8765 for information about this study from an outside source. You will be given a copy of this form.

**STUDY TITLE:        Labelling Symptoms and Predicting Help Seeking**

Participant ID: \_\_\_\_\_

Participant Initials: \_\_\_\_\_

**AUTHORIZATION TO PARTICIPATE IN THE STUDY:**

(Authorization to participate will be obtained over the phone).

I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks in participating. I understand that my child has the right to withdraw at any time without affecting how he or she is treated at school or at the IWK. I received a copy of the information and consent form.

Printed Name of Participant: \_\_\_\_\_

Signature of Participant:                N/A (information obtained over the phone)

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY:**

I have explained the nature and demands of the study and judge that the participant understands the nature of and demands of the study.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**STATEMENT BY PERSON OBTAINING ASSENT:**

I have explained the nature of the consent process to ensure that they understand that participation is voluntary and that they may withdraw at any time.

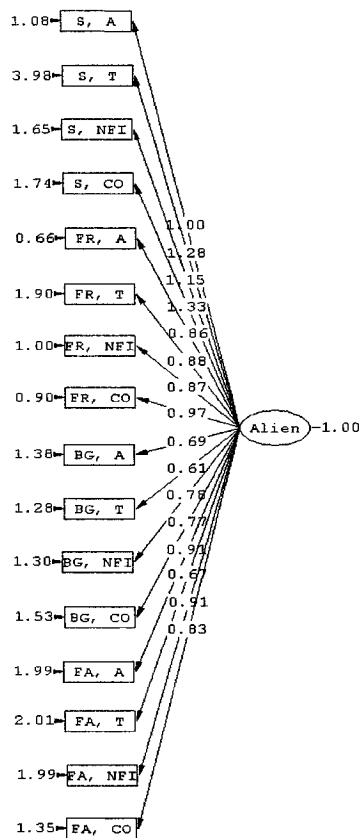
Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Appendix T

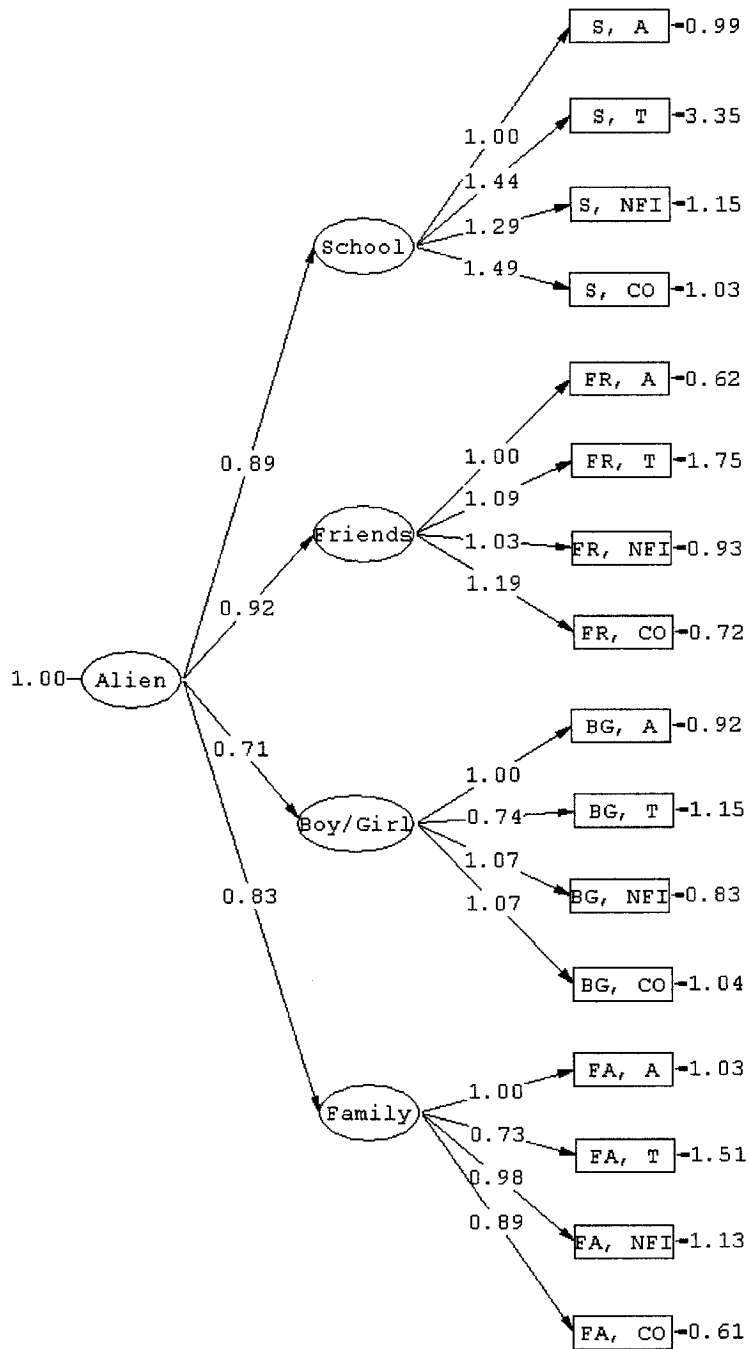
### First-Order Single Factor Model of Alienation with 16 Packets



