

CAPTURING DIVERSITY OF EXPERIENCE WITHIN EMERGING ADULTHOOD:
A CONTEXT COMPARISON OF UNDERGRADUATE STUDENTS, GRADUATE
STUDENTS, AND NON-UNIVERSITY EMERGING ADULTS

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By

CHASSIDY CARRUTHERS

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University of Saskatchewan
116 Thorvaldson Building, 110 Science Place
Saskatoon, Saskatchewan S7N 5C9
Canada

Abstract

Within the last half century, development during the transition to adulthood is said to have drastically shifted (Arnett, 2006, 2001). Arnett proposed a new developmental stage known as “emerging adulthood” (EA) to describe this time period (Arnett, 2006, 2000). Experiences during EA vary substantially from individual to individual, though the specific contexts that foster such experiences are less certain (Arnett, 2006). The current study builds upon past research on emerging adults by using the life-span model of motivation (LMM; Nurmi, 2004; Salmela-Aro, 2007) as a framework for understanding the relationship between individual development and the context in which individuals reside with a specific emphasis the university environment.

The sample included 737 participants aged 18 to 29 (mean age = 21.50, SD = 3.04; n males = 170, 23.2%). There were 509 undergraduate students (mean age = 20.32, SD = 2.21), 74 graduate students (mean age = 24.77, SD = 1.89), and 154 non-university participants (mean age = 23.81, SD = 3.44). Participation occurred via online questionnaire. Participants completed a sociodemographic questionnaire, measures of various markers of development, and measures of psychosocial correlates (internalizing/externalizing behaviours). Participants were also asked if they felt as though they had reached adulthood.

The results indicate that the description of EA does in part seem to fit with modern theories of development in that typical trajectories were observed. For example, many of the differences in EA experiences across context (i.e., status groups) were no longer present once age (i.e., maturation) was considered and many of the channeling factors (i.e., income, employment) were largely unrelated to development. Nevertheless, individual variations in experience were still observed based on channeling factors. Specifically, non-university participants, individuals in committed relationships, and those employed full-time appear to be further along in their attainment of developmental tasks when compared to university students, single participants, and those employed part-time or unemployed. Further, parenthood predicted whether or not an individual felt as though she or he had transitioned to adulthood. Overall, common developmental experiences appear to occur among 18 to 29 year olds, variations exist based on how development is being channeled through different contexts.

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CHAPTER ONE: INTRODUCTION

Within the last half century, development during the transition to adulthood has drastically shifted in North America (Arnett, 2006, 2001; Gaudet, 2007). Social conceptions of obtaining adult status and the process of transitioning from adolescence to adulthood have undergone significant changes. Until the 1970s, obtaining adult status generally occurred shortly after the completion of high school and corresponded to very specific life events, such as moving away from the family home, marrying, beginning a career, and starting a family (Gaudet, 2007; Blatterer, 2007a). Such markers suggested that the individual was committed, responsible, and an active contributor to society (Blatterer, 2007). However, in modern times such events do not typically occur until a later age given current economic and social conditions which, some have argued, facilitate a prolonged period of exploration and uncertainty characteristic of adolescence (Arnett, 2006, 2001). Consequently, the markers of the transition to adulthood are now individually rather than socially prescribed.

Arnett theorized a new developmental stage known as “emerging adulthood” (EA) to describe this time period, which originally included young people between the ages of 18 to 25 but has more recently expanded to include 18 to 29 year olds (Arnett, 2014, 2012, 2006, 2000). Arnett argues that there are several features unique to emerging adulthood, such as feeling in-between and exploration of identity. He proposes that his description of EA provides an overview of typical experiences among individual’s aged 18 to 29. However, Arnett also notes there is much diversity and heterogeneity in experiences of EA during the transition to adulthood (Arnett, 2006). Thus, experiences during EA are suggested by Arnett to vary substantially from individual to individual as the opportunity to explore one’s identity and possible roles during early adulthood is not equally available to all.

Because EA is a newly described stage of development, developmental psychologists have a keen interest in examining whether the new theorization fits within the larger context of existing stage theories. At first glance, Arnett’s conceptualization of a stage theory that does not apply universally to all seems to stand in contrast to more traditional work in the larger field of developmental psychology. Specifically, there are a number of classical stage theories that have been proposed to describe commonalities or universalities among individuals with respect to progression within each developmental stage (e.g., infancy, childhood, adolescence, adulthood; Scarr, 1992). These classical theories used a nomothetic approach (i.e., focusing on

generalizability) rather than an idiographic approach (i.e., focusing on unique individual experiences) by focusing on universal sequences of development. However, more recent theories of development have taken a more idiographic approach, whether by questioning stage concepts, proposing domain specificity, and/or accounting for cultural and even individual variations in developmental pathways, (e.g., Goodnow, 2002; Super & Harkness, 2002; Budwig et al., 2017). Thus, while developmental theories still describe the development typical of individuals at certain ages, they have also begun to consider variations in experiences that deviate from the norm. Accordingly, Arnett's work arguably fits within this more contemporary approach to understanding development.

Current issue

Although it seems clear that individual experiences during EA are diverse, the specific factors or contexts that foster such experiences are far less certain (Arnett, 2006; Bynner, 2005; Cote & Bynner, 2008; Schoon & Schulenberg, 2013). Specifically, some contexts are hypothesized to be more conducive to the exploration of self and identity as the precursor to achieving adult status, such as attending post-secondary education, living in industrialized and urban areas, and having a middle-to-upper class upbringing (Arnett, 2006, 2002; Galambos & Martinez, 2007; Gaudet, 2007). The context-dependent nature of EA has led an increasing number of scholars to question whether the description of EA is a true developmental stage that accounts for typical experiences of individuals between 18 and 29 years of age (Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; Schoon & Schulenberg, 2013). Alternatively, it has been suggested that EA is simply a reaction to certain contexts (i.e., university/college environments), is not experienced by the majority of individuals, and is consequently better understood as a description of a transitional age period as opposed to a developmental stage (Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; Schoon & Schulenberg, 2013).

Within the last decade, scholars have debated the applicability of using Arnett's description of EA to understand the development of individuals aged 18 to 29 outside of the undergraduate university context (Arnett, 2016 a; Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; du Bois-Reymond, 2016; Schoon & Schulenberg, 2013; Schwartz, 2016). Although Arnett (2012) has indicated that EA is characterized by diversity and heterogeneity, his description does not provide a model for understanding which contextual factors might account for variations in development during this time period. Although such debate exists, very little research has

addressed these issues. The current study builds upon past research on emerging adults by using the life-span model of motivation (LMM; Nurmi, 2004; Salmela-Aro, 2007) as a framework for understanding the relationship between individual development and the context in which individuals reside.

The LMM describes the relationship between the environment and the individual as reciprocal in nature; that is, the environment shapes the development of the individual and, likewise, the growing individual influences his or her surrounding environment (Nurmi, 2004; Salmela-Aro, 2007). Therefore, the purpose of the current study is to explore development among a broad range of emerging adults from varying contexts, including both undergraduate and graduate students in addition to those individuals who have not attended university. The current study also explored additional individual difference factors hypothesized by Arnett (2001, 2006, 2016a, 2016b) to predict variations in development during EA, including parenthood, relationship status, employment, and income.

