Turning Points: Meaning-making and its Association With Psychological Well-being,
Academic Achievement and Parental Relationship Quality Among Adolescents

by

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Abstract

There is substantial research linking meaning-making ability and psychological well-being in the context of turning point events. Still, an important research question remains: whether individuals who report meaning-making and psychological well-being were already better adjusted psychologically, prior to the experience of their turning point. In addition, the role of meaning-making on academic achievement and parental relationship quality has received little empirical attention although both variables have been shown to be positively associated with positive adjustment among adolescents. This longitudinal study examined differences in psychological well-being, academic achievement, and parental relationship quality between adolescents who reported meaning-making (lessons or insights) and those who reported no meaning-making within their turning point narratives. Participants were 803 (52% female) grade 12 adolescents, 26% (N = 209) of whom had reported experiencing a turning point. Participants also completed measures on the outcome variables (psychological well-being, academic achievement, and parental relationship quality) 3 years prior, when they were in grade 9. MANOVA results indicated that, of the participants who experienced a turning point, adolescents who reported meaning-making reported significantly higher psychological wellbeing and more positive parental relationship quality than adolescents who reported no meaningmaking. Importantly, these two groups did not differ on the outcome variables prior to their experience of a turning point event when they were in grade 9. Academic achievement scores did not differ significantly between adolescents who reported meaning-making and those who reported no meaning-making. These findings highlight the importance of meaning-making in relation to positive adjustment subsequent to a turning point among adolescents.

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Turning Points: Meaning-making and its Association with Psychological Well-being, Academic Achievement, and Parental Relationship Quality Among Adolescents

Overview

Adolescence represents a period of exploration and vulnerability (Erikson, 1968), in which individuals are exposed to myriad of potentially life-altering experiences. Pillemer (2001) reserves the term turning points to describe these experiences, which are deemed focal points of change in one's life. Furthermore, researchers have used the term meaning-making to refer to the process by which individuals make sense out of their turning points (McLean & Breen, 2009; McLean & Pratt, 2006). The ability to create meaning-making from turning points tends to be associated with more positive adjustment (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001). The purpose of the present study is to examine how meaning-making within turning points of grade 12 high school adolescents relates to psychological well-being, academic achievement, and parental relationship quality. I will first give an overview of the theoretical framework that underlies this study. I will then discuss the types of events that characterize turning points followed by a brief review of the assessment of meaning-making in terms of lessons and insights. Next, I will review the issue of the prevalence of meaning-making among adolescents. I will then give an overview of the literature on meaning-making in relation to psychological well-being, academic achievement, and parental relationship quality. Lastly, I will present the rationale, research questions, and hypotheses for the present study.

Theoretical framework: Life story model of identity

Within modern societies, individuals acquire social-cognitive abilities during adolescence (Habermas & Bluck, 2000) which facilitate the construction of a *life story* in which multiple life

experiences are organized cohesively, and infused with a sense of purpose and direction (McAdams, 1985). These life experiences are weaved together into a meaningful pattern that fits within the context of one's cultural norms and values (Bruner, 1990; McAdams, 2001). Life stories, therefore, represent the articulation of these narrative accounts of the individual's life experiences (McAdams, 2001). In general, personal narratives function to promote communication, yield affective responses from listeners, and are more memorable than general facts (Pillemer, 2001). More specifically, life stories provide a holistic, integrative understanding of the individual and serve as a mechanism through which underlying personal values and beliefs are revealed (McAdams, 1985).

McAdams's (1985) *life story model of identity* posits that one's life story mirrors the individual's identity. According to McAdams, "identity is not synonymous with the 'self' or the 'self-concept' or even with 'who I am'; rather, it refers to a particular flavoring of people's self-understandings, a way in which the self can be arranged or configured" (p. 102). Through the individual's plot, characters, and themes that comprise the life story, the most defining aspects of the self become evident. It is important to note that the life story is not the same as a mere recollection of life events. The authenticity of the life story is validated across its structure and complexity (McAdams, 1985). Life stories comprise elements of narrative transitions, integration, meaning, and direction. The ability for individuals to synchronize multiple life experiences into a meaningful life story has been referred to as *global coherence*. According to Habermas and Bluck (2000), it is this aptitude for global coherence which differentiates adults' life stories from children's mere recollection of life events. Moreover, one of the most critical components of the life story is the articulation of life experiences that have caused significant

change in the overall pace of the individual's life. The current study specifically focuses on this component of the life story – *turning points*.

Turning point events

Pillemer (2001) states that, "turning points are concrete episodes that are perceived to suddenly redirect a life plan" (p. 127). Although turning points may include traumatic experiences, such events need not be negative or traumatic. For example, turning points have been grouped into the following thematic categories: relationship, achievement, autonomy, and mortality/life threatening events (McLean & Pratt, 2006). Furthermore, turning points are perceived as causal agents of change because individuals attribute changes in their behaviours and attitudes to these events. Thus, the defining characteristic of a turning point is that the individual perceives the experience to be life-changing. For example, the onset of a terminal illness cannot be deemed a turning point in and of itself unless the individual attributes some form of directive change in his/her life to that experience. Events related to bereavement, nevertheless, have been consistently cited as one of the most prevalent types of turning point events reported (Thorne, McLean & Lawrence, 2004), and thus warrant further discussion here.

The experience of loss tends to have an immense impact on the life course of the individual (Park & Folkman, 1997), as was demonstrated by reports of grief symptoms and mental health problems among a sample of bereaved parents in a study conducted by Feigelman, Jordan, and Gorman (2009). The type of death (suicide, accidental, homicide, ambiguous death or natural causes) was not significantly related to grief difficulty in the Feigelman et al study, suggesting that the experience of losing someone may be emotionally taxing irrespective of the cause of death. The experience of loss may also have important implications for identity

(Michael & Snyder, 2005; Park & Folkman, 1997). Because our sense of self is connected to our interpersonal relationships, the absence of the deceased may inevitably change the dynamics of our relationships and hence influence our self-concept. Through the process of *identity reconstruction*, the bereaved may devise ways of redefining his/her sense of self in the physical absence of the deceased (Michael & Snyder, 2005). Through this process, there may be a sense of disconnectedness within the individual, whereby he/she feels a sense of connectedness to the deceased while simultaneously aspiring to move beyond the experience (Tedeshi & Calhoun, 2008). It is this incoherence within the individual that is believed to propel the search process to make sense out of the experience (Berntsen & Rubin, 2007) - a process termed *meaning-making*.

Additionally, some events may provide more opportunities for self-reflection than others, and thus give way to meaning-making. For example, McLean and Pratt (2006) found that meaning-making scores were significantly higher among individuals who reported mortality events as turning points compared to individuals who reported achievement events. Furthermore, meaning-making was more prevalent among turning points characterized by high tension and conflict relative to events that did not contain conflict (Thorne et al., 2004). These findings suggest that it is important to explore meaning-making in the context of different types of turning point events. The current study, therefore, will examine the prevalence of meaning-making across various types of turning point events.

Assessing meaning-making: Lessons and insights

Meaning-making can be assessed in a myriad of ways (see Park, 2010 for a comprehensive review of the different theoretical perspectives on meaning-making). One method of assessing meaning-making is by coding narrative accounts of life experiences for perceived

lessons and insights gained as a result of the meaning-making process (McLean & Pratt, 2006; McLean & Thorne, 2003). Lessons refer to very concrete changes in behaviours within a specific setting that relate to general normative conduct. In other words, lessons relate to the learning of socially-acceptable ways of behaviour and the lesson may often be applied to similar experiences. Some examples of lessons include, "always wear a seatbelt," "don't talk back to parents," "don't do drugs," "don't run wild" (McLean & Thorne, 2001, p. 2). McLean and Thorne (2003) offered the following as an example of a narrative coded as a lesson: "After joyriding that night and almost getting in a fight with a gang of girls, I think we really learned a good lesson that being daring like that can be really stupid" (p. 638).

Insights, on the other hand, are deemed global, abstract changes in perceptions and attitudes which impact multiple facets of one's life (McLean & Thorne, 2001). In other words, insights refer to a form of meaning-making that transcend the specific event. The acquisition of insight usually impels changes in the way the individual perceives him/her self and others, on a general level (McLean & Thorne, 2001). In other words, there is a sense of psychological transformation. The following is an example of a narrative coded as insight:

After the argument with my dad I realized a lot about my nature, how exactly like my father I really am, and how much my father tries not to be like his father, who was really dictatorial. I realized a lot about my character, my role in the family, who I do and don't want to be when I grow up. (McLean & Thorne, 2003, p. 638)

From this example, we can deduce that the meaning ascribed to this experience will not only affect relations with the individual's father, but will transcend how he/she interacts with other people within and outside of the individual's family.

Prevalence of meaning-making among adolescents

Researchers seem to agree that the ability to construct meaning-making from life events emerges during late adolescence (Habermas & Bluck, 2000; Habermas & de Silveira, 2008; McLean & Thorne, 2003). Recently, however, some researchers have challenged this view and state that early adolescents and even possibly pre-adolescents may demonstrate meaning-making ability (Reese, Yan, Jack, & Hayne, 2010). The scientific evidence that supports this latter view, however, is based on limited empirical findings as research in this area is still in the early stages. The general consensus among researchers seems to be that the advanced cognitive tools required for meaning-making may only emerge during adolescence (McAdams, 1985), rendering it less likely for pre-adolescent individuals to demonstrate meaning-making ability. McLean and Breen (2009) examined gender and age differences in meaning-making with a sample of 14 – 18 year olds and found a significant positive relationship between age and meaning-making. Specifically, the most significant increase in meaning-making was between mid- and late adolescence or when adolescents were between 16 and 17 years old. This finding supports the view that meaning-making ability may indeed emerge during mid-to late adolescence.

Researchers are also interested in the extent to which adolescents are capable of formulating different types of meaning-making. Specifically, researchers have devoted attention to the increasing evidence which indicates that the ability to construct more developmentally advanced forms of meaning-making (i.e. insights) may be more prevalent among adolescents than was previously thought. For example, McLean and Thorne (2003) hypothesized that lessons would be more prevalent than insights among a sample of 18 - 23 year old college students, yet they found no significant difference between the number of lessons and insights reported in their

sample. In other words, these emerging adults seemed just as capable of formulating more developmentally advanced forms of meaning-making (i.e. insights) as they were in deriving lessons from their life experiences. Additionally, Thorne et al. (2004) found that insights were more prevalent than lessons in their sample of university students.

Overall, these findings suggest that university students might be just as capable as adults in constructing meaning from life-changing experiences. It is not clear, however, whether these results would be the same for high school adolescents. The majority of studies that explore meaning-making among adolescents rely on university samples (McLean, 2005; Thorne et al., 2004). The demands of university, however, often include moving away from home and moving is often construed as a significant life changing event for these students. In contrast to university students, high school students are much less likely to move out of their parents' home. In addition, university samples may not be representative of emerging adults as they do not include individuals who go to community college or who embark on a career after graduating high school. Thus, research involving a more representative sample of adolescents, such as a high school sample is necessary in order to expand our understanding of the types of turning point events experienced by different group of adolescents. To address this gap in the literature, the present study will examine the concepts of turning points and meaning-making with a sample of grade 12 high school adolescents.

Meaning-making and psychological well-being

Researchers have devoted considerable effort towards understanding how individuals make sense out of significant life-changing events such as illness (Boehmer, Luszczynska, & Schwarzer, 2007), violent death (Currier, Holland, & Neimeyer, 2006) and sexual assault (Koss

& Figueredo, 2004). In addition to documenting the types of experiences that are deemed turning points, researchers are becoming increasingly interested in examining how meaning-making may be associated with psychological well-being (Draucker, 1989; Gangstad, Norman & Barton, 2009; Pals, 2006; Sutin, Costa, Wethington & Eaton, 2010).

It is important to note that, although meaning-making will be operationalized as lessons and insights in the present study, researchers who have examined meaning-making within more elaborate narratives (such as life stories or self-defining memories) have relied on other modes of assessing meaning-making. These alternative ways of assessing meaning-making include the use of concepts such as *redemption* (or redemptive narrative pattern) and *cognitive transformation*. Both redemption and cognitive transformation refer to the ability to draw some form of positive outcomes from a negative life experience (such as learning to be more appreciative of others following the onset of a terminal illness). Although both constructs differ slightly from the assessment of lessons and insights, they represent different aspects of the same construct of meaning-making. In fact, McLean and Pratt (2006) suggest that redemptive narrative pattern may be one form of meaning-making.

Possible psychological benefits of meaning-making subsequent to a major life changing event have been documented by McAdams et al. (2001), in a study on narrative life stories and adaptation among a sample of students (18 - 24 years) and adults (35 - 65 years). Participants' life stories were assessed for the presence of redemptive narrative patterns (i.e., the ability to deduce some positive outcome from a negative life event). Results indicated that individuals who displayed redemptive narrative patterns within their life stories fared better psychologically and were more satisfied with life, relative to individuals who did not report redemptive narrative

patterns within their life stories. Additionally, McLean and Lilgendahl (2008) presented similar findings among a group of Canadian university students ($M_{age} = 19$ years), such that individuals who reported redemptive narrative patterns also reported significantly higher well-being scores than individuals whose narratives did not contain redemptive patterns.

Furthermore, Tebes, Irish, Vasquez and Perkins (2004) examined the relationship between *cognitive transformation* (the ability to deduce some positive outcome from a negative or traumatic life experience) and adaptation with a group of 18 – 35 year old bereaved adults who had lost a parent within the past two years. Results showed that cognitive transformers reported fewer psychiatric symptoms, and higher levels of grief and trauma resolution compared to cognitive non-transformers (i.e., individuals who were not able to deduce some positive outcome from their bereavement). These findings provide empirical support for the view that differences in adaptation to life-changing events do exist between individuals who are able to deduce some meaning from a significant life event, and those who do not report meaning.

Although the general consensus in the literature seems to be that individuals who engage in meaning-making tend to fare better psychologically in comparison to those who fail to engage in meaning-making, the results of some studies suggest otherwise. For example, Sutin et al., (2010) examined the role of meaning-making on self-rated physical health and psychological distress with a sample of adults ranging in age from 30 - 86 years at baseline. Participants were assessed at two different time points, ten years apart. At the second assessment, individuals were asked to indicate their most stressful life experience since the initial assessment and were asked whether they had gleaned any meaning from their experience in the form of lessons learned. Contrary to what was hypothesized, the authors found no significant relationship between self-

rated health scores and lesson learning. In other words, participants who reported learning a lesson from their most stressful life event did not rate their physical health any higher (or lower) compared to participants who did not construe any lesson from their experience. Similarly, the authors found no significant relationship between lessons learned and psychological distress. In other words, individuals who reported learning a lesson from their most stressful life experience did not report experiencing any more (or less) psychological distress compared to individuals who did not report learning a lesson from their stressful life experience.