Note. S = People at School, FR = Friends, BG = Boyfriend/Girlfriend, FA = Family, A = Being Alone, T = Being a Target, NFI = Not Fitting-In, CO = Being Cut-Off.

## Appendix U

### Second-Order Four Factor Contextual Domains Model of Alienation

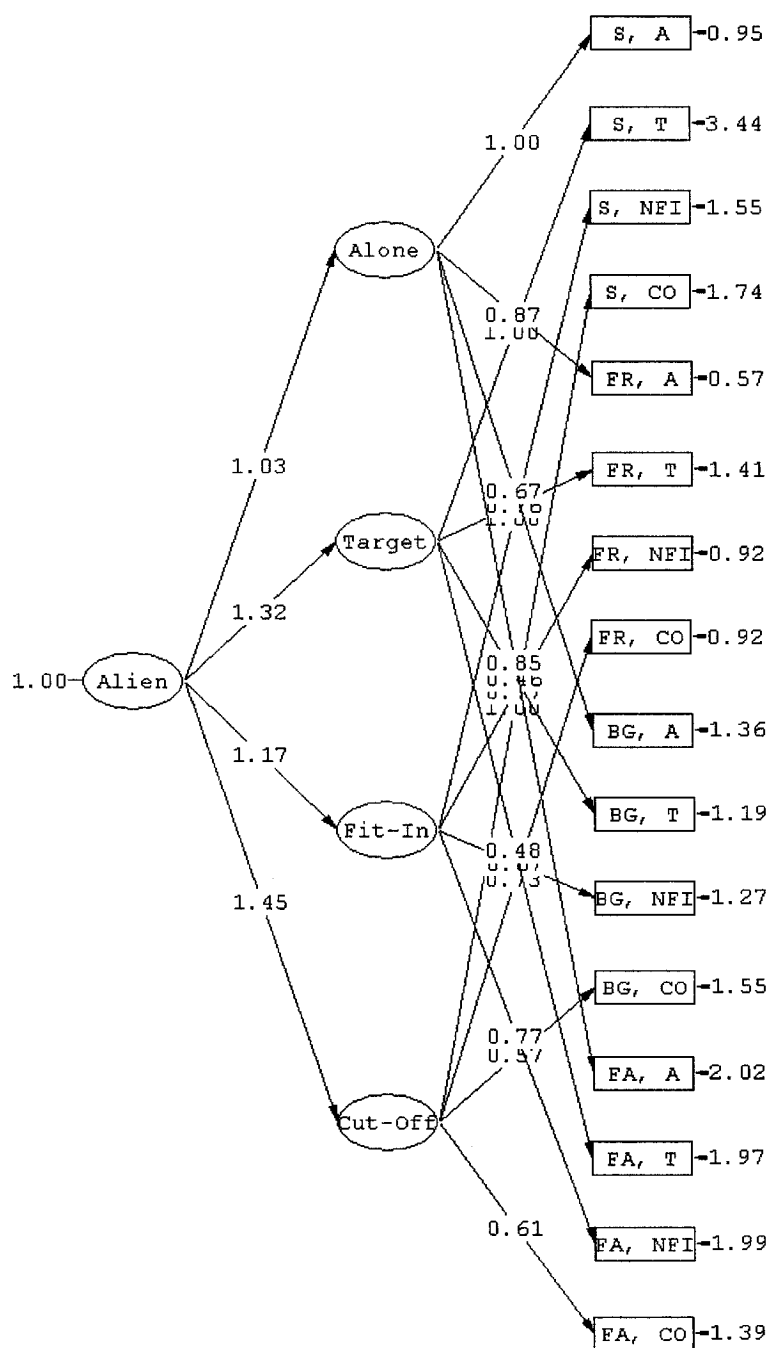


Note. S = People at School, FR = Friends, BG = Boyfriend/Girlfriend, FA = Family, A = Being Alone, T = Being a Target, NFI = Not Fitting-In, CO = Being Cut-Off.



## Appendix V

### Second-Order Four Factor Psychological Components Model of Alienation



Note. S = People at School, FR = Friends, BG = Boyfriend/Girlfriend, FA = Family, A = Being Alone, T = Being a Target, NFI = Not Fitting-In, CO = Being Cut-Off.

## Appendix W

### Study 2 Outcome Measures Correlations for Each Month and for Each Group

#### Study 2: Hopelessness (HBeck) Correlations for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
<hr/>				
All Participants (range 88 to 101)				
Month 1				
Month 2	.74 <sup>d</sup>			
Month 6	.67 <sup>d</sup>	.76 <sup>d</sup>		
Month 12	.68 <sup>d</sup>	.57 <sup>d</sup>	.76 <sup>d</sup>	
<hr/>				
Distressed Group (range 25 to 31)				
Month 1				
Month 2	.73 <sup>d</sup>			
Month 6	.59 <sup>b</sup>	.69 <sup>c</sup>		
Month 12	.47 <sup>a</sup>	.62 <sup>b</sup>	.84 <sup>d</sup>	
<hr/>				
Self-Harm Group (range 30 to 35)				
Month 1				
Month 2	.51 <sup>b</sup>			
Month 6	.40 <sup>a</sup>	.66 <sup>d</sup>		
Month 12	.54 <sup>b</sup>	.21	.47 <sup>b</sup>	
<hr/>				
Comparison Group (range 32 to 35)				
Month 1				
Month 2	.83 <sup>d</sup>			
Month 6	.73 <sup>d</sup>	.67 <sup>d</sup>		