CHAPTER TWO: LITERATURE REVIEW

Arnett's Theory of Emerging Adulthood

Many societal and cultural changes have occurred within North America over the past forty years that have consequently altered the way in which individuals transition from adolescence to adulthood (Arnett, 2004; Blatterer, 2007a, 2007b; Hendry & Kloep, 2007). In previous decades, individuals typically transitioned from youth to adulthood through the attainment of the “classic markers of adulthood” (Blatterer, 2007a): full-time employment, marriage, parenthood, and independent living. Within the past few decades, the time and order in which individuals reach the previously standard transitional markers of adulthood have drastically shifted. The ages at which youth enter employment, marry, and have children have been pushed back from the early twenties to the late twenties. This may be in part due to the increasing numbers of youth attending post-secondary education following the completion of high school (Arnett, 2004; Blatterer, 2007a, 2007b; Gaudet, 2007; Holloway, Holloway & Witte, 2010). Within Canada, the proportion of young people pursuing post-secondary education has continued to grow from the 1970s on. For instance, among 21-year olds, 12% were enrolled in university in 1972 to 1973 compared to 31% in 2009 to 2010 (Canadian Association of University Teachers, 2012). Moreover, nearly 85% of 15-year-old Canadians anticipate attending post-secondary education after high school (Canadian Council on Learning, 2009). Thus, the pursuit of post-secondary education within Canada has become more common.

Typically, individuals tend to wait until completion of post-secondary education before pursuing marriage and parenthood (Arnett, 2004). It has also been speculated that the delayed entry into marriage and parenthood may also be a result of the development and availability of the birth control pill and increasingly liberal societal views regarding premarital sex. Consequently, youth are now able to engage in sexual activities before marriage without worrying about unwanted pregnancies or social ostracism. Due to the aforementioned changes in the arenas of education and sexual relationships, youth of today are now afforded an extended opportunity beyond adolescence to explore their identities—an opportunity previously unavailable to the youth of our past.

“Generation Y” or “Millenials” have been used as labels for today’s youth who were born in the 1980’s and 1990’s (Erikson, 2008; McCrindle, 2003; Tulgan, 2009; Wohlburg & Pokrywczynski, 2001). Generation Yers are described to have access to resources and supports

not afforded to previous generations, including advancements in technology, lack of financial commitments, and growing up in families that are child-centered in nature (Alexander & Sysko, 2011; McCrindle, 2003). Consequently, they are said by some to possess a mentality of entitlement in which they feel as though they are deserving of any accomplishment or material goods they so desire (Alexander & Sysko, 2011; Twenge, 2013). Further, compared to past or future generations, Generation Yers have been described to place greater emphasis on making meaning in their lives and establishing autonomy. Although Generation Yers have been described quite extensively within the business, economic, and non-academic literatures, significantly less work has been done within the psychological and developmental research arenas.

Indeed, Arnett's description of EA arose from his realization that no documented stages of development could account for the current trends in youth development, mainly that of intense instability, exploration, and self-focus (Arnett 2004). Certainly, youth ages 18 to 29 experience intense identity exploration typical within the period of adolescence. Research shows that identity development is rarely complete by the end of adolescence (Kroger, 2002; Marcia, 2002; Waterman, 1982). In fact, Sawyer et al. (2018) recently proposed that the transitional period between childhood and adulthood has expanded well into the 20s and suggested that the age of adolescence should be expanded to include the ages ten to 24 in order to better reflect current patterns of development in modern society. However, Arnett (2004) has argued that simply describing the period following adolescence as a "prolonged adolescence" (Erikson, 1968) does not suffice because individuals who have transitioned from adolescence have significantly higher levels of independence. Further, use of the term "young adulthood" is not appropriate as it implies that at least a certain level of adulthood status has been achieved; a level of attainment that Arnett would contend (based on clinical practice) has not consistently been reached. As a result, Arnett developed the theory of "Emerging Adulthood" to describe the experiences of today's youth in transition from adolescence to adulthood that were not captured by previously existing developmental theories (Arnett, 2000, 2004, 2006).

Characteristics of Emerging Adulthood

Arnett identified five characteristics unique to EA that help distinguish the period from other stages of development across the lifespan (Arnett, 2004): (1) intense identity exploration,

(2) instability, (3) self-focused behaviour, (4) feeling “in-between”, and (5) a large array of possibilities from which to choose.

Intense identity exploration. Arnett (2004) indicates that the central feature of EA is the individual’s intense exploration of possible identities in the areas of love and work. The period of EA provides a context that fosters such exploration. Specifically, youth are typically more independent from their parents than in previous years and are also not tied down to many commitments, such as partners, children, or employment. In other words, emerging adults are not totally dependent on parents, but have not yet taken on the responsibilities of adulthood. This context allows the opportunity for the individual to explore his or her identity in a variety of different areas independently.

Within the area of love, emerging adults consider both who they are as a person in combination with whom they would like to have as a partner (Arnett, 2004). Part of this exploration often involves dating individuals in order to see what they like and dislike in potential partners. Within the area of work, emerging adults experiment with different occupations through various employment and education opportunities. They may, in fact, try out many types of jobs or majors in order to find an occupation that fits with their life goals. During the period of EA, individuals decide on their future career goals and gain the experience required to reach these goals, which often involves furthering their education. Arnett (2004) notes that while identity exploration during this period may be considered a serious process that lays the foundation for adulthood, many emerging adults also view the process as “fun”. That is, emerging adults often enjoy trying on different identities without having to “settle down” and choose any particular one.

Period of instability. Due to emerging adult’s experimentation with various identities, it is not surprising that EA is represented as a period of inherent instability. Arnett (2004) indicates that while emerging adults understand they must work towards making a “plan” for their adult lives, it takes much experimentation and revision for the individual to settle on a “final” plan. For example, individuals enter university in order to plan for a future career. However, many individuals switch majors several times within university before ultimately deciding on their final plan. As well, many emerging adults experience residential instability as the place in which they reside is generally in flux. Many might move residence several times between the ages of 18 to 29. Emerging adults often live with roommates with varying degrees of success and some may

even move in with their romantic partners. An increasing number of emerging adults are also moving back home to live with their parents, termed “boomerang kids” both within the academic literature (Mitchell, 2006, 2004; Mitchell, Wister & Gee, 2004; Mitchell & Gee, 1996) and the popular media (Furman, 2005; Henig, 2010; Newman, 2012). Based on 2001 census data, approximately 28% and 33% of Canadian women and men, respectively, aged 20 to 29 have moved back to their parents’ residence at least once after they initially moved out (Statistics Canada, 2002). Residential transiency certainly leads to instability though it also fosters further exploration of possible adult roles (Arnett, 2004). Indeed, many times emerging adults move in order to explore selves, such as moving to attend school, to begin a new job, or to cohabitate with a potential mate.