In another study, Michael and Snyder (2005) found that among a U.S sample of college students (M_{oge} = 19 years) who had lost a loved one over a year prior to the time of the study, finding benefit in the loss was significantly related to higher levels of rumination. Rumination has been construed as an ineffective form of coping with stressful life events, whereby individuals continuously process the negative aspects of an experience without constructing any adaptive strategies to alleviate psychological distress (Michael & Snyder, 2005). Among participants who had lost someone within the past year, however, the authors found benefit-finding to be a significant protective factor for depressive symptoms, such that individuals who were able to glean some benefit from the loss reported significantly less depressive symptoms and anxiety, relative to those who did not report finding any benefit in the loss. Overall, these mixed findings suggest that further research is needed to unravel the complexities of meaning-making in relation to psychological well-being within the context of significant life events.

A major limitation of the studies examining the relation between meaning-making and psychological well-being, however, is that they have been predominantly cross-sectional. For example, McLean and Breen (2009) assessed the association between redemptive narrative

pattern and self-esteem in a U.S cross-sectional sample of adolescents ranging in age from 14 - 18 years ($M_{age} = 16$ years). Redemptive narrative pattern, defined as the ability to evaluate a negative life experience in a positive light, was positively related to adolescents' self-esteem. Based on the cross-sectional nature of the study, however, the authors were not able to ascertain whether the adolescents who demonstrated redemptive patterns within their turning points, and concurrently reported higher self-esteem, were adolescents who were already high on self-esteem to begin with, prior to their turning point. One possibility, for example, is that students who reported both redemptive narratives in their turning points and higher self-esteem may have had higher self-esteem well before their turning point, which may have contributed to their positive interpretation of the negative event.

In one longitudinal study, McLean and Pratt (2006) examined the association between meaning-making (at age 23 years) and identity development (at ages 17, 19 and 23 years) with a sample of adolescents. The turning point question (from which meaning-making was coded) was only assessed when participants were 23 years old. Results indicated a significant relationship between meaning-making and optimism at age 23, but interestingly, meaning-making (at age 23) was not significantly related to optimism at ages 17 and 19 years. McLean and Pratt, however, did not account for the timing of the occurrence of participants' turning points so we do not know whether their turning points occurred prior to or after age 17, when they began the study. Therefore, it is not clear whether individuals who reported meaning-making from their turning points, and concurrently reported higher optimism, were individuals who were already high on optimism to begin with, prior to their turning point.

Cross-sectional studies provide valuable information about the differences in well-being that exist between individuals at one specific point in time, yet fall short of accounting for possible pre-existing differences in psychological well-being that may be associated with the capacity for meaning-making subsequent to a significant life event. To address this gap, the present study will specifically analyze the timing of participants' turning points in relation to their meaning-making and the outcome variables. The present study will first examine the association between meaning-making and the outcome variables concurrently with grade 12 adolescents. Additionally, for the subset of participants who had their turning point within the past 2 years, their grade 9 assessment will reflect scores on the outcome variables prior to their turning point whereas their grade 12 assessment will reflect scores on the outcome variables after their turning point; thus allowing me to account for possible pre-existing differences on the outcome variables between adolescents who reported meaning-making and those who did not report meaning-making.

Assessing psychological well-being. Psychological well-being is a broad, multi-dimensional construct. As a result, there are numerous indicators of psychological well-being and researchers vary in the measures used to assess well-being. For example, studies that have looked at specific life changing events, such as bereavement, often include a measure of grief and/or depression as an indicator of psychological well-being (Currier, et al., 2006), whereas others have assessed psychological well-being based on measures of frequency of post-traumatic stress disorder symptoms (Bernsten & Rubin, 2007; Tolstikova, Fleming, & Chartier, 2005), physical health (Sutin et al., 2010), life satisfaction (Russell, White, & White, 2006), post-traumatic growth (Phelps, Williams, Raichle, Turner, & Ehde, 2008) and anxiety (Moore, Norman, Harris,

& Makris, 2006). The present study will employ a composite measure of psychological well-being which comprises the following four variables: daily hassles, depression, self-esteem and social anxiety.

Meaning-making and academic achievement

To my knowledge, no study has yet examined the relation between meaning-making and academic achievement based on the experience of a turning point event among a high school sample. There is reason to believe, however, that such an association is worth exploring. First, adolescents who report meaning-making might be more cognitively motivated, in general, than adolescents who do not report meaning-making. Thus adolescents who report some form of meaning-making may perform better academically than those who report no meaning from their turning points. Furthermore, higher academic achievement in grade 9 might be indicative of greater general cognitive ability, which may facilitate meaning-making in grade 12 subsequent to a turning point event. In this case, there might be a significant difference in adolescents' grade 9 academic achievement scores between individuals who later reported meaning-making and individuals who did not report meaning-making in grade 12. In addition, because the ability to construct insight is seen as more developmentally advanced than the ability to formulate lessons (McLean & Thorne, 2001), we might expect that among participants who reported meaningmaking, adolescents who reported insights might differ in their grade 12 academic scores relative to adolescents who reported lessons.

To shed some light on this important research question, the present study will examine whether there is: a) a significant difference in grade 12 academic achievement between adolescents who reported meaning-making (collapsed across lessons and insights) and

adolescents who reported no meaning-making, b) a significant difference in participants grade 9 academic achievement between adolescents who reported meaning-making and those who reported no meaning, and lastly c) a significant difference in grade 12 academic achievement between adolescents who reported insights and adolescents who reported lessons.

Meaning-making and parental relationship quality

Furthermore, a relatively unexplored research question is the association between meaning-making and parental relationship quality. There is some support, however, for the view that parental relationship quality is associated with adolescent adjustment (Feinberg, 2003). Specifically, more positive parent-adolescent relationships have been associated with higher academic performance (Heaven & Newbury, 2004), well-being (Shek, 2002), emotional adjustment (Engels, Finkenauer, Meeus & Deković, 2001), and fewer risk-taking behaviors (Roche, Ahmend & Blum, 2008), relative to weaker parent-adolescent relationships. Thus, it seems worthwhile to explore the association between meaning-making and parental relationship quality in the context of turning point events among adolescents. Parents may have accumulated an abundance of life lessons which have equipped them with essential skills that contribute to their ability to derive meaning from life experiences. As a result, parents' meaning-making skills may surpass that of their adolescent children. For adolescents who have healthy relationships with their parents, such skills and methods of coping with life changes may be passed on from the parent, thus possibly impacting how adolescents, in turn, construct meaning from their own experiences.

Dumas, Lawford, Tieu, and Pratt (2009) examined the relationship between perceived parenting during adolescence ($M_{age} = 17$ years), and the level of coherence within life narratives

9 years later. When participants were 26 years of age, they were asked to recall a *low point narrative*, defined as a specific point in time characterized by negative affect, "such as deep sadness, fear, strong anxiety, terror, despair, guilt or shame" (Dumas et al., 2009, p. 1536). The authors reported that individuals who indicated more positive perceived parenting during adolescence also demonstrated more positive adjustment in terms of their identity and emotionality, 9 years later, relative to individuals who reported less positive perceived parenting. Specifically, compared to individuals who reported less positive perceived parenting, those who reported more positive perceived parenting reported low point narratives in which the individual was able to draw some form of closure and positive resolve about the experience. This finding suggests that parenting relationship quality may be associated with the ability to construct lessons and insights from turning point events.

Although findings from the Dumas et al. (2009) study showed a significant positive relationship between perceived positive parenting and narrative ending resolution, the authors did not specifically assess participants' positive perceived parenting prior to the actual occurrence of participants' low point event. Therefore, it is unclear whether adults who demonstrated narrative ending resolution (at age 26) and positive perceived parenting (at age 17) had positive perceived parenting prior to the experience of their low point narrative. If participants who reported ending resolution had significantly higher positive perceived parenting than participants who did not report ending resolution prior to the experience of their low point event, then it would suggest that positive parenting may have facilitated young adults' ability to positively resolve their low point event. Alternatively, if there was no significant difference in positive perceived parenting between participants who reported ending resolution and those who

did not report ending resolution prior to participants' experience of their low point event, then one might conclude that positive perceived parenting may be a possible outcome of the individual's ability to positively resolve their low point event. The present study will address these possibilities by examining differences in parental relationship quality among adolescents who reported meaning-making relative to adolescents who did not report meaning-making in grade 12. If there is a significant difference, such that adolescents who report meaning-making also reported more positive parental relationship quality then I will determine whether these differences in parental relationship quality existed in grade 9, prior to adolescents' experience of their turning point.

The present study

In spite of the substantial research linking meaning-making and psychological well-being among university and adult samples, research on meaning-making and well-being among high school students is lacking. Furthermore, there seems to be mixed findings with regard to the prevalence of more developmentally advanced forms of meaning-making among adolescents, which suggests the need for further research in this area. This study will examine meaning-making and its association with psychological well-being, academic achievement, and parental relationship quality with a sample of grade 12 high school adolescents. A critical aspect of the present study is its longitudinal design, resulting in the ability to determine possible pre-existing differences on the outcome variables between adolescents who report meaning-making and those who do not report meaning-making within their turning point narratives.

Research questions and hypotheses. The present study addresses the following six research questions.

Research question 1: Among participants who experienced a turning point event, what is the overall prevalence of lessons and insights, and how prevalent are lessons and insights across different types of turning point events?

Overall, I expected that insights would be more prevalent than lessons (Thorne et al., 2004). Furthermore, I expected that among participants who reported meaning-making, insights would be more prevalent than lessons particularly among relationship and mortality events, compared to travel, moving, educational and other events. This hypothesis was based on results presented by Thorne et al. (2004), who found that insights (relative to lessons) were most prevalent among relationship and mortality events.

Research question 2: Are there significant differences between adolescents who reported meaning-making and those who did not report meaning-making on measures of psychological well-being, academic achievement, and parental relationship quality?

I hypothesized, based on past literature (see McLean & Lilgendahl, 2008; McAdams et al., 2001; Tebes, et al., 2004), that participants who reported meaning-making (collapsed across lessons and insights) within their turning point narratives would report significantly higher scores on measures of psychological well-being relative to participants who did not report meaning-making. Similarly, I hypothesized that individuals who reported meaning-making would also report significantly higher scores on parental relationship quality compared to individuals who did not report meaning-making (Dumas et al., 2009). No hypothesis was projected for a significant difference on academic achievement based on the exploratory nature of this research question.

Research question 3: If there are significant differences between adolescents who reported meaning-making and those who did not report meaning-making on psychological well-being, academic achievement, and parental relationship quality, are these differences evident prior to participants' turning points?

For participants who had a turning point within the past 2 years, I examined whether differences between meaning-making (lessons and insights) and no meaning groups were evident prior to participants' experience of their turning point event. (based on scores from the grade 9 assessment). In terms of expectations for group differences in psychological well-being, past literature (McAdams et al., 2001) suggests that individuals' psychological well-being is enhanced through the meaning-making process. If this theory holds true, then I would expect no significant difference on psychological well-being between adolescents who report meaning-making and those who do not report meaning-making *prior* to participants' experience of their turning point event.

Regarding group differences in parental relationship quality, expectations are unclear.

On the one hand, it is possible that positive parental relationships may facilitate meaning making — and as such, it could be possible for meaning-making and no meaning groups to differ in parental relationship quality prior to the experience of participants' turning point event.

Conversely, it is also possible that parental relationship quality is enhanced as a result of the meaning-making process (irrespective of prior parental relationship quality), and as a result there would be no expected significant difference in parental relationship quality based on the grade 9 assessment (prior to the turning point experience) between adolescents who report meaning-making and those who do not report meaning-making.

In regards to expected group differences in academic achievement, no specific hypothesis was projected. One possibility is that more advanced cognitive ability (as assessed by higher academic achievement) would facilitate meaning-making; therefore, I might expect differences in academic achievement between meaning-making and no meaning groups prior to the experience of their turning point.

Research question 4: Among participants who reported meaning-making, are there significant differences on measures of psychological well-being, academic achievement, and parental relationship quality between individuals who reported lessons and those who reported insights?

I expected that participants who reported insights also would report significantly higher scores on psychological well-being compared to participants who reported lessons. This hypothesis was based Dumas et al.'s (2009) results of a significant positive relationship between coherent positive resolution and well-being. Coherent positive resolution may be perceived as one aspect of meaning-making defined as the ability to relate a negative life event with a sense of closure and resolve. I also hypothesized that adolescents who reported insights would report significantly higher scores on parental relationship quality compared to participants who reported lessons.

Research question 5: Are there significant differences on measures of psychological wellbeing, academic achievement, and parental relationship quality between adolescents who reported a turning point event and those who did not report a turning point?

I expected that there would be no significant group differences on measures of psychological well-being, academic achievement, and parental relationship quality between

participants who reported a turning point event and a matched group of adolescents who did not report a turning point event (matched on age, gender, parental education and Canadian-born status). This hypothesis was premised on the rationale that it is the meaning-making process, and not the mere experience of a turning point event, that may drive group differences on the outcome variables.

Research question 6: Does church attendance moderate how meaning-making relates to psychological well-being, academic achievement, and parental relationship quality?

Some participants reported having had a turning point that could be characterized as spiritual. I explored the possibility that church attendance might moderate the relationship between meaning-making and the outcome variables (psychological well-being, academic achievement, and parental relationship quality), based on the notion that church attendance might be one mechanism through which adolescents might learn to construe meaning from life experiences. For example, church services often include discussions of how life changing events might involve meaning-making. Adolescents exposed to church services, therefore, might be more likely to look for meaning-making within their own turning points with concurrent benefits to well-being, compared to their non-church attending peers.

Method

Participants

The sample was comprised of 803 (52% female) adolescents from eight high schools encompassing a school district in southern Ontario, Canada. This study was part of a larger longitudinal-sequential project examining youth lifestyle choices across the high school years. In the larger study, surveys were completed several times between 2003 and 2008, with some

students starting the study in 2003 and others joining the study in subsequent years. Consistent with the broader Canadian population (Statistics Canada, 2001), 92% of the participants were born in Canada and the most common ethnic backgrounds reported other than Canadian were Italian (31%), French (18%), British (15%), and German (12%). Data on socioeconomic status indicated mean parental levels of education falling between "some college, university or apprenticeship program" and "completed a college/ apprenticeship/ technical diploma." Furthermore, 70% of the respondents reported living with both birth parents, 12% with one birth parent and a stepparent, 15% with one birth parent (mother or father only), and the remainder with neither parent (e.g., other relatives, foster parents, etc.) The sample included for analyses in the present study was comprised of 209 (57% female) participants who responded 'yes' to having had major turning point experience at the time of the survey; as well as 209 (57% female) matched adolescents (matched on age, gender, parental education and Canadian-born status) who did not have a turning point experience.