Month 12	.70 <sup>d</sup>	.70 <sup>d</sup>	.83 <sup>d</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Study 2: Depressed Mood (BDI-II) Correlations for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
All Participants (range 88 to 101)				
Month 1				
Month 2	.71 <sup>d</sup>			
Month 6	.51 <sup>d</sup>	.66 <sup>d</sup>		
Month 12	.51 <sup>d</sup>	.31 <sup>b</sup>	.41 <sup>c</sup>	
Distressed Group (range 23 to 31)				
Month 1				
Month 2	.69 <sup>d</sup>			
Month 6	.38	.76 <sup>d</sup>		
Month 12	.47 <sup>a</sup>	.35	.49 <sup>a</sup>	
Self-Harm Group (range 32 to 35)				
Month 1				
Month 2	.45 <sup>a</sup>			
Month 6	.25	.30		
Month 12	.48 <sup>b</sup>	.03	.15	
Comparison Group (range 30 to 35)				
Month 1				
Month 2	.68 <sup>d</sup>			
Month 6	.23	.46 <sup>a</sup>		
Month 12	.35 <sup>a</sup>	.27	.45 <sup>b</sup>	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Study 2: Suicidality (BSS) Correlations for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
All Participants (range 88 to 101)				
Month 1				
Month 2	.65 <sup>d</sup>			
Month 6	.70 <sup>d</sup>	.72 <sup>d</sup>		
Month 12	.65 <sup>d</sup>	.71 <sup>d</sup>	.71 <sup>d</sup>	
Distressed Group (range 24 to 31)				
Month 1				
Month 2	.62 <sup>c</sup>			
Month 6	-.05	.80 <sup>d</sup>		
Month 12	-.06	.72 <sup>d</sup>	.92 <sup>d</sup>	
Self-Harm Group (range 30 to 35)				
Month 1				
Month 2	.60 <sup>c</sup>			
Month 6	.61 <sup>c</sup>	.68 <sup>d</sup>		
Month 12	.64 <sup>c</sup>	.64 <sup>c</sup>	.64 <sup>c</sup>	
Comparison Group (range 32 to 35)				
Month 1				
Month 2	--			
Month 6	--	--		
Month 12	--	--	--	