Self-focused behaviour. Arnett (2004) argues that individuals are the most self-focused in emerging adulthood when compared to all other developmental periods. Emerging adults frequently have few obligations and commitments to others. They are also faced with many different choices from the minute (e.g., what should I have to dinner? What time should I wake up?) to the major (e.g., who should I marry? What should I major in?). Arnett (2004) notes that the self-focused behaviours in emerging adulthood help individuals clarify who he or she is and what he or she wants in life, and that focusing internally will eventually allow emerging adults to commit themselves externally to their relations with others in the workplace, romantically, and to their future family. As such, Arnett (2004) argues that the self-focused behaviours characteristics of this period are not selfish but are, rather, normal, healthy, and temporary.

Feeling “in-between”. Arnett (2004) describes the feeling of “in-betweenness” as a natural consequence of the instability and exploration that occurs during EA. Moreover, emerging adults are certainly in-between stages: no longer an adolescent, but not yet an adult. Indeed, Arnett (2000) found that nearly 60% of individuals aged 18 to 29 respond “yes and no” to the question, “Do you feel that you have reached adulthood?”. In contrast, approximately 30% of individuals aged 26 to 35 responded “yes and no” and less than 10% of individuals aged 36 to 55 responded “yes and no”. The “classic markers of adulthood” (Blatterer, 2007a) are quite “sudden” and obvious when compared to the modern markers of adulthood (Arnett, 2004), which are “gradual” and subjective in nature. That is, one may transition from single to married or childless to parenthood over a short period of time and, moreover, such transitions are obvious. In contrast, modern markers are significantly more subjective, take place over time, and include

(Arnett, 2004): accepting responsibility for oneself, making independent decisions, and becoming financially independent. Therefore, one does not transition from EA to adulthood simply by meeting socially sanctioned markers of maturity. Rather, the transition is hypothesized to be based largely on one's own personal and subjective development. A more detailed discussion of achieving adult status occurs below.

The Age of Possibilities. For emerging adults, the future is open to endless possibilities as very little about their future has been decided (Arnett, 2004). It is during this time of exploration that emerging adults are able to consider a vast array of possibilities for their future that they previously may not have been able to consider. Specifically, because youth often gain independence from their families of origin, they are now able to consider their lives apart from their parents and exercise increased agency in exploring the possible paths their lives may take. This also means emerging adult experience a significant degree of uncertainty as their futures have not yet been mapped out.

Measurement of Emerging Adulthood

Within the literature, emerging adulthood has been measured in multiple ways (Lisha, Grana, Sun, Rohrbach, Spruijt-Metz, Reifman, & Sussman, 2012). Age (18 to 29) has commonly been used as a marker of emerging adulthood status. Although Arnett's theory holds that many individuals between the ages of 18 to 29 experience emerging adulthood, a significant amount of variation exists across individuals with respect to whether or not they are "emerging adults". For instance, some individuals in this age group may, in fact, feel a sense of "in-between", instability, and the need for identity exploration. In contrast, other individuals in this age group may not feel as though they are in-between life stages and have transitioned to adulthood. Therefore, simply defining EA on the basis of age does not capture the diversity of experience for the proposed age group.

Developmental milestones have also been used to define emerging adulthood status (Lisha et al., 2012). Specifically, markers such as marriage, parenthood, career, and financial independence have been used to define status. That is, individuals who have not reached such milestones are not likely to be considered adults and, consequently, are labeled as emerging adults. A limitation to the use of developmental markers to determine adult/emerging adult status is that it potentially neglects or misclassifies those individuals who may be considered an "adult" in some areas, but not in others. For example, consider an individual who has a well-defined

sense of identity, but is still dependent on his/her parents financially. Conversely, an individual might be financially independent, but still exploring his/her identity. Perhaps not surprisingly, when asked if they consider themselves to be an adult, many individuals aged 18 to 29 indicate “in some ways yes, in some ways no” (Arnett, 1994; Molgat, 2007). Indeed, there appears to be difficulty in defining emerging adult status dichotomously because the developmental time period itself is defined by variations in experiences and “feeling in-between”.

In order to address the aforementioned limitations in defining emerging adulthood status within the literature, Reifman, Arnett and Colwell (2007) developed the Inventory of the Dimensions of Emerging Adulthood (IDEA) to measure the issues and processes of EA, rather than age or markers of adulthood status. The IDEA is comprised of five subscales that represent the distinct aspects of EA: identity explorations, instability, feeling in-between, self-focused age, and the age of possibilities. A sixth subscale was also created, “other-focused,” to counter the self-focused subscale. Reifman et al. (2007) conducted exploratory and confirmatory factor analyses to see if the IDEA mapped onto the proposed aspects of emerging adulthood. As well, the reliability and convergent validity of the measure was tested. Multiple studies were conducted within a Texas university. Approximately 57 to 66% of participants from each of the samples were female and 72.5 to 87% identified as Caucasian. Unfortunately, no further sample information was provided. The results from the exploratory and confirmatory factors analyses indicated that the five scales plus the other-focused scale emerged as independent factors. However, many scales were highly correlated ($r > .7$). The internal consistency in each of the studies was sufficient (Cronbach’s alpha ranging between .70 and .85). Moreover, the measure had adequate test-retest reliability correlations (.64 to .76 over a one month period). However, the “feeling in-between” subscale had low test-retest reliability (.37).

Convergent validity was also observed (Reifman, Arnett & Colwell, 2007) as the IDEA was significantly correlated with related constructs including Cross and Markus’s (1991) measure of possible selves and the Consideration of Future Consequences Scale (Strathman, Gleicher, Boninger, & Edwards, 1994) which measures an individual’s future orientation. Specifically, two of the IDEA dimensions were associated with the measure of possible selves. A positive relationship was found between self-reporting as being in an identity-exploration time of life and a greater number of possible selves ($r = .34, p < .01$) and self-reported instability was also associated with a greater number of possible selves ($r = .35, p < .01$). Four of the five IDEA

subscales were associated with the measure of future orientation: identity exploration ($r = .20, p < .05$), experimentation/possibilities ($r = .22, p < .05$), other-focus ($r = .29, p < .01$), and self-focus ($r = .23, p < .05$).

Lisha and colleagues (2012) conducted a follow-up study in order to examine the application of the IDEA to non-white populations. Participants included 1676 (males $n = 968$) students from Southern California Continuing Education High Schools. The mean age of the sample was 16.8 years. The ethnic composition of the sample included: 64.3% Latino, 13.3% mixed ethnicity, 11% White, 6.3% other ethnicity (not specified), and 5.1% African American. Participants completed a reduced 21-item IDEA in order to assess four dimensions of interest: Identity Exploration, Experimentation/Possibilities, Self-focus, and Feeling in-between. The other-focus dimension was not included as it was an “extra” subscale that emerged from Reifman and colleagues’ (2007) analysis and was not a central dimension of EA. As well, the instability subscale was omitted because the authors also measured anxiety and stress, which were suspected to overlap significantly with the instability subscale.