Procedure

Active informed consent was obtained from the adolescent participants (see Appendix A). Parents were provided with written correspondence mailed to each student's home prior to the survey administration outlining the study; this letter indicated that parents could request that their adolescent not participate in the study (see Appendices B and C). An automated phone message about the study also was left at each student's home phone number. This procedure was approved by the participating school board and the University Research Ethics Board (see Appendix D). At all time periods, the questionnaire was administered to students in classrooms

by trained research staff (see Appendix E for questionnaires). Students were informed that their responses were completely confidential.

Measures

All participants completed questionnaires that assessed demographics, church attendance, psychological well-being, academic achievement, and parental relationship quality at two time points: in Grade 9 and 3 years later when adolescents were in Grade 12. The turning point question, which elicited turning point narratives, was posed to participants only when they were in grade 12.

Demographics: Participants completed a demographics form which assessed age (13, 14, 15, 16, 17 or 18 years or over); gender (1 = male or 2 = female); parental education for both mother and father (1 = did not finish high school 2 = finished high school 3 = some college, university, or apprenticeship program 4 = completed a college/apprenticeship diploma (e.g., electrician) and/or technical diploma (i.e. graphic design, hair dressing) 5 = completed a university undergraduate degree 6 = completed a professional degree (e.g. masters, PhD, medical doctor, lawyer) 7 = still going to school 8 = I don't know) and Canadian-born status (Were you born in Canada? 1 = Yes 2 = No).

Turning Points: The following open-ended question was posed to all participants to elicit turning point narratives: Have you ever experienced a major turning point in your life that changed the way you thought about something or how you behaved? If yes, what was the turning point? Participants were given four lines to respond to this question. Turning point narratives were then coded for turning point event and meaning-making (see section below on coding for turning point event and meaning-making and also see Appendix F).

Timing of Turning Point: Following the turning point question, participants responded to the following question, which assessed the timing of their turning point event: *How old were you when that turning point happened?* The present study was part of a larger study that examined psychological well-being, academic achievement, and parental relationship quality in grade 9 and in grade 12. If participants experienced their turning point event 3 or more years prior to the time of the survey (i.e. prior to grade 9), their scores on the outcome variables were not available as that time period would have been prior to the start of the study. Therefore, only participants who had their turning point within the last two years were included in the analyses for research question 3 (i.e., If there are significant differences between adolescents who reported meaning-making and those who did not report meaning-making on psychological well-being, academic achievement, and parental relationship quality, are these differences evident prior to participants' turning points?)

For participants who had their turning point within the last two years their survey responses in grade 9 would have been prior to the experience of their turning point, therefore allowing me to address this research question.

Psychological Well-being: Four aspects of psychological well-being were assessed.

(i) Depression: The 20-item Center for Epidemiological Depression Scale,

CES-D: Radloff (1976) was used to assess the degree of depressive symptoms adolescents experienced over the past two weeks (e.g. I thought my life had been a failure). Scale anchors ranged from 1 = none of the time (less than 1 day) to 5 = most of the time (10 – 14 days). (ii)

Social anxiety: The 14-item Social Anxiety-related symptoms scale (Ginsberg, LaGreca, & Silverman, 1998) was used to assess the frequency of social anxiety-related symptoms

experienced by adolescents (e.g. *I'm quiet when I'm with a group of people my age*). Scale anchors ranged from 1 = almost never or never to 4 = almost always or always. (iii) Self-esteem: The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) assessed the degree to which adolescents agreed with a list of statements relating to their self-worth (e.g. *I feel useless at times*) and (iv) Daily hassles: Participants indicated the frequency of experiencing a 21-item list of daily hassles with friends, peers, school, etc. (e.g. *Problems with friends*). Scale anchors ranged from 1 (almost never bothers me) to 3 = (often bothers me). Scales were standardized and averaged, such that higher composite scores indicate greater well-being.

Academic achievement: A self-report measure of average grades received in school was used to assess academic achievement. Participants responded to the following question: *What marks do you usually get in school?* In response to this question, participants chose among the following six options A+ (90% - 100%), A (80% - 89%), B (70% - 79%), C (60% - 69%), D (50 - 59%), or below 50%.

Parental Relationship Quality: Paternal and maternal relationship quality was measured separately using the parent subscale of the Inventory of Parent and Peer Attachment (Armsden & Greenburg, 1987). Sample items include: *My mother trusts my judgement* and *Talking over my problems with my mother makes me feel ashamed or foolish*. The correlation between maternal and paternal scales was .49 in grade 12 and .53 in grade 9. Responses were coded on a 4-point Likert scale where 1 = *almost always or always* 2 = *often*, 3 = *sometimes* and 4 = *almost never or never*. Scores were standardized and averaged such that higher scores indicate more positive parental relationship quality.

Church Attendance: Participants responded to 1-item measure assessing the frequency

of which they attended church/ synagogue/ temple in the last month. Responses were coded on a 5-point Likert scale where 1 = everyday, $2 = several times \ a \ week$, $3 = once \ a \ week$, $4 = once \ or \ twice \ a \ month$ or 5 = never. Participants who responded 1 - 4 were then collapsed as one group, indicating the participants who had gone to church/synagogue/temple in the last month and participants who responded 5 were grouped as a separate group, indicating participants who had never gone to a church/temple/synagogue in the last month.

Coding turning points

Turning point events. Turning points were coded for the type of event that characterized participants' experiences. The coding for turning point events was originally based on McLean and Pratt's (2006) four turning point event type categories: relationship events ("focused on an interpersonal encounter with an emphasis on relational concerns e.g., falling in love, divorce"), achievement events ("emphasized effortful attempts at mastering vocational, physical, social, or spiritual goals, such as getting into college and excelling at sports, work, or leadership"), autonomy events ("emphasized becoming independent from others, for example one's family of origin or peers"), and mortality events ("emphasized one's own or another's mortality, including stories about accidents, death, or near-death experiences.")

McLean and Pratt's (2006) coding scheme was adapted such that of the four categories, only relationship and mortality events were included in the current study. This adaptation was necessary because of the relative absence of achievement and autonomy events among participants from the current study, which may have been due to differences in sample characteristics. For example, participants from McLean and Pratt's (2006) study were older individuals (M = 23 years) who had completed or were about to complete university, compared

to participants in the current study (M = 17 years, 5 months) who were grade 12 high school students. Perhaps the university experience provides individuals with more opportunities to demonstrate autonomy (e.g. moving away from home for the first time and decisions about what degree to pursue).

In the current study, the following turning point event categories emerged from participants' responses: relationship events (focused on interpersonal encounters or conflicts with friends/ peers/ family members, changes in intimate relationships such as dating or breakups, and changes in family structure due to parental divorce or remarriage), travel events (focused on actual travel experiences abroad with the opportunity to experience a foreign culture through mission trips or volunteer abroad opportunities), moving events (focused on events that related to one's permanent relocation in a different place, whether as an individual or with family, including moving to a different city or country), mortality/life threatening events (focused on events pertaining to bereavement, illness, accidents, near-death experiences of the individual or that of others), and educational events (focused on events relating to academics that may not necessarily be tied to any specific achievement; for example the experience of one particular class that may have inspired the participant, concerns about grades, decisions regarding career choices or university plans). To be coded as a particular turning point event type, participants' responses must have included a statement that explicitly stated the occurrence of a specific event or series of events. Responses that were too vague or did not contain a specific event were coded as no event, whereas responses that comprised a specific event that did not fit into one of the above categories were coded as other events. This latter category was examined for emerging themes but there were insufficient cases to form a separate category.

Some of these events included experiences relating to one's spirituality, concerns about pregnancy, trouble with the law and drug experimentation.

To establish inter-rater reliability a research assistant who was blind to the study's hypotheses initially coded 10% of the cases, after which discrepancies in coding were discussed and clarified. An inter-rater reliability analysis was performed using 40% of the cases to determine consistency in coding for turning point event type, Kappa = .89, p < .001.

Meaning-making. Turning point narratives were also coded for the type of meaning-making that participants reported within their responses. Coding for meaning-making was based on McLean and Thorne's (2001) *Manual for Coding Meaning Making in Self-Defining Memories* (see Appendix G). McLean and Thorne (2001) differentiate between two types of meaning-making: *lessons* and *insights*. Lesson refers to learning a lesson from an experience that can be applied to similar experiences. The lesson is specific to one particular type of behavior such as drinking and driving. On the other hand, insight refers to responses in which "the reporter gleans insight from the event that applies to greater areas of the reporter's life, not just to a specific behavior. There is often some kind of transformation — emotional or psychological or relational — for the reporter" (p. 3). Insight includes abstract or general ways to think about different things, or life in general. McLean and Thorne (2001) cautioned that responses comprising both a lesson and an insight should be coded as insight. Responses that comprised neither lesson nor insight were coded as *no meaning*. The following meaning-making coding scheme was used for the current study: 0 = no meaning, 1 = lesson, 2 = insight.

To establish inter-rater reliability a research assistant who was blind to the study's hypotheses initially coded 10% of the cases, after which discrepancies in coding were discussed

and clarified. An inter-rater reliability analysis was performed using 40% of the cases to determine consistency in coding for meaning-making, Kappa = .78, p < .001.

Results

For all analyses, gender was first included as a between-subjects independent variable, but there were no significant interactions between gender and any of the main independent variables (e.g., meaning-making). Past research, however, has indicated a significant difference between males and females on all of the outcome variables (i.e., main effects) and therefore, I included gender as a covariate in all of the analyses. In addition, age, parental education, and Canadian-born status were also included as covariates in all analyses. Table 1 shows a summary of the measures in the present study including means, standard deviations, Cronbach's alpha, number of items, and scale anchors for grade 9 and grade 12 assessments.

Descriptive Statistics

Overall, approximately 26% (N = 209) of the larger sample of grade 12 adolescents reported having had a turning point experience at the time of the survey (57% female, M = 17 years, 5 months, SD = 0.49). The majority of participants (62%) reported that their turning point occurred within the past two years. In contrast, 28% of participants experienced their tuning point event three or more years ago, while the remaining participants (10%) did not indicate when their turning point occurred.

Results of the prevalence of the various turning point events were as follows: 23% reported relationship events (e.g. "Meeting my best friend made me a more outgoing person, I enjoy life a lot more"), 4% travel events (e.g. "Going to the Dominican to do development work"), 4% moving events (e.g. "Moving to another country- different place, mix of cultures,

felt very strange and mistrustful"), 27% mortality/ life-threatening events (e.g. "My close friend passed away a year ago and it has opened my eyes and I have matured. I am very thankful for what I have"), 6% educational events (e.g. "Physics class – changed my outlook on engineering to a business degree"), 12% other events (e.g. "I got arrested for prostitution"), and 24% were classified as no event (e.g. "Not sure"). Table 2 shows the descriptions, examples, and frequencies of the two coding categories: turning point event type and meaning-making. In terms of prevalence of the various turning point events by gender, relationship and mortality events were among the top three most prevalent turning points for both males and females. Females, however, reported mortality and relationship events in greater proportions than males. Table 3 shows a breakdown of each of the turning point categories by gender.

Research question 1: Among participants who experienced a turning point event, what is the overall prevalence of lessons and insights, and how prevalent are lessons and insights across different types of turning point events?

Results indicated that among participants, who had a turning point experience, 8% reported lessons, 28% reported insights, and 64% reported no meaning. A closer look at these results, however, indicated that among those who reported meaning-making (N = 76), insights (78%) were more prevalent that lessons (22%). Furthermore, consistent with expectations, across the various turning point event categories, adolescents reported more insights than lessons for relationship events (73% insights versus 27% lessons), and mortality events (89% insights versus 11% lessons). On the other hand, lessons were more prevalent than insights among educational events (70% lessons versus 30% insights). Furthermore, all adolescents who reported meaning-making for travel events reported insights (N = 9), while neither lessons nor insights were

reported for moving events. Results of a chi-square test indicated that the number of insights relative to lessons was significantly above chance for relationship events, $\chi^2(1) = 5.54$, p = .019 and mortality events, $\chi^2(1) = 11.84$, p = .001. For the remaining turning point events, sample sizes were too small to conduct chi square tests to determine whether the relative prevalence of lessons and insights were above chance.

Research question 2: Are there significant differences between adolescents who reported meaning-making and those who did not report meaning-making on measures of psychological well-being, academic achievement, and parental relationship quality?

A Multivariate Analysis of Variance (MANOVA) was conducted to test the hypothesis that there would be a significant group difference on psychological well-being, academic achievement, and parental relationship quality, between participants who reported meaning-making and those who reported no meaning-making. The independent variable was meaning-making (meaning-making versus no meaning-making) and the dependent variables were grade 12 scores on psychological well-being, academic achievement, and parental relationship quality. Results indicated that, overall, there was a significant effect for meaning-making, $\Lambda = .96$, p = .033, partial $\eta^2 = .04$. A follow up univariate ANOVA indicated a significant effect of meaning-making for psychological well-being, F(1, 204) = 5.90, p = .016, partial $\eta^2 = .03$, such that adolescents who reported meaning-making (lessons or insights) also reported significant effect of meaning (M = -0.08, SD = 0.74). A follow-up univariate ANOVA also indicated a significant effect of meaning-making for parental relationship quality, F(1, 204) = 6.67, p = .011, partial $\eta^2 = .03$, such that adolescents who reported meaning-making (lessons or insights) also reported

more positive parental relationship quality (M = 2.96, SD = 0.45) compared to adolescents who reported no meaning (M = 2.77, SD = 0.51). In contrast, there was a non-significant effect of meaning-making for academic achievement, F(1, 204) = 0.72, p = .397, partial $\eta^2 = .004$. Research question 3: If there are significant differences between adolescents who reported meaning-making and those who did not report meaning-making on psychological well-being, academic achievement, and parental relationship quality, are these differences evident prior to participants' turning points?

A MANOVA was conducted to ascertain whether there was a significant difference between adolescents who reported meaning-making and adolescents who reported no meaning-making on psychological well-being, academic achievement, and parental relationship quality, prior to participants' experience of a turning point event. Among participants who reported a turning point event, 62% of adolescents reported having had their turning point within the last 2 years and thus only these participants were included in this analysis. If participants experienced their turning point event 3 or more years prior at the time of the survey (i.e. prior to grade 9), their scores on the dependent variables would not have been available, as that time period would have been prior to the start of the study.