Note. Dashed indicate the correlation was not calculated since the comparison group participants' Beck Suicide Scale score equalled zero.

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Study 2: Negative Events (NE) Correlations for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
All Participants (range 89 to 98)				
Month 1				
Month 2	.75 <sup>d</sup>			
Month 6	.59 <sup>d</sup>	.75 <sup>d</sup>		
Month 12	.42 <sup>d</sup>	.61 <sup>d</sup>	.51 <sup>d</sup>	
Distressed Group (range 24 to 31)				
Month 1				
Month 2	.67 <sup>d</sup>			
Month 6	.66 <sup>c</sup>	.72 <sup>c</sup>		
Month 12	.46 <sup>a</sup>	.72 <sup>d</sup>	.69 <sup>c</sup>	
Self-Harm Group (range 30 to 35)				
Month 1				
Month 2	.71 <sup>d</sup>			
Month 6	.46 <sup>b</sup>	.73 <sup>d</sup>		
Month 12	.10	.41 <sup>a</sup>	.33	
Comparison Group (range 32 to 34)				
Month 1				
Month 2	.60 <sup>c</sup>			
Month 6	.21	.26		
Month 12	.58 <sup>c</sup>	.68 <sup>d</sup>	.34	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Study 2: Stress Level (SQ) Correlations for Each Month and for Each Group

	Month 1	Month 2	Month 6	Month 12
All Participants (range 88 to 97)				
Month 1				
Month 2	.80 <sup>d</sup>			
Month 6	.59 <sup>d</sup>	.57 <sup>d</sup>		
Month 12	.52 <sup>d</sup>	.52 <sup>d</sup>	.45 <sup>d</sup>	
Distressed Group (range 24 to 31)				
Month 1				
Month 2	.77 <sup>d</sup>			
Month 6	.51 <sup>a</sup>	.69 <sup>c</sup>		
Month 12	.32	.44 <sup>a</sup>	.45 <sup>a</sup>	
Self-Harm Group (range 30 to 35)				
Month 1				
Month 2	.67 <sup>d</sup>			
Month 6	.38 <sup>a</sup>	.26		
Month 12	.53 <sup>b</sup>	.44 <sup>a</sup>	.27	
Comparison Group (range 31 to 34)				
Month 1				
Month 2	.69 <sup>d</sup>			
Month 6	.33	.35		
Month 12	.45 <sup>a</sup>	.40 <sup>a</sup>	.24	

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .

Study 2: Aggression (AQY) Correlations Between Months 6 and 12 for Each Group

	Month 6	Month 12
<hr/>		
All Participants ( $\underline{n} = 67$ )		
Month 6		
Month 12		.78 <sup>d</sup>
<hr/>		
Distressed Group ( $\underline{n} = 14$ )		
Month 6		
Month 12		.72 <sup>c</sup>
<hr/>		
Self-Harm Group ( $\underline{n} = 25$ )		
Month 6		
Month 12		.79 <sup>d</sup>
<hr/>		
Comparison Group ( $\underline{n} = 28$ )		
Month 6		
Month 12		.64 <sup>c</sup>
<hr/>		

<sup>a</sup>  $p < .05$ . <sup>b</sup>  $p < .01$ . <sup>c</sup>  $p < .001$ . <sup>d</sup>  $p < .0001$ .