The results indicated that four of the subscales emerged through confirmatory factor analysis: identity exploration, experimentation/possibilities, self-focus, and feeling in-between (Lisha et al., 2012). In addition, the IDEA had sufficient internal consistency overall (Cronbach’s $\alpha = .93$) and by subscale. Specifically, the Cronbach’s α for each subscale were as follows: Identity Exploration (.89), Experimentation/Possibilities (.85) and Independence/Self-Focus (.64). The authors suggested that the differences in scale structure of the IDEA between their current study and Reifman et al.’s (2007) examination likely reflected differences in sample demographics. Specifically, a majority of Lisha and colleagues’ (2012) sample were from non-White ethnicities and, as result, may have differing conceptions of what it means to be an adult due to varying cultural beliefs. The authors suggested their sample may already consider themselves to be adults and, consequently, the “In-between” subscale did not emerge in the analyses. As well, the sample consisted of high school students which limits the applicability of the findings to individuals who fall within the EA age range. The authors also noted that their sample was currently enrolled in continuing high school education. Many individuals in such educational settings have had experiences related to adult status (i.e., parenthood) which also may account for differences in factor structure between the two studies. This study provides evidence to support the idea that EA experiences are diverse and vary across populations. More

research is required in order to determine the validity of the IDEA among other sociodemographic populations located in various geographic regions.

Critiques of Arnett's theory of Emerging Adulthood

Arnett's description of EA has been well received within the academic community and research within the area since 2000 has been prolific (Arnett, 2012). However, not all scholars agree with Arnett's conceptualization of the experiences of youth during this period in the lifespan (du Bois-Reymond, 2016; Furstenberg, 2016; Schwartz, 2016). Hendry and Kloep (2007) disagree with several aspects of the EA theory. First, they indicate that although Arnett describes the progression from EA to adulthood as relatively linear, the transition is better described as domain specific, variable, and reversible. That is, one may achieve adulthood status in one domain (e.g., love) yet not in other domains (e.g., work). Moreover, individuals may also regress in domains and lose the subjective feeling of being an adult, which the description of EA does not account for. For example, an individual may divorce, move back home with his/her parents, or change career paths. Second, the authors contend that identity exploration does not end when one reaches adulthood. Rather, individuals tend to explore their identity throughout their lifetimes in process of reoccurring moratoria and achievements. Third, the authors argue that both across and within each stage of the life-course there is bound to be some "in-betweenness" and that most individuals are in the state of "emerging". Fourth, the authors caution that the description of EA is predominantly based upon populations of affluent middle-class individuals residing in western societies. Therefore, the theory is not useful in describing experiences of other youth in alternative circumstances.

Indeed, the most prevalent critique of Arnett's theory involves the heterogeneous experiences of youth ages 18 to 29 that are not well-captured through the use of "blanket" theories, such as the description of EA (Batterer, 2007a; Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; du Bois-Reymond, 2016; Hendry & Kloep, 2007). Bynner (2005) suggests that stage theories of human development focus predominantly on experiences of the "normative" individual and, consequently, do not capture the experiences of those individuals who may deviate for the norm. Further, he proposed that the description of EA focuses too much on timings and periods of transition while neglecting individual variations around the mean.

The description of EA has also been criticized for underemphasizing the role of social and institutional structures in EA experiences (Bynner, 2005; Cote, 2014; Furstenberg, 2016;

Silva, 2016). Although certainly Arnett has stated that experiences of EA differ both within and between countries (Arnett, 2006; 2012), no current aspects of the theory can account for such variations. Furthermore, Bynner (2005) indicates that the description of EA does not account for the fact that context not only influences development, but also may constrain development. In other words, the EA theory tends to neglect the importance of the structuring of opportunities and constraints within the environment. The environmental context within industrial societies has stratified the population into “have” and “have-nots”, and has excluded the have-nots from engaging in EA experiences. That is, individuals from lower socioeconomic statuses are not provided the opportunity to engage in EA tasks and appear to adopt more traditional paths to reaching adult status, such as marriage and parenthood (Bynner, 2005; Furstenberg, 2016; Silva, 2016). Bynner (2005) argues that one cannot examine EA experiences without simultaneously analyzing the social, economic, cultural, and structural features of the environment, all of which lengthen or constrain an individual’s journey to adulthood. Such factors include, but are not limited to: gender, social class, ethnicity, nationality, locality, and education. However, because experiences of EA appear to be so heavily dependent on an array of environmental factors, scholars suggest the description of EA may be less a stage of development and more a reaction to certain environmental circumstances (Cote & Bynner, 2008). Likewise, Hendry and Kloep (2007) argue that because EA experiences do not generalize to non-western countries and, moreover, may not even be generalizable to subsets of the population in western countries, it does not make sense to categorize EA as a stage in the lifespan. Instead, the authors suggest EA is “merely a description limited to a certain age cohort in certain societies at a certain historical time with particular socioeconomic conditions” (p.76).

Indeed, scholars have argued that Arnett frames the characteristics of EA as a consequence of free-agency or personal choice when, in fact, such experiences may be better described as reactions to structural changes in the environment (Cote & Bynner, 2008; Hendry & Kloep, 2007). Therefore, the instability and exploration associated with EA are not freely chosen as a means to prolong the transition to adulthood, but are coping mechanisms to deal with an economically uncertain environmental context. Cote and Bynner (2008) contend that if EA experiences were defined in terms of coping mechanisms in response to precarious environment, then EA as a developmental stage would no longer make logical sense. Essentially, the new generation of young people is unable to obtain financial independence until their late twenties

due to the changing nature of the job force and the increased pressure to attain higher-level education. As a result, the transition to adulthood has been prolonged, which has created widespread identity confusion among today's youth. Because the subsequent identity confusion experienced by today's youth is so widespread, it has been mistaken by Arnett (2000) to be a newly arisen developmental stage instead of a reaction to changing environments.

It should not be surprising to see critics of Arnett's theory highlighting context as a critical consideration in development and a weak element of Arnett's conceptualization. Specifically, within the developmental literature, researchers have emphasized the importance of context in determining developmental trajectories (Bronfenbrenner, 1979; Heckhausen, Wrosch, & Schultz, 2010; Salmela-Aro, 2009, 2010). Perhaps the most influential contextual model of development is Urie Bronfenbrenner's ecological model of development (Bronfenbrenner, 1979, 1977). Bronfenbrenner designed the model to explain how the environment influences the ways in which individuals develop, where development is conceived as an active rather than passive process. Further, the model underscores the reciprocal nature of development – individuals are not only influenced by their environment, but also influence their environments. Thus, it makes it challenging to attempt to understand or explain how individuals develop (e.g., formulating life stages) without also considering the environment in which they reside.