The independent variable was meaning-making (meaning versus no meaning) and the dependent variables were participants' grade 9 scores on psychological well-being, academic achievement, and parental relationship quality. Results indicated that there was no significant difference between participants who reported meaning-making and those who reported no meaning-making on their grade 9 scores for psychological well-being, academic achievement, and parental relationship quality, $\Lambda = .99$, p = .518, partial $\eta^2 = .01$.

Research question 4: Among participants who reported meaning-making, are there significant differences on measures of psychological well-being, academic achievement, and parental relationship quality between individuals who reported lessons and those who reported insights?

A MANOVA was conducted to determine whether participants who reported lessons differed significantly from participants who reported insights on the three dependent variables. The independent variable was meaning-making type (lessons versus insights) and the dependent variables were grade 12 scores on psychological well-being, academic achievement, and parental relationship quality. Contrary to what was expected, results indicated no overall significant effect for meaning-making type, $\Lambda = .96$, p = .389, partial $\eta^2 = .04$. Relative to adolescents who reported lessons, adolescents who reported insights did not differ on their psychological well-being, academic grades, and parental relationship quality.

Research question 5: Are there significant differences on measures of psychological well-being, academic achievement, and parental relationship quality between adolescents who reported a turning point event and those who did not report a turning point?

To test this research question, a MANOVA was conducted to determine whether there were any significant differences between adolescents who reported a turning point and adolescents who did not report a turning point on measures of psychological well-being, academic achievement, and parental relationship quality. A matching process was conducted to create a comparable group of adolescents from the larger sample of participants who did not report a turning point. To account for potential confounds and ensure that the two groups did not differ on any extraneous variables, adolescents who reported a turning point were matched with

adolescents who did not report a turning point on the following key variables: age, gender, parental education and Canadian-born status.

To address this research question, the independent variable was turning point (turning point event versus no turning point event) and the dependent variables were grade 12 scores on psychological well-being, academic achievement, and parental relationship quality. Results of the MANOVA indicated no overall significant difference in psychological well-being, academic achievement, and parental relationship quality, $\Lambda = .99$, p = .32, partial $\eta^2 = .009$, between adolescents who reported a turning point and adolescents who did not report a turning point. Research question 6: Does church attendance moderate how meaning-making relates to psychological well-being, academic achievement, and parental relationship quality?

A MANOVA was conducted to determine whether adolescents' church attendance would moderate the association between meaning-making and psychological well-being, academic achievement, and parental relationship quality. Results indicated that there was no significant interaction between church attendance and meaning-making on psychological well-being, academic achievement, and parental relationship quality, $\Lambda = .99$, p = .431, partial $\eta^2 = .014$, indicating that church attendance did not moderate the results.

Discussion

The purpose of the present study was to examine meaning-making within turning point events and its association with psychological well-being, academic achievement, and parental relationship quality, with a sample of grade 12 high school adolescents. Among participants who reported a turning point event, adolescents who demonstrated meaning-making reported significantly more positive psychological well-being and parental relationship quality compared

to adolescents who did not report meaning-making. Importantly, these two groups did not differ on the outcome variables prior to their experience of the turning point event, when they were in grade 9. These findings are important as they indicate that adolescents who reported meaning-making in grade 12 were not necessarily the adolescents who had higher well-being and more positive parent-adolescent relationships already in grade 9, prior to the experience of their turning point. These results will be discussed further below. Six main research questions were examined in the present study and I will discuss each of these questions in turn.

The first question addressed the overall prevalence of meaning-making (lessons versus insights) among high school adolescents as well as the prevalence of lessons and insights across different types of turning points. In terms of the types of turning points reported, relationship and mortality events were most prevalent, a finding which is consistent with past research (Thorne et al., 2004; Thorne & McLean, 2002). Thus, it seems that conflicts and interpersonal encounters with significant others such as a boyfriend/girlfriend, family members, or friends, are experiences that hold grave meaning for individuals across the adolescent years. It is evident that the interpersonal experiences in which adolescents engage are perceived to have the potential to reshape and redirect their life course. Furthermore, insights were nearly three times more prevalent than lessons among relationship events, suggesting that such events provide a fertile context for meaning-making.

In terms of mortality events, including the loss of a loved one, life-threatening incidents, accidents, or illness, these are experiences that may have implications for one's identity or life story (Bagnoli, 2003; Pals, 2006). Furthermore, like relationship events, insights were more prevalent than lessons for mortality events in the present study. Why might the meaning

Experiences relating to death might challenge individuals' identity in a way that forces an individual to reflect on personal values and beliefs (Catlin, 2001; Park & Folkman, 1997). In fact, Michael and Snyder (2005) believe that it is this disruption in one's sense of self that facilitates meaning-making. Indeed, results of the present study showed that adolescents reported approximately eight times more insights than they did lessons for mortality events. Further research, however, is needed to determine what conceptualizes an individual's distorted identity or loss of a sense of self. In other words, can an individual's sense of distorted identity be reflected in the life story? And if so, what specific aspects of the life story are affected?

In contrast to the pattern of lessons and insights found among relationship and mortality events, lessons were more prevalent than insights among educational events. It appears that adolescents deduce very specific and concrete forms of meaning through events which relate to their educational experiences. Adolescents in the current study reported having a clear direction in terms of their career aspirations (such as deciding their major at university) through their educational turning points. Experiences within the classroom, and concerns about grades, comprise a very specific aspect of the adolescent's experience and as a result seem to have very specific implications. The purpose of such experiences, therefore, may be solely to enable adolescents to focus their energies and provide a clear sense of direction rather than having more general implications that affect their core values and beliefs, as would relationship and mortality events.

Moreover, travel events did not occur frequently in this sample of adolescents. Of the few participants who reported travel events, approximately half reported meaning-making. Among

those who reported meaning-making, however, all reported insights. It seems that the opportunity to experience a foreign culture may hold some potential in affecting adolescents' perceptions and attitude towards life. This finding seems to be in contrast to the findings from Thorne et al.'s (2004) study where meaning-making was most sparse among leisure events (with a sample of college students aged 18 - 23 years). It should be noted, however, that participants' travel experiences in the Thorne et al. study were grouped with "hobbies, celebrations, and sports," all categorized as "leisure events". On the other hand, the travel experiences reported in the present study did not appear to be purely rooted in leisure. In this study, adolescents' reports of travel were generally based on mission trips or class trips that seemed to have an experiential learning component. For example, one participant's travel event was, "I recently went to Guatemala on a mission trip. When I was there was I realized the importance of life and god and realized that material things we have back at home are meaningless." Future research should determine the extent to which travel experiences hold different meanings for different groups of adolescents. Specifically, researchers should attempt to distinguish between travel events that are comprised of an educational or specific learning component and travel events that are purely for leisure as these two experiences may be qualitatively different and have very different implications for meaning-making.

Taken together, the results presented thus far are consistent with results from existing research with university students, particularly the findings that relate to the prevalence of meaning-making within relationship and mortality events. Differences in turning point events between this sample of high school adolescents and other studies based on university students, however, become evident when autonomy and achievement events are considered. For example,

whereas McLean and Pratt (2006) found evidence for autonomy and achievement events among their sample of university students, these event types were rare among the high school adolescents in the present study. One reason for the lack of autonomy events may be that most high school students still live at home and have limited opportunities for autonomy in comparison to university students. Many university students move to a different city to attend university and live away from home for the first time - this experience is subsequently characterized as an autonomy event. Similarly, achievement events were rare among adolescents in this study. One reason might be that achievement events tend to include experiences such as graduation and college or university acceptance, which occur upon completion of high school. Still, experiences in which adolescents are exposed to different cultures seem quite meaningful among this high school sample.

The second and most critical research question assessed group differences in psychological well-being, academic achievement, and parental relationship quality between adolescents who reported meaning-making and those who reported no meaning from their turning points. Consistent with past research (McLean & Lilgendahl, 2008) and in line with my hypothesis, adolescents who were able to construe some form of meaning-making reported higher well-being scores compared to adolescents who reported no meaning. There may be several reasons for this finding. First, through meaning-making, individuals have the opportunity to understand their turning point experiences and subsequently assimilate such experiences into their sense of self. In trying to understand turning point experiences, adolescents are able to navigate their emotional reactions including possible feelings of guilt, shame, embarrassment

and resentment. In the absence of meaning-making, such emotions may compromise well-being but when addressed, a sense of clarity may become possible.

Second, counterfactual thinking is one mechanism that has been proposed as a possible pathway through which well-being is achieved. Counterfactual thinking is defined as the ability to generate alternative hypothetical situations relating to one's present situation or experience (Kray et al., 2010). For example, even amidst adverse life experiences (such a break-up with an intimate partner), generating ideas about the possibility of alternate undesirable life outcomes, (such as being terminally ill) may positively influence one's assessment of a present situation or experience. Kray et al. (2010) conducted four experiments with the purpose of determining whether counterfactual thinking predicted meaning-making among a sample of college students. Across these experiments, considering alternate outcomes (i.e. what could have been) when assessing life's experiences led participants to report significantly more meaning about their life experiences in the contexts of their choice of university, relationships, and turning point events (Kray et al., 2010).

Another mechanism through which meaning-making may relate to well-being is through the concept of redemption. Redemption has been defined as the ability to infer positive affect towards a life event that was originally negative (Pillemer, 2001). Some evidence for this concept was found in the current study particularly among participants who experienced the loss of a loved one or witnessed the illness of a family member. One participant, for example, reported that "when my mum was sick, I learned to appreciate things more" and another stated, "my close friend passed away a year ago and it has opened my eyes and I have matured; I am very thankful for what I have." Still, researchers should examine what variables or personal

characteristics may predict the ability to construct positive affect from a psychologically upsetting life event.

In spite of the substantial research linking meaning-making and psychological wellbeing, one of the most fundamental questions in the literature remains whether individuals who report meaning-making were already better adjusted psychologically prior to the experience of their life event. According to the results in this study, adolescents who reported either lessons or insights did not differ on any of the outcome variables prior to the experience of their turning point event, in comparison to adolescents who reported no meaning. This finding indicates that adolescents, who reported meaning-making and more positive well-being in grade 12 were not necessarily better adjusted psychologically in grade 9 prior to the experience of their turning point, compared to adolescents who did not report meaning-making. Similarly, adolescents who reported meaning-making and more positive parent-adolescent relationships in grade 12, were not necessarily the adolescents who enjoyed more positive parental relationship quality in grade 9, prior to their turning point event. These results suggest that irrespective of prior levels of wellbeing and parental relationship quality, meaning-making is positively associated with well-being and parental-adolescent relationship subsequent to the experience of a turning point event. There may be something meaningful about adolescents' search for meaning and their well-being that is not necessarily dependent upon prior psychological well-being and parental relationship quality.

Although some researchers have suggested that parental relationship quality may influence meaning-making (Dumas et al., 2009), findings of the present study highlight the need for future research to explore the mechanisms through which adolescents construct meaning-making, and the role of parental relationship quality both prior and subsequent to adolescents'

experience of a turning point event. Although the correlational nature of the current study prevents causal claims, the fact that differences in well-being and parental relationship quality were evident between meaning-making and no meaning-making groups subsequent to the experience of turning points, but not prior, suggest that there may be something inherently meaningful about the meaning-making process that leads to well-being. Future research should explore possible mechanisms through which psychological well-being may be enhanced through meaning-making.

Moreover, as predicted, adolescents who engaged in meaning-making reported more positive relationships with their parents than adolescents who did not report meaning-making. To my knowledge, only one other study to date has examined the association between parenting and meaning-making among adolescents. There are some significant differences between the two studies which should be noted. First, Dumas et al. (2009) examined meaning-making in the context of low points, defined as a period of high stress and negative affect, whereas the current study examined turning points (which may be positive or negative). Furthermore and perhaps most relevant to the discussion, is the fact that Dumas et al. (2009) did not assess parental relationship prior to participants' low point narratives. Participants completed parenting measures at age 17 and reported their low point narratives 10 years later. However, participants were instructed to "think back over your entire life and try to remember a specific experience or event in which you felt extremely negative emotions, such as deep sadness, fear, strong anxiety, terror, despair, guilt or shame" (p. 1536). It is quite possible that participants' low point experiences occurred prior to age 17 because the authors did not specifically require participants to recall a low point that occurred after the start of the initial study. As such, their finding that

positive parenting and ending resolution within low point narratives were significantly positively related does not account for possible pre-existing differences in parental relationship quality prior to the experience of a low point event. We are thus unable to conclude, based on these results, that positive parenting prior to a low point event influences participant's subsequent report of ending resolution.

The fourth research question addressed possible group differences on outcome variables between adolescents who reported lessons versus adolescents who reported insights. I hypothesized that within the meaning-making group, adolescents who reported insights (as construed as a more developmentally advanced form of meaning-making) might report more positive psychological well-being and parental relationship quality than adolescents who reported lessons. Contrary to expectations, no significant differences were found between the two groups. Although findings from past research have found that insight is significantly positively related to well-being (Dumas et al., 2009; McLean, Breen, & Fournier, 2010; McLean, & Lilgendahl, 2008) and other measures of adjustment, such as optimism (McLean & Pratt, 2006), grief and trauma resolution (Tebes et al., 2004), there were no differences in the type of meaning-making (specifically lessons and insights) reported on well-being and parental relationship quality with the high school sample in the present study. What distinguished adolescents who reported positive psychological adjustment and parental relationship quality was the ability to construe some form of meaning-making from their turning points, whether it was in the form of lessons or insights. One of the reasons for this finding could be the fact that studies that have assessed lessons and insights have used a more continuous measure of meaningmaking whereby meaning-making was coded as no meaning, lesson, vague meaning, and insight

(McLean & Pratt, 2006). Perhaps the use of such a coding scheme may have yielded different results among the meaning-making group. It should be noted, however, that the majority of the adolescents in this study reported insights and thus perhaps greater variability in lessons and insights would have yielded different findings.

Although there seems to be a general consensus among researchers regarding adolescents' ability to construct meaning-making from life experiences (Habermas & de Silveira, 2008; McAdams, 1985; McLean & Thorne, 2003), there remains within the literature some contention on the issue of when the life story develops. Habermas and Bluck (2000) argue that the essential social-cognitive skills required for the composition of a life story do not develop until adolescence. Although the authors acknowledge that children are quite capable of expressing recollective memories by recalling their life events, the authors emphasize that "the organizational means to connect single events with each other to attain global coherence in the life story emerge only in adolescence" (p. 752). Other researchers, however, have challenged this view and offer as evidence life stories from children as young as eight years (Reese, et al., 2010). Consequently, the contention regarding the emergence of the life story remains a task for researchers to resolve. Researchers have noted that it is important to determine the emergence of the life story because such a concept has important implications for psychological health and general well-being (Habermas & de Silveira, 2008; Habermas & Diel, 2010). In the current study, however, I only examined meaning-making in the context of adolescents' turning points, which represents only one aspect of the life story. Nevertheless, results of this study provide clear evidence for the implications of assessing meaning-making within turning points for adolescents in relation to their psychological well-being. This finding suggests that examining

meaning-making in the context of turning point events may be just as worthwhile as assessing global coherence within the context of life stories. To my knowledge, no study to date has examined whether meaning-making within turning points is predictive of global coherence within the life story. Since researchers have identified various components of the life story (e.g. low points, high points, and turning points), researchers should also examine the extent to which meaning-making within these components accurately predict coherence within the life story and the implications for psychological well-being.

The fifth research question addressed possible differences on measures of psychological well-being, academic achievement, and parental relationship quality between adolescents who reported a turning point and a comparable group of adolescents who did not report a turning point. In line with my hypothesis, results indicated no significant group differences. Why might adolescents who experienced a significant life-changing event not differ significantly from adolescents who did not have such an experience? This finding may be due to the immense variability that exists among individuals' experience of a turning point. As was evidenced by the results of the different types of turning point events reported in this study, as well as that of other studies (McLean & Pratt, 2006; Thorne et al., 2004; Thorne & McLean, 2002), adolescents experience a variety of different turning points ranging from mission trips overseas to the loss of loved ones. As a result, the process of meaning-making, which is believed to be the mechanism through which psychological well-being is enhanced, may be quite different across various types of turning points. In fact, results of this study showed that the prevalence of lessons and insights varied as a function of the turning point event experienced. Another reason why the mere experience of turning points did not yield any significant group differences on outcome variables may be that the emotions generated by turning points may vary based on the type of event experienced. Different turning points may generate different emotions which then lead individuals to have very different emotional reactions to those events. The mere experience of a turning point, therefore, may not be sufficient to propel changes in psychological well-being, academic achievement, and parental relationship quality among adolescents. Among those who have experienced a turning-point, however, it is clear that the ways in which adolescents assimilate these experiences may have immense implications, particularly for well being and parental relationships.

Strengths and limitations

The current study addressed some key limitations in the meaning-making literature, specifically as it relates meaning-making within the context of turning point events with a sample of non-university adolescents. Some limitations of the present study, nevertheless, are worthy of note. First, participants were limited in the amount of space they were given to articulate their turning point events. Participants were given four lines in which to respond to the turning point question. Although the use of an open-ended question provided the opportunity to elicit turning points from participants, a valid alternative is the interview method. Although more time consuming, interviews would have allowed participants to provide more detailed explanations of their turning point events. More importantly, since a large majority of participants from the current study provided turning point responses that were coded as *no event*, which comprised of responses that were too vague or unclear, the interview method would have allowed the researcher to ask follow-up questions that could potentially clarify some of those responses.

Second, the current study failed to assess the impact of time since the turning point on participants' psychological well-being and meaning-making. Feigelman et al (2009) noted the importance of time as a significant negative predictor of grief symptoms, and found that the first three years post death appeared to be the most challenging – at least among their sample of bereaved parents. Other researchers have also suggested that time since death plays a crucial role in determining how individuals grasp the impact of death (Michael & Snyder, 2005). On a broader scale, the experience of any life-altering event, it seems, requires adequate time for reflection - although the exact amount of time would be near impossible to determine. There is agreement, however, that the negative impact of significant life events tend to diminish with the passage of time. This time variable could not be assessed in the present study because there was not enough variability in the participants' time since their turning point event. Still, the influence of time remains an important variable to consider in the context of meaning-making and well-being.

A third limitation of this study relates to the lack of a culturally diverse sample. This study was based on a homogenous sample of predominantly white, Canadian-born high school adolescents and thus results cannot be generalized to an ethnically diverse population of adolescents. Cultural differences across ethnicity, social class, and communality may influence both the types of experiences that are deemed turning points, and the ways in which meaning-making is construed from these events. In one study, for example, Catlin (2001) examined the association between culture and grief with a sample of U.S. and Spain university students. Results indicated that the negative effect of grief on self-esteem was more profound among the Spaniards relative to the U.S. sample. Also, in contrast to the U.S. sample, Spaniards reported

higher liking and trust of others as a response to grief. Important questions relating to culture as a possible moderator in the relationship between meaning-making and psychological well-being and parental relationship quality could not be addressed in the present study due to the limited cultural variability in this sample. Future research is needed to address these questions.

A fourth limitation relates to the interpretation of these results. A significant association between meaning-making and psychological well-being, as well as meaning-making and parental relationship quality in grade 12 does not necessarily mean a causal relationship. Significant relationships between meaning-making ability and well-being may be due to their association with another "third variable". Further longitudinal research is needed to assess bidirectional relationships and to control for potential third variables between meaning-making and psychological well-being, as well as between meaning-making and parental relationship quality. Finally, long-term longitudinal research is needed in order to examine whether the significant associations between meaning-making and well-being, and between meaning-making and parental relationship quality, remain over time.

The present study also had a number of strengths. An important element of this study was the ability to determine whether participants who differed in their meaning-making differed on any key outcome variables prior to their turning point experience. Results of the present study indicated no differences on psychological well-being, academic achievement, and parental relationship quality prior to the experience of a turning point event (i.e. in grade 9) between adolescents who reported meaning-making and those who reported no meaning-making in grade 12. Future research is needed to determine the resources and individual characteristics that predict or facilitate meaning-making. Second, this study made a significant contribution to the

Undoubtedly, future research should further explore meaning-making with non-university adolescent samples, particularly to ascertain the extent to which high school students engage in meaning-making and the outcomes of their search for meaning, in comparison to post-high school adolescents. Such research will lead to a better understanding of the meaning-making process across various groups of adolescents.

Implications and directions for future research

The results of this study add to a growing body of literature on the meaning-making process and its associations with psychological well-being and adjustment, particularly among adolescents. This study is situated within the theoretical framework of McAdam's (1985) life story model of identity, which suggests that the structure and content of life narratives is a direct reflection of one's identity. Of particular relevance to the current study is the view that, within one's life story, the way in which individuals narrate their turning points have profound implications for individual's adjustment and psychological well-being.

In addition, some researchers have suggested that the benefits of meaning-making may place individuals at a higher level of psychological functioning than they were prior to the experience of a traumatic event — a concept referred to as post traumatic growth (Tedeschi & Calhoun, 2008). Post traumatic growth is defined as changes in one's psychological adaptation that is deemed positive and may be evident through one's own perceptions of and appreciation for life, richer and more meaningful interpersonal relationships, and an achieved sense of spirituality, following the experience of a traumatic event (Tedeschi & Calhoun, 2004). The experiences of such traumatic events are often construed as life changing and thus relate to our

discussion of turning point events. Furthermore, the positive gains or psychological growth experienced by individuals who have experienced distressing events relates to the view that meaning-making is meaningfully associated with improved well-being.

Still, the search for meaning is not a simple process and the assessment of such a complex construct remains a challenging task for researchers. For example, meaning-making may take on different forms and has been assessed in several different ways. Park (2010) differentiates between the meaning-making process and meanings-made. Park emphasizes a need for researchers to investigate the underlying cognitive processes that characterize meaning-making in addition to the products of the meaning-making process (such as lessons and insights).

Additionally, future research should explore the role of religion or spirituality in relation to meaning-making. Although the present study found no support for a moderating effect of church attendance, these results could be due to the type of measurement used. For example, as opposed to a measure of frequency of church attendance, a more valid measure could be one's level of spirituality or belief in a higher power.

Lastly, future research should examine how different assessments of meaning-making relate to each other. More specifically, the concepts of redemption and cognitive transformation should be explored in relation to lessons and insights to determine how these concepts relate to each other and how they are associated with well-being. Concepts of redemption and cognitive transformation have traditionally been assessed within more elaborate life narratives where participants were specifically instructed to indicate emotional reactions to their life experiences (McLean & Lilgendahl, 2008). Perhaps the use of these specific instructions would have made it possible to also code for redemptive narrative patterns and cognitive transformation in the

present study. An extension of the current study would be to elicit life stories from a culturally diverse sample of high school students to further examine these concepts.

Conclusion

This study examined meaning-making in the context of turning point events and its association with psychological well-being, academic achievement, and parental relationship quality, with a sample of grade 12 high school adolescents. Adolescents reported having experienced various events that were perceived to be life changing, ranging from mission trips to the loss of loved ones. Adolescents who reported meaning-making either in the form of learning a lesson or gaining insight from their turning points reported more positive psychological wellbeing and parental relationship quality. Most importantly, the adolescents who reported meaning-making and more positive parental relationships and psychological well-being did not differ on these measures prior to the experience of their turning point event. The concepts addressed in this study contribute not only to our conceptualization of trauma, stress, and coping but also have implications for how individuals offer support to others, or cope with their own life experiences on a daily basis. Counselors, parents, and other support networks can benefit from the knowledge that navigating life's unpredictable paths is not necessarily solely associated with negative affect. These findings provide some assurance that when high school adolescents engage in a more intimate exploration of their life experiences – particularly those that cause significant change – there is hope that some positive consequences may emerge both at the personal and relational level.

References

- Bagnoli, A. (2003). Imagining the lost other: The experience of loss and the process of identity construction in young people. *Journal of Youth Studies*, 6, 203 217.
- Bernsten, D., & Rubin, D. C. (2007). When a trauma becomes a key to identity: Enhanced integration of trauma memories predicts posttraumatic stress disorder symptoms. *Applied Cognitive Psychology*, 21, 417 431.
- Boehmer, S., Luszczynska, A., & Schwarzer, R. (2007). Coping and quality of life after tumor surgery: Personal and social resources promote different domains of quality of life.

 Anxiety, Stress, and Coping, 20, 61 75.
- Bruner, J. (1990). Acts of meaning. Cambridge, MA: Harvard University Press.
- Catlin, G. (2001). The role of culture in grief. *The Journal of Social Psychology*, 133, 173 184.
- Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2006). Sense-making, grief, and the experience of violent loss: Toward a mediational model. *Death Studies*, 30, 403 428.
- Draucker, C. B. (1989). Cognitive adaptation of female incest survivors. *Journal of Counselling and Clinical Psychology*, 57, 668 670.
- Dumas, T. M., Lawford, H., Tieu, T., & Pratt, M. W. (2009). Positive parenting in adolescence and its relation to low point narration and identity status in emerging adulthood: A longitudinal analysis. *Developmental Psychology*, 45, 1531 1544.
- Engels, R. C. M. E., Finkenauer, C., Meeus, W., & Deković, M. (2001). Parental attachment and adolescents' emotional adjustment: The associations with social skills and relational competence. *Journal of Counseling Psychology*, 48, 428 439.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York, NY: W.W. Norton.

- Feigelman, W., Jordan, J. R., & Gorman, B. S. (2009). How they died, time since loss, and bereavement outcomes. *Omega*, 58, 251 273.
- Feinberg, M. E. (2003). The internal structure and ecological context of coparenting: A framework for research and intervention. *Parenting: Science and Practice*, 3, 95 131.
- Gangstad, B., Norman, P., & Barton, J. (2009). Cognitive processing and posttraumatic growth after stroke. *Rehabilitation Psychology*, 54, 69 75.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence.

 *Psychological Bulletin, 126, 748 769.
- Habermas, T., & Diel, V. (2010). The emotional impact of loss narratives: Event severity and narrative perspectives. *Emotion*, 10, 312 323.
- Habermas, T., & de Silveira, C. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology*, 44, 707 721.
- Heaven, P. C. L., & Newbury, K. (2004). Relationships between adolescent and parental characteristics and adolescents' attitudes to school and self-rated academic performance.

 *Australian Journal of Psychology, 56, 173 180.
- Koss, M. P., & Figueredo, A. J. (2004). Change in cognitive mediators of rape's impact on psychosocial health across 2 years of recovery. *Journal of Consulting and Clinical Psychology*, 72, 1063 1072.
- Kray, L. J., George, L. G., Liljenquist, K. A., Galinsky, A. D., Tetlock, P.E., & Roese, N. J. (2010). From what might have been to what must have been: Counterfactual thinking creates meaning. *Journal of Personality and Social Psychology*, 98, 106 118.

- McAdams, D. P. (1985). Power, intimacy, and the life story. Homewood, IL: Dorsey Press.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5, 100 122.
- McAdams, D. P., Reynolds, J., Lewis, M., Patten, A. H., & Bowman, P. J. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Society for Personality and Social Psychology*, 27, 474 485.
- McLean, K. (2005). Late adolescent identity development: Narrative meaning making and memory telling. *Developmental Psychology*, 41, 683 691.
- McLean, K., & Breen, A. V. (2009). Processes and content of narrative identity development in adolescence: Gender and well-being. *Developmental Psychology*, 45, 702 710.
- McLean, K. C., Breen, A. V., & Fournier, M. A. (2010). Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well-being. *Journal of Research on Adolescence*, 20, 166 187.
- McLean, K. C. & Lilgendahl, J. P. (2008). Why recall our highs and lows: Relations between memory functions, age, and well-being. *Memory*, 16, 751 762.
- McLean, K.C., & Pasupathi, M. (2010). Narrative Development in Adolescence: Creating the Storied self. NY: Springer.
- McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaning-making in the turning point narratives of emerging adults. *Developmental Psychology*, 42, 714 722.
- McLean K. C., & Thorne, A. (2001). Manual for coding meaning making in self-defining

- memories (Adapted from coding manual for relationship memories).
- McLean, K. C., & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. *Developmental Psychology*, 39, 635 645.
- Michael, S. T., & Snyder, C. R. (2005). Getting unstuck: The roles of hope, finding meaning, and rumination in the adjustment to bereavement among college students. *Death Studies*, 29, 435 458.
- Moore, T., Norman, P., Harris, P. R., Makris, M. (2006). Cognitive appraisals and psychological distress following venous thromboembolic disease: An application of the theory of cognitive adaptation. *Social Science & Medicine*, 63, 2395 2406.
- Pals, J. L. (2006). Narrative identity processing of difficult life experiences: pathways of personality development and positive self-transformation in adulthood. *Journal of Personality*, 74, 1079 1110.
- Park, C. L. (2010). Making sense of the meaning-making literature: An integrative review of meaning making and its effect on adjustment to stressful life events. *Psychological Bulletin*, 136, 257 301.
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology*, 1, 115 144.
- Phelps, L. F., Williams, R. M., Raichle, K. A., Turner, A. P., & Ehde, D. M. (2008). The importance of cognitive processing to adjustment in the 1st year following amputation.

 *Rehabilitation Psychology, 53, 28 38.
- Pillemer, D. B. (2001). Momentous events and the life story. *Review of General Psychology*, 5, 123 134.