Perhaps as a result of critiques, Arnett (2012) recently addressed whether or not the period of EA is, in fact, a life stage. Ultimately, he maintains that EA is a life stage, but suggests that scholars must take into consideration the vast heterogeneity in EA experiences across individuals (Arnett, 2012, 2016b). Specifically, Arnett states that his theory is not a “one-size-fits all” theory and that the stage of EA is hardly uniform or universal. He further notes that there is not “one emerging adulthood, but many emerging adulthoods” (p. 244). Indeed, modern conceptions of development indicate that individual growth does not necessarily occur in predictable stages (Baltes, Staudinger, & Lindenberger, 1999; Baltes, 1987; Scarr, 1992; Schulz & Heckhausen, 1996). That is, while theories of development are able to establish typical trajectories, there will always be individual variations in experience (Salkind, 2004). However, it is still important to note that while variations in development exist in any given stage of development, a majority of individuals' experiences fall within the bounds of the stage. For example, in western culture, no one would question whether or not to classify a 7-year-old as a child. If the description of EA describes an important period of development in the lifespan, then

it follows that a majority of individuals should experience EA. Unfortunately, it is not yet clear whether all, or even a majority, of individuals between the ages of 18 to 29 go through EA. Further, while Arnett's description of EA aligns with modern conceptions of development in that variations in development are expected, the theory remains limited in its ability to explain sources of individual differences.

Indeed, one of the outstanding challenges for Arnett's theory is that a majority of the research has been focused on individuals who are in university. Significantly fewer research studies have been conducted on individuals who enter the labour market after high school instead of pursuing post-secondary education (Hamilton & Hamilton, 2006). Arnett (2000) has, in fact, indicated that non-students are the "forgotten half" in EA research. The issue remains that university versus non-university contexts are so vastly different that it makes it very difficult to extrapolate the findings of EA research among university students to their non-student counterparts. Experiences of EA among non-students are unclear and the application of the description of EA to non-students has been largely overlooked. Indeed, Hamilton and Hamilton (2006) suggest that more research is required among non-students in order to better understand diversity in experiences of EA. Further, it is important to note that a majority of studies examining EA have sampled university undergraduates and, as a result, it is not certain what experiences may be typical of graduate students during EA. Whereas it might be the case that graduate student experiences align with the experiences of undergraduate students, it might also be that contextual differences do, in fact, exist between undergraduate and graduate education that may potentially lead to varying developmental trajectories.

In order to explore the many divergent paths of EA, Arnett (2012) proposed several new areas for future research. First, he calls for longitudinal research to examine development past the twenties into the 30s and 40s as limited research thus far has attended to this age period. Second, he points to the need for research to consider those who may experience no emerging adulthood at all. Namely, he mentions those who become parents at a young age. Third, Arnett (2012) calls for an examination of variations in EA experiences *within* countries. Specifically, research should examine differences between emerging adults of different ethnicities and social classes. In summary, Arnett (2012) recognizes that while many individuals aged 18 to 29 do experience EA, these experiences are diverse. Further, some individuals may not experience EA at all, raising the question whether or not the description of EA should be considered a stage of

development. Thus far, research has not discriminated EA experiences within sample populations. That is, the vast majority of existing research defines emerging adults as those between the ages of 18 to 29 without first determining whether or not individuals within this age range follow typical EA trajectories. Consequently, research must continue to explore the description of EA in order to better understand what populations the description of EA may be applied to.

Research has begun to explore differences in development during EA in various contexts. For example, Salmela-Aro (2009, 2010) developed the Life-span Model of Motivation (LMM) to take into account the contextual and individual factors that may influence variations in EA experiences. Salmela-Aro's (2009, 2010) initial findings indicate that development during EA varies from individual to individual and is largely based on differences in individual motivations in addition to the surrounding environment (i.e., social supports, societal expectations, available opportunities). The LMM shows promise as a framework for explaining how and why developmental trajectories are so vastly different among individuals aged 18 to 29. The following section will explore the application of the LMM to the description of EA as a means of organizing and defining what factors should be considered when examining development among this age group.

The Life-span Model of Motivation

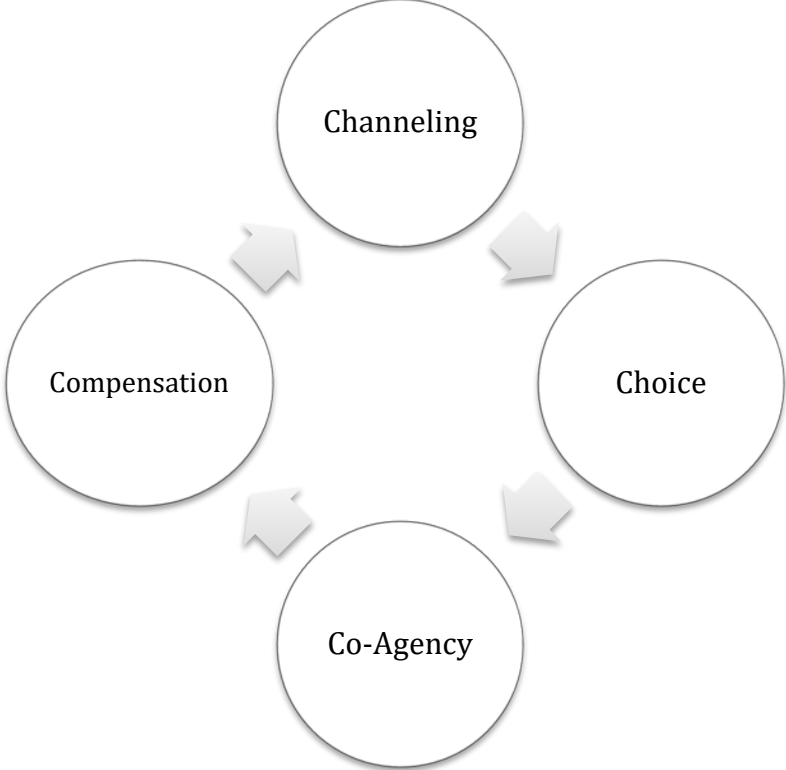
The lifespan model of motivation (LMM) is relatively new and attempts to set out what factors influence variations in individual development (Heckhausen, Wrosch, & Schultz, 2010; Salmela-Aro, 2009, 2010). Specifically, the model suggests that individuals are not passive in their development, but are motivated to influence their development based on individual needs, contextual factors, and social support systems. The theoretical underpinnings of the LMM rest on Bronfenbrenner's model (1979, 1977) in that individuals are considered to be actively engaged with their environment in order to construct their own developmental paths. The LMM suggests that individuals use motivation and self-regulation to meet various developmental challenges throughout the lifespan. That is, individuals actively construct their development based on the demands, challenges and opportunities they encounter within their environment or through the various roles they inhabit (Salmela-Aro, 2009). From this perspective, individuals are hypothesized to shape their development by comparing their own motivations and goals to the developmental tasks and transitions typical of others at the same stage of development.

Salmela-Aro (2009; 2010) proposed that the LMM is comprised of four key processes termed the 4 C's: channeling, choice, co-agency, and compensation (refer to Figure 1). The environments in which individuals develop *channel* their development, individuals *choose* their developmental pathways and personal goals, individuals are *co-agents* to one another in facilitating or inhibiting life paths, and, finally, individuals must *compensate* when their development is unsuccessful and re-adjust their personal goals or targets for development. Positive adjustment occurs when individuals make choices that fit with their environment, personal motivations, and social context, *and* are successful at either attaining their developmental goals or re-directing their goals when unsuccessful. The following sections will further describe the processes involved in the LMM in relation to development during EA.