- Reese, E., Yan, C., Jack, F., & Hayne, H. (2010). Emerging identities: Narrative and self from early childhood to early adolescence. In K.C McLean, & M. Pasupathi. (Eds.), Narrative development in adolescence: Creating the storied self (pp. 23-43). NY: Springer.
- Roche, K. M., Ahmed, S., & Blum, R. W. (2008). Enduring consequences of parenting for risk behaviors from adolescence into early adulthood. *Social Science & Medicine*, 66, 2023 2034.
- Russell, C. S., White, M. B., & Parker, White, C. P. (2006). Why me? Why now? Why multiple sclerosis?: making meaning and perceived quality of life in a Midwestern sample of patients with multiple sclerosis. *Families, Systems, & Health, 24*, 65 81.
- Shek, D. T. L. (2002). The relation of parental qualities to psychological well-being, school adjustment, and problem behaviour in Chinese adolescents with economic disadvantage.

 The American Journal of Family Therapy, 30, 215 230.
- Sutin, A. R., Costa, P. T., Wethington, E., & Eaton, W. (2010). Perceptions of stressful life events as turning points are associated with self-rated health and psychological distress. *Anxiety, Stress, & Coping*, 1-14.
- Tebes, J. K., Irish, J. T., Vasquez, M. J. P., & Perkins, D. V. (2004). Cognitive transformation as a marker of resilience. *Substance Use & Misuse*, 39, 769 788.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15, 1 18.
- Tedeschi, R. G., & Calhoun, L. G. (2008). Beyond the concept of recovery: Growth and the experience of loss. *Death Studies*, 32, 27 39.
- Thorne, A., McLean, K. C. (2002). Gendered reminiscence practices and self-definition in late

- adolescence. Sex Roles, 46, 267 277.
- Thorne, A., McLean, K. C., & Lawrence, A. M. (2004). When remembering is not enough:

 Reflecting on self-defining memories in late adolescence. *Journal of Personality* 72, 513

 541.
- Tolstikova, K., Fleming, S., & Chartier, B. (2005). Grief, complicated grief, and trauma: The role of the search for meaning, impaired self reference, and death anxiety. *Illness, Crisis* & *Loss*, 13, 293 313.
- Willoughby, T., & Hamza, C. A. (2010). A longitudinal examination of the reciprocal effects among parenting behaviors, adolescent disclosure and problem behaviors. *Journal of Youth and Adolescence*.

Table 1
Summary of measures for grade 9 and grade 12

Variable	Measure	Items	Items Scale Range		Grade 9		Grade 12	
				Alpha	M (SD)	Alpha	M (SD)	
Age	Age	1		-	14 years, 1 month	<u>-</u>	17 years, 5 months	
Sex	Sex	1	1(male) or 2 (female)	-	57% female	-	57% female	
Parental education	Educational Attainment	2	1(did not finish high school), 5 (completed a university undergraduate degree) to 8 (don't know)		3.41 (1.48)	-		
Psychological well-being	Daily hassles	20	1 (almost never bothers me) to 3 (often bothers me)	.80	1.79 (0.21)	.90	1.87 (0.21)	
	Self-esteem	10	1 (strongly agree) to 5 (strongly disagree)	.91	2.15 (0.33)	.89	2.24 (0.37)	
	Social anxiety	14	1 (almost never or never) to 4 (almost always or always)	.90	1.75 (.21)	.92	1.72 (0.15)	
	Depression	20	1 (none of the time) to 5 (most of the time)	.85	2.02 (0.65)	.94	2.23 (0.29)	
Academic Achievement		1	A+ (90% – 100%) to Below 50%	-	75%	-	75% (0.89)	
Parental relationship	Mother	17	1 (almost always or always) to 4 (almost never or never)	.93	1.96 (0.29)	.92	2.04 (0.26)	
quality	Father	17	1 (almost always or always) to 4 (almost never or never) 56	.92	2.16 (0.39)	.90	2.2 (0.35)	

N = 209. Higher scores on psychological well-being composite and parental relationship quality indicate more positive psychological well-being and more positive parent-adolescent relationship quality.

Table 2

Descriptions of Subcategories, Examples, and Frequencies of Turning Point Event Type and Meaning-making Coding Categories

Categories	Examples	Prevalence	
Turn	ing point event type		
Relationship events Interpersonal encounters or conflicts with friends, family members; changes in relationships and family structure	"Meeting my best friend made me a more outgoing person, I enjoy life a lot more."	47 (23%)	
Travel events Travel experiences; exposure to a different culture/country	"Going to the Dominican to do development work."	9 (4%)	
Moving events Permanent relocation in a different place either alone or with family	"Moving to another country- different place, mix of cultures, felt very strange and mistrustful."	9 (4%)	
Mortality/ Life threatening events Illness, accidents, bereavement, near- death/ life threatening experiences either to the individual or others	"My close friend passed away a year ago and it has opened my eyes and I have matured. I am very thankful for what I have."	56 (27%)	
Educational events Academic experiences, a specific class, concerns about grades, decisions regarding career and university choices	"Physics class – changed my outlook on engineering to a business degree."	13 (6%)	
Other Trouble with the law, drugs, spirituality	"I got arrested for prostitution."	24 (12%)	
No Event No specific events; too vague/ unclear	"Not sure" "High school"	51 (24%)	
Me	aning-making type		
Lesson Change in a specific behavior towards a specific event	"My mum died in a car accident. A drunk driver killed her. I do not drink anymore."	17 (8%)	
Insight Emotional or psychological transformation; global, abstract change in attitude or behavior towards others, or life in general	"My mum got sick and made me appreciate my loved ones more."	59 (28%)	
No meaning No lesson or insight; turning point event merely stated	"When my parents got divorced."	133 (64%)	

57

Table 3
Frequency of Turning Point Events Across Males and Females

Turning Point Events	Male	Female	Overall
Relationship events	19	28	47
Travel events	1	8	9
Moving events	3	6	9
Mortality/ Life- Threatening	15	41	56
Educational	7	6	13
Other	18	6	24
No Events	28	23	51
Total	91	118	209_

N = 209

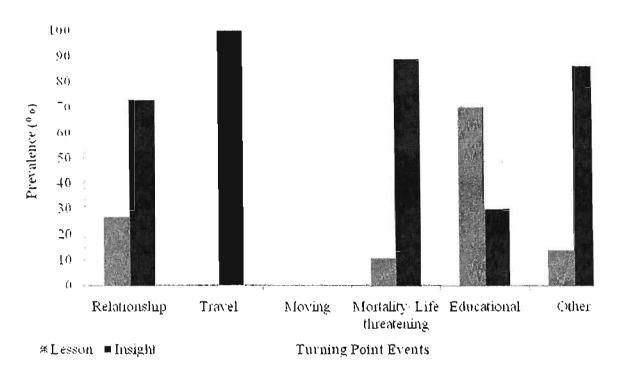


Figure 1. Prevalence of lessons and insights across various turning point events. *Note that percentages for each type of turning point events are independent of other types of events.

APPENDIX A - PARTICIPANT ASSENT FORM

Youth Lifestyle Choices - Community University Research Alliance (YLC-CURA) Brock University - Youth Resilience Questionnaire

I understand that I am agreeing to participate in this study which will involve answering a series of questions concerning lifestyle choices and experiences. I understand that this study also will identify where gaps may exist in services available to youth in the Niagara Region, and as such, will be of benefit to me. This study is being conducted by the YLC-CURA (email at cura@www.brocku.ca).

- I understand that I will be asked to answer a number of questions about lifestyle choices and experiences (e.g., questions involving computer use, aggression, victimization, school culture, substance use, daily hassles, family lifestyle, anxiety, friendship quality, etc.).
- I understand that my participation in this study is voluntary and that I may withdraw from the study at any time and for any reason without penalty. I understand that the questionnaire will take about 45 minutes to complete. Students who choose not to complete the questionnaire will have 45 minutes to complete an alternative educational activity.
- I understand that my responses to the questionnaire may be matched to previous year's questionnaires as part of this long-term study.
- I understand that there is no obligation to answer any question in the questionnaire that I consider invasive or inappropriate.
- I understand that my parents or guardians have been informed about the study and have consented to my participation, although this does not mean that I must participate.
- I understand that only the YLC-CURA researchers will have access to the data. I understand that all data will be kept confidential except in the case where I provide information that indicates that I am in danger of being abused.
- I understand that there are very minimal potential risks to my participation in this study. Based on the YLC-CURA's experience with youth filling in similar surveys in 2001, 2003, and 2004, I understand that I am not expected to experience any negative feelings about the survey. In case I have questions or concerns, however, I understand that the YLC-CURA research staff will be available in the classroom to answer questions and will provide all students with a bookmark that includes phone numbers of youth-serving agencies in the Niagara Region.
- I understand that only group data will be reported and no information about individual responses will ever be given to schools, teachers, or anyone else. The data, with identifying information removed, will be retained indefinitely and will be securely stored in a locked office in the research laboratory. Group data only may be published, presented at conferences, used to evaluate programs, or used for secondary data analyses by other researchers. Feedback and information about the results of this study will be posted on the YLC-CURA website (www.brocku.ca/cura) in September 2006.
- One of the most valuable parts of our research is that we are able to describe the ways in which young people change and stay the same as they get older. We know that the time between high school and young adulthood is a very unique time of life and we think that it is important to find out more about it. In order to see how people develop, we need to have future information from the same people who gave us information during high school thus, no one can take your place in this study! We would like to ask you about your experiences again after you graduate, as well as provide you with ongoing feedback about the results of our study.
- If you would be willing for us to contact you in a year or two, please provide us with your email address

•	Email addresses only will be used to send you information about the results of our study and to ask whether you would be interested in being
	part of our study in the future. Your email address will be kept strictly confidential in a locked cabinet in our lab and no researcher other
	than the primary researcher will have access to that information.
	Participant Signature Date
	This study has been reviewed and approved by the Brock Research Ethics Board (File # 00-116). If you have any questions or concerns
	about your participation in this study, you may contact Michael Busseri at 905-688-5550, ext. 4798 (or by email at cura@www.brocku.ca),
	or the Research Ethics Officer at 905-688-5550, Ext. 3035. We also have a website, www.brocku.ca/cura, that you can access for more
	information. Please keep a copy of this form for your records.

Teena Willoughby, Ph.D.

Professor, twilloug@brocku.ca

905-688-5550, ext. 4281



Youth Lifestyle (hoices Companity Liniously Recently Alliance

The YLC-CUPA to a tong-torm at a tegic partnership between number of Brock University (acuty & Magara Region Community agencies to better understand (exiltence and youth lifestyle choices Anothrugged Indonés

- · Adolescent's Family Support Services of
- Boys and Girts Club of Niagara
 Brock University
 Business Education Council of Magara
- a Constitute Red Cross
- Contre for Addiction & Mental Health
- 4 City of \$1. Catharines
- City of Walland . Centro De Santo Communisatatre
- Contact Nagar
- District School Board of Ningara Early Childhood Community
- valorment Pantra
- Fornity & Children's Services/Family Counselling Centre
- & GLRTO Outreach Project of Niseara
- Institute for Enterprise Education
- . HENTHOUSE MISSAFA
- Ministry of Corrections Probetion and Parole Services A Niagara Alcohol & Orug Assessment
- . Magare Catholic Datrict School Board
- Mingara Centre for Youth Care
 Mingara District Health Council
- . Mazam Augional Police
- Operation Springboard
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Canada Centre of Excellence for Youth Enginement Contact Information

YLC-CURA Brock University St. Cathannes, ON

L25 3A1
Priorie (905) 688-5550
Ext. 4614
Fext. (905) 688-3344

Empit cura@www.tvocker.ca Web.wwwylo-cura ca YLC-CURA is a

Social Sciences & Humanities Research

APPENDIX B - PARENT INFORMATION LETTER

Parent/Guardian:

Since January 2000, the Niagara Catholic District School Board has been an active member of the Youth Lifestyle Choices - Community University Research Alliance (YLC-CURA), which consists of 31 community agencies and 15 faculty at Brock University. Our goal is to better understand youth lifestyle choices, both those involving risk and those that are positive. In order to do this, we are following youth in Niagara as they continue through adolescence. We believe that if we can gain an understanding of these choices and of the protective factors that youth will need in life, we can begin to develop more effective ways to enhance their coping skills and enable youth to make positive lifestyle choices.

In 2003 and 2004, YLC-CURA surveyed over 7,000 youth in the Niggara Region, and may have included your child in the study. The information gathered has been published in many reports, and used by multiple community agencies in Niagara to improve their programming and to apply for more government funding. This information is also being used to enhance curriculum with relevant statistics that reflect Niagara youth lifestyles. With continued research, we will be in a unique position to explore the pathways students take as they progress through adolescence. We are writing to ask your permission for your child to participate in completing the survey again. The survey will take approximately 45 minutes to complete. Completing the survey again is critical in order to examine how youth change in their perceptions as they go through adolescence. Your child will be asked to answer a number of questions about lifestyle choices and experiences (e.g., questions involving computer use, aggression, victimization, school culture, substance use, daily hassles, family lifestyle, depression, anxiety, friendship quality, etc.). A copy of the questionnaire is available in the school office. This information will allow us to understand how youth make decisions about lifestyle choices and how transition periods, such as entry to the secondary school system, affect those decisions.

This project has received ethics clearance from the Brock University Committee on Research with Human Participants, and the Niagara Catholic District School Board, and is funded by the Social Sciences and Humanities Research Council of Canada. The project will be implemented during the Teacher Advisory Group (TAG). The content of the questions address issues found in provincial curriculum. The questionnaire acts as an educational and discussion tool for teachers, students, and parents.

All of the information that we record will be kept completely confidential. Only group data will be reported. This group data may eventually be housed in an archive, again with no identifying information. You and your child will be free to withdraw your participation at any time without penalty. More specifically, nonparticipation will not affect your child's grades in any way. Students who do not wish to complete the survey will complete an alternative educational task.

We hope that you and your child will be willing to participate in our project and we look forward to sharing our findings with you at the end of this project. We have attached a consent form for you to let us know if you wish your child to participate in this project. ONLY return the form if you do NOT wish your child to participate. If you do NOT want your child to participate please sign and return the attached form to the Student Services Department in your child's school by April 7, 2006. We also will ask your child to provide assent to participating in the study.

If you have any questions or concerns about your participation in the study, you may contact Michael Busseri at 905-688-5550, ext. 4798 (or by email at cura@www.brocku.ca), or the Research Ethics Officer at 905-688-5550, Ext. 3035. For more information, you can access our website www.brocku.ca/cura. Thank you for considering our project.

APPENDIX C - PARENT CONSENT FORM

Youth Lifestyle Choices: Community University Research Alliance BROCK UNIVERSITY - YOUTH RESILIENCE QUESTIONNAIRE

I understand that this research study in which I have agreed to allow my child to participate is designed to better understand factors that foster healthy lifestyle choices in adolescence. I understand that this study also will identify where gaps may exist in services available to youth in the Niagara Region, and as such, will be of benefit to my child. This study is being conducted by the YLC-CURA (Professor Willoughby, email address twilloug@brocku.ca, 905-688-5550, ext. 4281).

- I understand that my child will be asked to answer a number of questions about lifestyle choices and experiences (e.g., questions involving computer use, aggression, victimization, school culture, substance use, daily hassles, family lifestyle, anxiety, friendship quality, etc.).
- I understand that a copy of the questionnaire is available for inspection in the school office. The questionnaire will take approximately 45 minutes to complete. Students who do not have parental permission or who choose not to complete the questionnaire will have 45 minutes to complete an alternative educational activity.
- I understand that my child's questionnaire may be matched to previous year's questionnaires as part of this long-term study.
- I understand that my child's participation in this study is voluntary and that my child or I may withdraw from the study at any time and for any reason without penalty.
- I understand that there is no obligation for my child to answer any question in the questionnaire that they consider invasive or inappropriate.
- I understand that there are very minimal potential risks to my child to participate in this study. Based on the YLC-CURA's experience with youth filling in similar surveys in 2001, 2003, and 2004, I understand that my child is not anticipated to experience any negative feelings about the survey. In case he or she has questions or concerns, however, I understand that the YLC-CURA research staff will be available in the classroom to answer questions and will provide all students with a bookmark that includes phone numbers of youth-serving agencies in Niagara. I understand that all data will be kept completely confidential, except in the rare instance where a child indicates that they may be in danger of being abused.
- I understand that only group data will be reported and no information about individual responses will ever be given to schools, teachers, or anyone else. I understand that I will not have access to my child's responses. The data, with identifying information removed, will be retained indefinitely and will be securely stored in a locked office in the research laboratory. Group data only may be published, presented at conferences, used to evaluate programs, or used for secondary data analyses by other researchers. Feedback and information about the results of this study will be posted on the YLC-CURA website (www.brocku.ca/cura).
- I understand that my child will be asked if they would like to participate again in the study several years after they graduate so that we can understand more about the ways in which young people change and stay the same as they get older. I understand that my child will be asked if they would be willing to provide their email address, if applicable, so that we can contact them later. I understand that their email address will be kept strictly confidential in a locked cabinet in our lab no researcher other than the primary researcher will have access to that information. I understand my child's email address only will be used to initiate contact but that my child will have to give permission before being asked to answer any survey questions.
- This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics Board. (File #00-116)

	dent Services Department of your child's school by April 7, 2006, ONLY if you do NOT want your Child's name (first and last)
Child's Birthdate Date	Parent/Guardian Signature

If you have any questions or concerns about your participation in the study, you may contact Michael Busseri at 905-688-5550, ext. 4798 (or by cmail at <u>cura@www.brocku.ca</u>), or the Research Ethics Officer at 905-688-5550, Ext. 3035. We also have a website, www.brocku.ca/cura that you can access for more information. Please keep a copy of this form for your records.

APPENDIX D



Brock University

Senate Research Ethics Board 3205/4315, Room C315 Extensions

FROM:

David Butz, Chair

Senate Research Ethics Board (REB)

TO: Teena Willoughby, Child and Youth Studies

FILE: 00-116, WILLOUGHBY

The Brock University Research Ethics Board has reviewed the revised research proposal:

"Enhancement of youth resiliency and reduction of

harmful behaviours leading to healthy lifestyle choices"

The Research Ethics Board finds that your revised proposal conforms to the Brock University guidelines set out for ethical research.

* Accepted as clarified

<u>Please note</u>: Any Changes or Modifications to this approved research must be reviewed and approved by the committee. If so, please complete form #5 - Request for Ethics Clearance of a Revision or Modification to an Ongoing application for Ethics Review of Research with Human Participants and submit it to the Chair of the Research Ethics Board. You can download this form from the Office of Research Services or visit the web site:

http://www.BrockU.CA/researchservices/mainethicsformpage.html

DB/dvo

APPENDIX E – SURVEY QUESTIONNAIRE

	emographics					
1.	How old are you?	0 13 0 14	O 15 (O 16	O 17	O 18 or over
2.	Are you male or female?	○ Male	○ Female			
3.	Were you born in Canada	a? O Yes	O No → If	f No, how	long ha	ve you been in living in Canada?
5.	 Did not finish hig Finished high scl Some college, un Completed a coll dressing) Completed a uni Completed a pro Still going to sch Don't know What is the highest level of Did not finish high sc Finished high sc Some college, u 	h school nool nool niversity, or appre ege/apprenticesh versity undergrad fessional degree ool of education your h school hool niversity, or appre lege/apprenticesh versity undergrad fessional degree	enticeship prog nip diploma (e. luate degree (e.g., masters FATHER/ster enticeship pro nip diploma (e.	gram .g., electr s, PhD, m ofather (r gram .g., elect	icían) ar nedical d nale gua rician) a	ardian) completed? nd/or technical diploma (i.e. graphic design, hair
Т	urning Points					
	ave you ever experienced a es, what was the turning poi	_		-		you thought about something or how you behave? If rning point?

Depression

		NONE OF THE TIME (LESS THAN 1DAY)	RARELY (1-2 DAYS)	SOME OF THE TIME (3-5 DAYS)	OCCASIONALLY (6-9 DAYS)	MOST OF THI TIME (10-14 DAYS)
1.	I was happy	0		О	O	0
2.	I did not feel like eating; my appetite was poor			О	О	O
3.	I felt that I could not stop feeling sad, even with help from my					
	family and friends			O	О	0
4.	I felt that I was just as good as other people					O
5.	I had trouble keeping my mind on what I was doing					O
6.	I felt depressed				О	O
7.	I felt that everything I did was an extra effort				O	O
8.	I felt hopeful about the future					O
9.	I thought my life had been a failure			О		O
10.	I felt fearful		O			O
11.	My sleep was restless		О	О		O
12.	I was bothered by things that usually don't bother me					O
13.	I talked less than usual					0
14.	I felt lonely					O
15.	People were unfriendly		О		О	O
16.	I felt like doing nothing			О		0
17.	I had crying spells	O	O	0		O
18.	I felt sad		O	O		0
19	I felt that people disliked me	О	O	O		0
20.	I enjoyed life	O	O			O

Daily hassles

PAR	Below is a list of daily hassles that commonly bother stude	ents. Please inc	dicate how ofter	n each one bothers yo	u.
		ALMOST NEVER BOTHERS ME		OFTEN BOTHERS	
1.	Classroom was too noisy				
2.	Not having enough time				
3.	Not having enough money				
4.	My weight		O	O	
5.	Mean/strict teacher				
6.	Having homework every day				

7.	Not enough close friends	О	O	
8.	Not enough time to talk to friends			
9.	Too few dates	O		
10.	How I look			
11.	Problems with classmates			
12.	Problems with friends			
13.	Getting to class on time		O	
14.	Problems with boyfriend/ girlfriend			
15.	Problems with family		0	
16.	Being lonely			О
17.	Others' opinions of me			
18.	Not enough sleep	O		
19	Taking tests			
20.	Household chores			

Self-esteem

PAR	Fill in the answer that best describes the way you feel					
		STRONGLY AGREE	AGREE	NEITHER AGREE	DISAGREE	STRONGLY DISAGREE
1.	On the whole I am satisfied with my life				0	
2.	I feel that I have a number of good qualities					
3.	I am able to do things as well as most people					
	, ,	O	О	O	0	O
4.	I feel I do not have much to be proud of					0:
5.	I feel useless at times					
6.	I feel that I am a person of worth, at least equal with others		O		O	O
7.	I wish I could like myself more	O			O	O
8.	All in all, I tend to feet that I am a failure	O			O	0
9.	At times I think that I am no good at all		0	O		O
10.	Ltake a positive attitude toward myself	🔾	0	Q	0	

Social anxiety

PAR	TF	In the chart below, fill in the answer that best suits you.					
			ALMOST NEVER OR NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS OR ALWAYS	
1.	I'm quiet	when I'm with a group of other people my age	,,O.,,	О	О	O	
2.		k to other people my age that I know really well					
3.	I feel tha	at other people my age talk about me behind my back					
4.		about what other people my age think of me					
5.	I feel tha	at other people my age are making fun of me					
6.	I am afra	aid that other people my age will not like me	0		,0		
7.	If I get in	nto an argument with another person, I worry that he or					
	she won	't like me	0	O	O	O	
8.	I worry a	about being teased	0		0		
9.		y with people my age that I don't know	0				

10.	well	O		O	0
11.	I worry about doing something new in front of other people my age				
12.	I feel shy even with other people my age I know well	О		О	O
13.	It's hard for me to ask other people my age to hang out with me		O		О
14.	I'm afraid to invite other people my age to my house because they might say no		O	O	,O
18.	I felt sad				
19	I felt that people disliked me				
20.	I enjoyed life	О	О	О	O <i>.</i>

Parental relationship quality - MOTHER

Think about your mother/ stepmother (female guardian) whom you live with the MOST and answer these questions. If you have NO contact with your mother/stepmother or female guardian please SKIP these questions and go unto the next section.

<u> </u>	The contact that your monotophication of formate guardi	an produce or an	117000 9400410	no anna ga annea	#10 110/11 000#01
		ALMOST ALWAYS OR ALWAYS	OFTEN	SOMETIMES	ALMOST NEVER OR NEVER
1.	My mother trusts my judgment	0	О		О
2.	My mother accepts me as I am	О		0	О
3.	I like to get my mother's point of view on things I'm concerned				
	about	O	O		
4.	My mother can tell when I'm upset about something	O	О	О	
5.	Talking over my problems with my mother makes me feel				
	ashamed or foolish				
6.	My mother expects too much from me		O		
7.	I get upset a lot more than my mother knows about		0		
8.	When we discuss things, my mother cares about my point of view.	О			
9.	My mother has her own problems, so I don't bother her with mine				
10.	I tell my mother about my problems and troubles				O
11.	I feel angry with my mother		О		O
12.	My mother understands me		О		
13.	I trust my mother	О	О		О
14.	My mother doesn't understand what I'm going through these days				О
15.	I get upset easily around my mother				O
16.	I don't get much attention from my mother				О
17.	I can count on my mother when I need to get something off my				
	chest				

Parental relationship quality - FATHER

PART H

Think about your mother/ stepmother (female guardian) whom you live with the MOST and answer these questions. If you have NO contact with your mother/stepmother or female guardian please SKIP these questions and go unto the next section.

		ALMOST ALWAYS OR ALWAYS	OFTEN	SOMETIMES	ALMOST NEVER OR NEVER
1.	My father trusts my judgment	Ö			О
2.	My father accepts me as I am	O	O	O	
3.	I like to get my father's point of view on things I'm concerned	_	-		
	about				
4.	My father can tell when I'm upset about something		О	·	
5.	Talking over my problems with my father makes me feel ashamed	О			0
	or foolish				
6.	My father expects too much from me	O		0	О
7.	I get upset a lot more than my father knows about		0		
8.	When we discuss things, my father cares about my point of view.	O	O		O
9.	My father has her own problems, so I don't bother her with mine				
10.	I tell my father about my problems and troubles	Ö	Ö	0	
11.	I feel angry with my father	Ö	,O	0	
12.	My father understands me	Ö	Ö	Ö	0
13.	trust my father	O			0
14.	My father doesn't understand what I'm going through these days	O		O	
15.	I get upset easily around my father				O
16.	I don't get much attention from my father	O	O		О
17.	I can count on my father when I need to get something off my	O	O		
	chest				

Academic Achievement

PART I	Fill in the answer that best describes you

1. What marks do you usually get in school?

○ A+ (90% - 100%) ○ A (80% - 89%) ○ B (70% - 79%) ○ C (60% - 69%) ○ D (50% - 59%) ○ (BELOW 50%)

Church Attendance

PART J Fill in the answer that best describes you							
low often have you gone to a church/synagogue/temple in the last month?							
O Everyday	O Several times a week	Once a week	O Once or twice a month	O Never			

APPENDIX F

Coding Manual for Turning Point Event and Meaning-making

Adapted from McLean & Pratt (2006) and Manual for Coding Meaning-making in Self Defining

Memories by McLean & Thorne (2001)

Royette Tavernier

Brock University, St Catharines, ON, Canada

July 2010 – Revised October 18, 2010

Coding Manual for Turning Point Events

According to Pillemer (2001) "turning points are concrete episodes that are perceived to suddenly redirect a life plan." Thus, the experience of a turning point event may result in fundamental changes in one's beliefs, attitudes and behaviours. To elicit narrative accounts of turning point events from grade 12 adolescents the following question was posed to participants: "Have you ever experienced a major turning point in your life that changed the way you thought about something or how you behaved? If yes, what was the turning point?"

Turning point narratives were then coded for the following four elements:

- I. *Event*: What type of event characterized the turning point?
- II. Meaning-making type (lessons versus insights): What meaning, if any, was derived from the turning point event?
- 111. Meaning-making: Lesson or Insight combined as one group, versus No Meaning group.
- 1V. Turning Point: Whether or not participant reported a turning point event.

I. Event

Guidelines for coding turning point event type were originally based on McLean and Pratt's (2006) four turning point categories namely: relationship events, achievement events, autonomy events, and mortality/life threatening events. To be coded as a particular turning point event type, participants' responses must have included a statement that explicitly stated the occurrence of a specific event or a series of related events. Responses that were too vague or did not seem to contain a specific event were coded as Not Applicable for turning point event. In

cases where the respondent provided multiple turning points within their response, only the first turning point was coded for turning point event and meaning-making, based on the assumption that the most salient turning point was reported first.

1 = Relationship events

According to McLean and Pratt (2006), relationship events focused on an interpersonal encounter, with an emphasis on relational concerns (e.g. falling in love, divorce). For the purposes of the current study, this definition was adapted to include interpersonal encounters known to be evident among young adolescents such as conflict with friends, peers, or parents; changes in intimate relationships such as dating or breaking up, loss of friendships, and changes in family structure.

Examples of relationship events:

- a) "When I was in elementary, I got made fun of for 6 years to the point of hating myself. It made me never want to make fun of someone ever, no matter how mean they are."
- b) "When I met my fiancé, he changed me and made me realize I needed to be nicer to people and in general."
- c) "Parents' divorce"

2 = Travel events

This category emerged from the data as participants related their actual travel experiences. Travel events included events that related to one's opportunity to travel abroad and were exposed to a different culture through mission trips or volunteer abroad opportunities.