Channeling. Channeling is the first process within the LMM and influences the ways in which individuals develop (Salmela-Aro, 2009, 2010). For example, individuals within Western societies reside within age-graded environments creating channels through which individuals develop alongside their same-aged peers. At different points in development, there are different role transitions and expectations considered typical or normative in one's environment (Shulman & Nurmi, 2010). With respect to expectations, societies differ in their beliefs surrounding when developmental transitions "should" occur, resulting in evaluations of whether an individual is "on-time" or "late". Consequently, the pursuit of specific developmental tasks tends to differ by age group with same-aged individuals pursuing similar developmental tasks according to similar demands, societal expectations, and role transitions (Salmela-Aro, 2009, 2010; Shulman & Nurmi, 2010).

Age-graded environments channel the choices made available to the individual and the available choices are largely associated with matters important during that time period. It is important to note, however, that varying life contexts may facilitate or constrain the channeling of development regardless of age (Salmela-Aro, 2009, 2010). For instance, individuals in different life circumstances, such as parenthood or marriage, follow varying tracks of development (Shulman & Nurmi, 2010) and consequently may develop differently than their same-aged counterparts without children and who are not married (Salmela-Aro & Nurmi, 1997). In addition, the role of individual factors, such as personality, cannot be underplayed and certainly channel the types of goals individuals seek within their contextual environment (Shulman & Nurmi, 2010). In sum, context in the LMM model is broad reaching and may

Figure 2-1. The four C's of the LMM: channeling, choice, co-agency, and compensation.



include both individual (i.e., age, sex) and environmental (i.e., university, marriage, parenthood) factors - factors that are of particular interest in the present study.

Choice. The LMM indicates that development is largely guided through personal agency or choices (Salmela-Aro, 2009, 2010). As such, individuals regulate their own development through selecting goals that will place them on individual life paths. Such goals are not selected in isolation; rather, the structure of their environment influences the timing and selection of an individual's goals. Specifically, it is suggested that individuals choose goals based on opportunities available in combination with their own individual needs. Further, goal pursuits that coincide with age-graded demands are hypothesized to be associated with positive well-being, whereas goals pursuits that counter age-graded demands are hypothesized to lead to poorer outcomes. For example, within North America, adolescents who bear children may experience more difficulties in a number of areas when compared to an adult who has children.

Co-agency. The third process of the LMM model is co-agency (Salmela-Aro, 2009, 2010). Not only do individuals have personal agency in shaping their development, but relational agency also plays a role. The LMM states that having a supportive social support network enhances an individual's ability to strive towards and attain goals. Specifically, individuals' family, peers, and friends help shape their development. It has been suggested that the transition to adulthood is not only a pursued goal for individuals, but also for their parents such that parents and children jointly work towards the attainment of adult status (Young, Marshall, Domene, Graham, Logan, Zaidman, Mart & Lee, 2008). In other words, the transition to adulthood is a mutually constructed goal shared by parent and child. Indeed, a recent review of the literature on parental involvement and individual goal selection and pursuit indicates parents have an enduring influence on the development of their children (Dietrich & Kracke, 2009). Specifically, parental aspirations, beliefs surrounding their children's abilities, levels of both support and autonomy, parental involvement, and the parent-child relationship shape the goals individuals pursue and, in part, influence success during their goal pursuit (Dietrich & Kracke, 2009). Indeed, parental interference and lack of engagement show a positive relationship with difficulties making decisions (Dietrich & Kracke, 2009).

The relations between family factors and individual development can be observed across the lifespan (Whiston & Keller, 2004). Family values and the social context of the family socialize the adolescent to value and pursue certain goals while neglecting or de-prioritizing

other goals (Massey, Gebhardt, & Garnefski, 2008). Moreover, the family contact will also facilitate or constrain certain goal paths. Whiston and Kellor (2004) suggest that family structure variables, such as SES, parental educational attainment, and parental occupation, influence individuals' career pursuits. In addition to structural family factors, family process factors, such as warmth, supportiveness, and relationship quality also shape the types of careers individuals select for themselves. However, authors have noted that while the influence of the family on individual development is clear, the mechanisms underlying the relationship are less certain (Massey, Gebhardt, & Garnefski, 2008; Whiston & Keller, 2004).

Peers and friends have also been shown to influence individuals' development (Nelson & DeBacker, 2008). Individuals' perceptions of their peer relationships have been shown to significantly contribute to their motivations to achieve their goals wherein individuals who felt valued and respected by their peers had more adaptive achievement motivations (Nelson & DeBacker, 2008). Massey and colleagues' (2008) review indicates that peers have an influence on individuals' goal pursuits. The authors reported that for females, positive peer support predicts perceived educational goal opportunities. For both males and females, peer support, peer expectations, and prosocial behaviours were associated with individual pursuit of prosocial goals and positive career expectations. In contrast, being surrounded by peers who use substances, pressure others to use substances, and engage in risky sexual behaviours are associated with negative expectations for the future and pursuit of deviant goals.

In sum, it appears as though parental and peer factors influence the types of goals individuals pursue. Thus, the individual is not the only agent constructing his or her development, but rather, development occurs through co-agency wherein relational ties shape individuals' developmental trajectories.

Compensation. The fourth process in the LMM is that of compensation (Salmela-Aro, 2009, 2010). Although individuals shape their developmental paths and the goals they pursue, not all goals are attainable and certainly individuals will experience failure in some areas. Thus, individuals must compensate for such losses and re-adjust their goals. In addition, as individuals develop, their environment will constantly evolve requiring them to also change or adjust their goals. Research has shown that the ability to compensate or re-adjust goals in light of changing contexts or the inability to attainment previous goals is associated with positive well-being (Heckhausen, Wrosch, & Schultz, 2010). In contrast, individuals who struggle to re-adjust their

goals tend to have poorer well-being. Research examining the compensation process of the LMM has been longitudinal in design allowing for the assessment of when and how individuals re-adjust their goals in addition to the impact of goal re-adjustment on well-being and future development (Haase, Heckhausen, & Koller, 2008; Salmela-Aro, Aunola, & Nurmi, 2007; Salmela-Aro & Nurmi, 1997; Shulman & Nurmi, 2010). In the current study, longitudinal data were not available. Thus, while it is acknowledged that compensation processes are an important contributor to development, the examination of such processes is outside the scope of the current study.

Summary of the Application of LMM to EA. The LMM proposes that individuals are active agents in their development throughout the lifespan (Salmela-Aro, 2009, 2010). Specifically, emerging adults construct their development based on both the opportunities and expectations within their environment and their own developmental needs. For purposes of the current study, the development of emerging adults includes the personal goals they pursue, the tasks/criteria deemed important to obtaining adult status and the actual attainment of tasks/criteria. The literature that has examined these areas of development has shown that variations exist yet the factors contributing to such variations are not well understood. Due to differing contexts between individuals, it is perhaps not surprising that development during EA is largely heterogeneous. The LMM is of great use in the current study as the model's theoretical constructs of channeling, choice and co-agency provide a way to delineate the heterogeneity of the EA period. Of particular use is the construct of channeling as the current study's focus is on understanding the impact of context or environment.