Examples of Travel events:

- a) "I recently went to Guatemala on a mission trip. When I was there I realized the importance of life and god and realized that material things we have back at home are meaningless."
- b) "An epiphany while I was on a trip to South Africa...it put things in perspective for me."

3 = Moving events

This category comprised events that related to one's permanent relocation in a different place, whether as an individual or with family; including moving to a different city or country.

Examples of Moving events:

- a) "left home and moved in with a friend."
- b) "Moving from St. Catharines to Mississauga."
- c) "I thought my life was going to be in Mexico. Then my life turned because I moved here and I had to learn a new language and start from zero."

4 = Mortality/ Life Threatening events

According to McLean and Pratt (2006), "mortality events emphasized one's own or another's mortality, including stories about accidents, death, or near death experiences." For the

current study, this category was expanded to include any illness or disease whether experienced by the participant or by a close friend or family member.

Examples of Mortality/Life threatening events:

- a) "When my nonna Grace passed away."
- b) "I began suffering from depression, it made me very negative but I am still trying to overcome and find positive attitudes."
- c) One of my friends passed away."

5 = Educational events

This category was originally based on McLean and Pratt's (2006) achievement events category. According to the authors, "achievement events emphasized effortful attempts at mastering vocational, physical, social, or spiritual goals, such as getting into college and excelling at sports, work, or leadership" (McLean and Pratt, 2006). For the purposes of the current study, however, this category was renamed Educational events. The adapted definition made it possible to include turning points relating to academics and school experiences that may not necessarily be tied to any specific achievement; for example, the experience of one particular class that may have inspired the participant, concerns about grades, decisions regarding career choices or university plans.

Examples of Educational/School-related events:

a) "Physics class – changed my outlook on engineering to a business degree."

- b) "My English lit class, it showed me that people are a certain way for different/ personal reasons that I never thought about before."
- c) "In grade 10 I felt like I was doing nothing with my life and got tired of it. So I changed my physical fitness and all my grades. From 50% in applied to 80's% in university. And also one sport to 7 sports. Also changed my friends."

6 = Other

Some participants reported turning point events that did not fit into any of the above five categories. All events under this category were examined for emerging themes but there were not enough cases to form a separate category.

Breakdown of 'Other' events:

- a) Spiritual (5) e.g. "Grade 11, read 'the God Delusion' by Richard Dankins & 'God is not Great' by Christopher Hitchens. This changed how I thought about the world, religion, morality. Gave me perspective on life."
- b) Trouble with the law (5) e.g. "I got arrested for prostitution."
- c) Pregnancy concerns (2) e.g. "Thinking that I may be pregnant."
- d) Drugs (3): e.g. "is when I experimented with LSD it really changed my view on things."

7 = Not Applicable

Responses that did not include a specific event or series of events, were incomplete or too vague, were classified as *Not applicable*. This category also included responses that comprised

some form of meaning but in the absence of a specific event or series of related events. Thus, meaning-making was coded independently of turning point event.

Examples of "Not Applicable":

- a) "Not sure."
- b) "High school."
- c) "Friends."
- d) "Growing up; coming-of-age; Take time to realize."

Scoring Turning Point Events

- 1 = Relationship events
- 2 = Travel events
- 3 = Moving events
- 4 = Mortality/ Life Threatening events
- 5 = Educational events
- 6 = Other (such as spiritual, trouble with the law, etc)
- 7= Not Applicable

II. Meaning-Making type

Guidelines for coding meaning-making were based on the *Manual for Coding Meaning making in Self-Defining Memories* by McLean & Thorne (2001). Participants need not explicitly state that he or she learned a lesson or gained insight from a particular experience. Instead, key phrases such as "I realized", "This made me", "I now know", "I am now" signal a change in one's behaviors, thoughts or actions as a result of a turning point event. Such key phrases signal some engagement with the meaning-making process which may have resulted in either a lesson or an insight.

0 = No meaning

This category included responses that did not seem to indicate any lesson or insight from the turning point event. Thus, turning points were merely stated.

Examples of No Meaning:

- o "I converted to Wicca"
- o "When my parents got divorced."
- o "The turning point was when I decided to go for something else for college."

1= Lesson

Lesson refers to the meaning that individuals derive from an event after pondering on the impact of an experience, and how that meaning can be applied to similar experiences. The lesson is specific to one particular type of behavior. Often, lessons relate to having made a decision about a specific aspect of one's life such as a career path; or a decision that relates to behaving in a very specific way towards a specific event such as drinking and driving. Lessons may be negative or positive.

Examples of lesson:

- a) "My mom died in a car accident. A drunk driver killed her. I do not drink anymore."
- b) Grade 9 French class helped me realize that I wanted to pursue a career in languages."
- c) "When I took a culinary arts program and decided that's what I want to do."

2 = Insight

Insight, on the other hand, "is coded when the reporter gleans insight from the event that applies to greater areas of the reporter's life, not just to a specific behavior. There is often some kind of transformation – emotional or psychological or relational – for the reporter." Insight included abstract or general ways to think about different things, or life in general. One who has gained insight has taken a lesson and applied it to multiple facets of one's life in a very broad sense. Responses which may have had both lesson and insight were coded as insight.

Examples of Insight:

- a) "Mission trip to Peru in March changed my outlook on life and how I view the world."
- b) "My mom got sick and made me appreciate my loved one's more."
- c) "I got a girlfriend it gave me motivation."

Scoring Meaning-Making

0 = No Meaning

1 = Lesson

2 = Insight

III. Meaning-making

The purpose of the coding for meaning-making was to compare participants who had indicated some form of meaning (lessons or insights) to participants who reported no meaning. In other words, participants who indicated either a lesson or insight were grouped together as the 'Meaning-making' group and participants who reported no meaning (i.e. neither lesson nor insight) were grouped as the 'No meaning' group.

Scoring Meaning-making:

0 = Meaning

1= No Meaning

IV. Turning point

The purpose of the coding category was to compare participants who reported a turning point to participants who did not report a turning point event. The two groups were matched on: age, gender, parental education and Canadian-born status.

Scoring Turning point:

0 = No turning point

1= Turning point

APPENDIX G

Manual for Coding Meaning Making in Self-Defining Memories

(Adapted from Coding Manual for Relationship Memories)

Kate C. McLean & Avril Thorne
University of California, Santa Cruz
August, 2001

We are happy to answer any questions!

Email: kcmclean@ucsc.edu avril@ucsc.edu

Ground Rules for Coding Meaning

- 1) Meaning making (lesson learning and gaining insight) must be coded from the reporter's perspective. For example, if the reporter's friend learns a lesson from the event in the narrative, that is not coded as lesson learning because the *reporter* did not learn the lesson.
- 2) The coder should always read the reporter's caption in addition to other information in the narrative. The caption may not offer anything new, but occasionally the caption provides insight on the reporter's perspective. [Note: we ask participants to provide a caption for each memory narrative; ignore this instruction if captions were not collected]
- 3) Currently, the two kinds of meaning making are mutually exclusive. That is, the coder must choose whether the meaning reported is lesson learning or gaining insight. (Gaining insight is considered higher order to lesson learning; if s narrative includes a lesson as well as an insight, insight is coded, rather than lesson)

Meaning:

Meaning refers to what the reporter gleans from, learns, or understands from the event. To count as meaning, the reporter must *reflect back* on the event, e.g., "I learned a lesson," or "After that event, I came to understand that..." If the reporter reports meaning in the moment of the event without suggesting later reflection, that does not count as meaning. However, if meaning is made in the event, and the reporter reflects on the meaning of the event at a later point, the narrative can count for meaning.

There are three categories for meaning: lesson learning, gaining insight, and not applicable. For a narrative coded as not applicable, no meaning is drawn from the event.

1. Lesson Learning:

Lesson learning involves learning a specific lesson from the event. For example, a son learns not to throw eggs at mom. [If the son drew a more general meaning from the event, e.g., that he had an anger management problem, that counts as insight rather than lesson learned].

Lessons learned usually pertain to behavior, interactional rules, or norms, e.g., "Always wear a seat belt," "Don't talk back to parents," "Don't do drugs," "Don't run wild."

The lesson can be positive or negative. The term "lesson" may not be explicitly used; instead, terms such as "mistake" may signal that something was learned from the event. The lesson should be clear enough that the coder can verbalize what the lesson was. The lesson may nor sit well with the reporter, or may not be fully elaborated. Also, the reporter may not have resolved the meaning of the lesson. Lesson learning is lower order to gaining insight. If the narratives includes a lesson learned as well as an insight gained, the meaning should be coded as insight.

Examples of Lesson Learned:

1) "For some reason, I was quite annoyed with my older brother, Travis, and one day I gave him this note saying I didn't think he took me seriously. I guess he was pretty upset by this and that night he suggested we take a ride. He parked his truck in the parking lot of my hometown's community college and started talking, first about what he thought of me and how he did take me seriously. Then he told me how messed up his life had been the year before and how drugs had

nearly ended his life. This really upset me, and I was crying so hard I could barely speak. I couldn't believe how stupid he had been, and how close I had come to losing him. I'm not sure what effect this has had on me, but I do have my brother's experience as an example to me of what not to do."

(The clue to lesson learned here is that she has her brother's experience as an example of what not to do. She has learned something from his mistake, but does not elaborate to other parts of her life. This appears to be a lesson about behavior regarding drugs, and nothing else.)

2) "On the night of my friend Katie's 16th birthday/costume party, she had the girls spend the night at her house. At around midnight, the plan was to go to this park and hang around. However, Katie got really mad at her boyfriend and decided to just go to bed instead. But the five of us girls were still wide awake, so we drove over to Denny's instead. After spending an hour or so there, we drove past Taco Bell, and we saw a group of guys piled in a car. We pulled over to talk to them and while we were "flirting" with one guy, another remarked to his friend "Yeah! We're gonna get laid tonight!" Us girls were pretty alarmed by that, so we drove away as quick as possible. We were all wide awake and giggly after that, so we went back to Katie's and woke her up to tell her what happened. It was pretty funny. Now when my friends and I talk about this, we laugh how it was the most daring thing we had done so far, and how stupid we were I think we learned a good lesson, and we have lots of fun still remembering it and telling our friends about it. Most of the people we tell agree that we're pretty dumb."

(The lesson here concerns not running wild; it relates to a specific behavior.)

2. Gaining Insight:

Gaining insight is coded when the reporter gleans insight from the event that applies to greater areas of the reporter's life, not just to a specific behavior. There is often some kind of transformation--emotional or psychological or relational--for the reporter. Narratives coded for gaining insight must really convince the coder that there is new insight for the reporter. Insight must be explicit and persuasive. Insight must reach to the future or to areas outside of the self. The coder feels that the insight has made a great impact on the reporter.

Examples of Gaining Insight:

1) I love my family. I believe it very important to stay deeply connected with your roots-were you came from. It can always be a sanction for which you can safely visit and stay, although it is not always super easy. My stepmother and dad have taught me so much in these past 4 years it is frightening. This again is a string of memories I have in my head summed up onto this paper. My parents have helped shape myself into a better understanding of the universe and world around me. I remember this one night xmas eve this year (98/99) we (my stepmother and myself) had gotten into an argument because I forgot to turn the lights off in my room and she was complaining about electric costs. I has just gotten back from college, (free living in my head-carefree) and was not too aware. The fight broke out verbally super loud when she told me to fuck off and go back to school. I called her a dirty smelly bitch, and it just went on and on. We finally stopped as my dad stepped in and laid down the law. We talked that night hours and hours on end. She had always deemed herself perfect and that night she was disproved. To make a very long story short we came to a way better understanding of how each of us perceives the world,

and how we function and live about our lives. It was awesome. I told my friend on the way back to school (college) in his truck. He was so utterly surprised that she had even done this he almost felt sorry for me. It told him it was cool because I learned never to tamper with other people. And other people shouldn't tamper with you (i.e., don't try to change other people's lives). All of these events have led me to discover about myself and live to my parents understanding. I have become more aware and conscious. They have taught me how to work the universe.

(The reporter's insight in this narrative comes from the discussion of gaining a better understanding of how the characters perceive the world, and the events leading to a self-discovery about how he and his parents understand the world. This meaning reaches beyond the immediate event to other's perspectives and a self-discovery.)

2) I was painting a huge picture of Santa Claus with my dad that he had cut out and we were going to put on the roof. I just remember how wonderful it felt to be spending time with just him and I was so happy and content. It was one of my happiest memories from childhood. The real shaping of it didn't happen until about two years ago. My dad was talking to me and remembering painting with me and he laughed to remember how stoned he was that day. I was so incredibly shocked. I had known he used to do all sorts of drugs, but I never thought he did them after I was born. It really made me go through and re-look at my memories and see how there's so many things behind a situation that you never see. Things are not always as they seem. I told my mom about it and she was just surprised as hell to know that I didn't know about his drug use.

(The reporter's insight comes from her realization that many of her memories may not always be what they seem-applying the realization to greater areas of her life.)

3. Meaning Not Applicable:

Apply "meaning not applicable" to narratives in which the coder feels the reporter has neither gained insight nor learned a lesson; that is, the reporter does not make an effort to explain the meaning of the event.

Examples in which meaning is not made of the event:

1) It was a hot summer night the summer after my freshman year of high school. I had a major crush on this really popular junior but I never thought I stood a chance. His friends called me up and invited me and my friends to go out with them to a party. We agreed! We all drove in 2-3 cars up to a remote spot in the mountains. We arrived at about 5 PM to set up the BBQ. I was amazed by this place. It was an old fire lookout station on top of a mountain. There was a 360 view and we could even see the ocean. We all sat around a fire and talked waiting for the sun to set. We ate our food but I was really thirsty. The guy (Joe) who I had a crush on offered to walk me over to get a drink. While we were separated from everyone he leaned over and kissed me. It was such a shock! Him and I totally bonded that night underneath the stars with a campfire and friends for company. Eventually we got together. I told one of my friends who wasn't with us that night. I was so excited and I had to get it out of my system. I told her the day after. She was jealous but happy for me. I was completely in another world.

(There is no reflection beyond this event in terms of how it relates to the reporter's actions, feelings, or development.)

2) My father was dumping my brother, sister and I off at elementary school. As we were about to exit the car and head up the giant steps into school, I remember my father explaining to us that he might not see us for a while. He went on to say that my mother was upset with him and that he wouldn't be at home for a couple days. He was crying. I don't remember all the words clearly but I remember that he seemed to be searching for what to say and perhaps pacing himself so that he could control his emotions. That was the first time I've seen my father cry. I don't recall what my brother and sister were doing, I don't remember looking at them. I primarily recall confusion at seeing my dad so visibly shaken and upset. My parents divorced when I was six. It was and still is not pretty.

(This narrative focuses on event description that is action-oriented, and the reporter does not reflect on the influence the event has had on her.)