Of interest in the present study are several channeling factors that may explicate diverging developmental pathways during EA. To begin, as mentioned earlier in the critique of Arnett's work, the channeling factor most relevant yet least understood is that of the undergraduate university context (Arnett, 2012; Hamilton & Hamilton, 2012). Further, university versus non-university contexts may also be conceptualized as representing choice. That is, the individual chooses to attend university or not based on individual and contextual factors which channel this decision. It follows that the decision to attend or not attend university may further channel development. Specifically, it may be the case that the context experienced by undergraduate university students differs significantly from the contexts experienced by both graduate students and non-university students thus channeling university students down a unique

developmental pathway characteristic of EA. Other channeling factors thought to influence whether or not EA will occur include: marriage, parenthood, employment, and socioeconomic status (Arnett, 2004). If these factors are required for EA to happen, then it is important to obtain a better understanding of how exactly these factors work together to shape development. In addition, the co-agency elements in the social support network surrounding the emerging adult period, including parents and peers, also influence the nature of development and will be explored as a source of variability.

The current study aims to expand on past research and thinking on emerging adulthood. Arnett's research has mainly focused on the area of conceptions of adulthood, while parallel research in the area of EA has begun to examine development in the area of personal goals using the LMM. Across these bodies of literature, the results indicate that development is highly variable among emerging adults (Roisman et al., 2004; Schulenberg, Bryant & O'Malley, 2004). Developmental theories outline typical trajectories of development within a stage while accounting for individual variations (Baltes, Staudinger, & Lindenberger, 1999; Baltes, 1987; Scarr, 1992; Schulz & Heckhausen, 1996). While Arnett's description of EA highlights the heterogeneity of development during this period, a majority of studies on EA have focused almost exclusively on university populations. Therefore, although experiences of EA appear to be quite typical among university students, it is less clear whether other subsets of the population also experience EA. In other words, is EA a stage typical for a majority of individuals aged 18 to 29, or is it a unique phenomenon experienced by university attendees? If it is only an experience held by certain groups, then it may be more of a reaction to context than a "true" developmental stage.

The current study helps to refine our current knowledge of EA and add to our understanding of what it means for young people to transition to adulthood. The central goal of the current study is to explore the applicability of EA to populations outside of the undergraduate university context using the LMM as a framework for understanding variable experiences across contexts. This study examines development across a broad cross-section of 18 to 29 year olds from three distinct environments: undergraduate students, graduate students, and non-university participants. In addition to distinct environments, several individual difference factors hypothesized to facilitate or inhibit "typical" EA development will be tested including parenthood, marriage, and social support, among others. Development will be operationalized in

terms of identification with the description of EA, conceptions of adulthood, completion of developmental tasks, and personal goals. To this end, the remainder of the present review focuses on what is currently known about environmental and individual difference factors as well as an overview of the key markers of development (tasks, conceptions, goals).

Environment as Context during EA

Based on LMM (Nurmi, 2004; Salmela-Aro, 2007, 2009), an individual's development is shaped by the environment in which she or he reside. Thus, while typical patterns of development may be determined, there are certainly variations in development across individuals based on their environmental circumstances. In keeping with this notion, past research has shown that development during EA may, in fact, differ between various contexts (Arnett & Galambagos, 2003; Beson & Elder, 2011; Kirkpatrick, Johnson, Berg & Sirotzki, 2007). According to Arnett (2004), the following contexts are required for individuals to experience EA: postponement of marriage and parenthood, industrialization, and having a mid-to-high level socioeconomic status. In addition, it may be the case that attending university is another context required for EA to occur.

University context. University students are likely afforded an opportunity for an extended period of exploration due to delayed role transitions, such as marriage and parenthood. The university context provides many new opportunities and changes that may not necessarily be characteristic of non-academic settings. Students must learn to adapt to their new learning environment and often must adjust to being away from their home, parents, and peers (Wintre, Knoll, Pratt, Polivy, Lefcovitch, & Adams, 2008; Lefkowitz, 2005). Moreover, the university environment has been described as one that provides students with increased freedom and anonymity. Therefore, it may be the case that the environment in which university students are situated is different than that of individuals not attending university and may be more conducive to promoting experiences of EA (Arnett, 2016a; Schwartz, 2016).

Research among university students makes practical sense in that participants are readily accessible. It is often difficult to access participants from non-university settings. It is further noted that studies on non-university samples have also been neglected due to a "lack of clear conceptualization" of youth in this particular age group (Arnett, 2000). Reifman and colleagues (2007) compared EA differences between college and non-college young adults in the USA using the IDEA. The results indicated that no differences were found in the domains of identity

explorations, instability, feeling in-between, self-focused age, and the age of possibilities; however, participants in college had significantly higher levels of “sense of possibilities” when compared to non-college participants.

Research has examined personal goals among university students following graduation from university and the attainment of a career (Salmela-Aro, Aunola, & Nurmi, 2007). Results indicated that once individuals graduated from university, their education-related goals decreased. Further, individuals who attained a career after graduation had a decrease in education-related goals during university compared to those who had not yet attained a career. These results suggest that completion of education-related goals guided individuals to disengage from such goals. Perhaps not surprising, the goals individuals pursued appear to influence their future goal attainment such that individuals who remained focused on education-related goals did not gain employment after university. Again, the results regarding work- and education-related goals cannot be applied to non-university students. Much less is known about the development of non-university students during the period of EA with respect to work- and education-related goals.

Certainly, the university context differs substantially from non-university contexts. However, it is important to note that contextual variations may also be observed *within* the university setting. Although graduate and undergraduate students pursuing a university education experience the same physical environment, the broader context in which they must navigate their lives differs substantially. Specifically, graduate students have significantly more choice regarding their educational pursuits and have higher control over the courses they complete and their program of research. Graduate students also have more responsibilities than undergraduate students and often are in charge of marking undergraduate assignments, teaching undergraduate courses, and even supervising the research of undergraduates.

It is important to note that graduate students are generally older than undergraduates because one must obtain an undergraduate degree before pursuing a graduate degree. Therefore, choosing to obtain a graduate-level education requires prioritizing one’s personal goals. That is, many graduate students tend to postpone marriage and parenthood until they have completed their educational pursuits. As a result, it may be the case that graduate students experience an even further prolonged entry into adulthood than if they would have transitioned from their undergraduate degree to the workplace. Although it may be argued that graduate school *is* a

workplace environment, many graduate students do not have an adequate income and, thus, may not be able to achieve financial independence. Overall, it seems plausible that graduate students often must delay role markers of adulthood status until they complete their education. However, it is less clear whether they achieve the more individualistic criteria of adult status, such as independence and responsibility for one's actions. However, no research has examined experiences of EA among graduate students and, as a result, it is unclear how graduate students conceive of the transition to adulthood or whether they consider themselves adults.

Marriage and parenthood. Arnett suggests the postponement of marriage and parenthood may be required in order for an individual to experience EA and thus represent another channeling factor (Arnett, 2004). Individuals may have less opportunity to engage in self-focused behaviours when they have committed themselves to relations with others, whether it be to a spouse or children. Indeed, differences have been found between married and non-married young adults, and parent versus non-parent young adults with respect to EA experiences (Martin, Blozis, Boeninger, Masarik, & Conger, 2014; Reifman, Arnett, & Colwell, 2007). Specifically, research has shown that entry into marriage and parenthood during emerging adulthood was associated with greater levels of norm compliance. Specifically, a decrease was observed in risky driving, theft, aggression or violence, risky sex, dealing in stolen or illegal goods, vandalism, and substance use (Martin, Blozis, Boeninger, Masarik, & Conger, 2014). Reifman, Arnett, and Colwell (2007) reported that individuals who have never been married had significantly higher levels of identity exploration, experimentation of possibilities, and self-focused behaviours when compared to individuals who were married or engaged. In contrast, individuals who were married or engaged had higher levels of other-focused behaviour when compared to those who were never married.

Although Reifman and colleagues (2007) attempted to examine relations between parenthood and EA, the requisite analyses were precluded by the limited number of individuals in the sample who were parents. Thus, the authors note that while it theoretically makes sense that individuals with children would have less opportunity to engage in the self-focused behaviours typical of EA, further research is required to determine how, if at all, EA experiences manifest among parents. Salmela-Aro, Aunola, and Nurmi (2007) did, in fact, examine personal goals among females transitioning to parenthood. The results indicated that from early- to post-pregnancy, women's goals changed to reflect the evolving nature of their life circumstance.

Specifically, their goals changed from achievement-related to family- and child-related. Thus, the authors suggest that the context of parenthood “channeled” women’s goal pursuits.

Research has examined changing personal goals among individuals who become parents or who marry. Specifically, Salmela-Aro, Aunola, and Nurmi (2007) examined changes in personal goals following the significant life events of cohabitation/marriage and parenthood. The results indicated that cohabitation/marriage among university students was associated with specific personal goals. For instance, individuals who had more family-related goals tended to marry or cohabit and to have children earlier than those who had fewer family-related goals. However, after individuals married or cohabitated their family related goals tended to stabilize. Those who both married and had children earlier in university education showed less of an increase in child-related goals over time.

The results from Salmela-Aro, Aunola, and Nurmi’s (2007) study indicate that the goals of individuals who marry or have children differ initially from those who do not marry or have children in university both before and after meeting their goals. This suggests that the development of university students who are married or have children differs from that of their non-married and childless counterparts. Although this study focused on university students, other research has investigated how personal goals change during the transition to parenthood in a broader sample (Salmela-Aro, Nurmi, Saisto, & Halmesmäki, 2000). Salmela-Aro and colleagues (2000) found that women’s goals shifted from achievement-related goals (e.g., to establish a career) to more family- (e.g., to take care of my family) and health-related (e.g., be healthy for my children) goals after childbirth. In contrast, men’s goals tended to remain stable over time. While these results provide evidence that both gender and the transition to parenthood influence an individual’s development and selection of personal goals, the sample was not restricted to emerging adults thus goal setting among a restricted sample of emerging adults who transition to parenthood may reveal different findings.

Socioeconomic Status. Arguably, socioeconomic status (SES) contributes to the creation of a channel. For example, individuals from lower socioeconomic statuses may not be afforded the opportunity for intense identity exploration and experimentation (Arnett, 2002, 2004; Furstenberg, 2016; Schwartz, 2016; Silva, 2016). Socioeconomic status is broadly defined as “the placement of persons, families, households, and census tracts or other aggregates with respect to the capacity to consume goods that are valued in society” (Meich & Hauser, 2001). In

contrast to those who focus on identity development and experiment with future pathways, individuals from lower SES income families may be required to go directly into the workforce once they have completed high school in order to meet their basic needs.

Indeed, research consistently demonstrates that youth from low-income families are significantly less likely to attend post-secondary education (Cheung, 2007; Christofides, Cirello, & Hoy, 2001; Frenette, 2007; Junor & Usher, 2004). Within Canada, approximately 50.2% of 19-year-old youth whose family income was in the top quartile attend post-secondary education. In contrast, only 31.0% of youth whose family of origin's income was in the bottom quartile attend university (Frenette, 2007). In addition, children from low-income families have been shown to leave home earlier than children from middle-to-high income families, but after age 18 are actually more likely stay within the family home (Berzin & Marco, 2010). Furthermore, youth raised in poverty are more likely to have children before the age of 25. In sum, youth who come from low-income families may be less likely to attend university, more likely to leave home prior to age 18 but more likely to stay after age 18, and are at a higher risk of parenthood before age 25. All of these factors, in turn, may change their experience of some of the characteristics of EA.

There is some evidence that differences may exist in EA experiences between young adults from varying social classes. For example, a recent examination explored differences in EA experiences between different social classes (self-reported working class, middle class, or upper-middle/upper class) using the IDEA among both college students and non-students from a wide age range (18 and older; Reifman, Arnett, & Colwell, 2007). Of the five domains, differences were found in the instability and self-focused domains. Specifically, working class respondents had significantly higher instability scores when compared to upper-middle/upper class respondents. In contrast, working class respondents scored significantly lower on the dimension of self-focused when compared to upper-middle/upper class respondents. Another study by Smith and colleagues (2014) also found variations in EA experiences among low income young adults. The authors compared scores on the IDEA between their sample of lower income emerging adults not in college and Reifman et al.'s (2007) sample of college students. The results indicated that the low-income youth reported similar levels of self-focused behaviours, but higher levels of identity exploration, negativity/instability, and other-focused, and lower levels of experimentation/possibilities. These results suggest that differences may exist in EA

experiences with individuals from lower class backgrounds with experiencing less possibilities available and showing less certainty about their futures.

Massey, Gebhardt, and Garnefski (2008) examined the research on personal goals between low and high SES among adolescents (grades 5 to 12). The authors share evidence that adolescents from lower SES tended to report more goals related to wealth than adolescents from a higher SES, while higher SES adolescents tended to report more education-related goals. The authors note that the connection between adolescent SES and educational pursuits is likely mediated by several family factors, including parental support, parental involvement, and parental academic achievement. Although research has explored the links between SES and personal goals among adolescents, more research is required in order to ascertain any specific patterns of development during EA that may differ between social classes. That is, do systematic differences exist in experiences of EA when comparing young adults from varying social classes?

Environmental context of emerging adults in Canada

The current study examined the experiences of individuals aged 18 to 29 within a Saskatchewan city within Canada. Although the current study was not designed to treat geographic context as a variable of interest (i.e., by making national or regional comparisons), it was nevertheless considered important to appropriately set the stage by outlining the current Canadian context in the areas of participation in post-secondary education, employment, parenthood, marriage, and SES.

Post-secondary Education in Canada. In addition to marriage and parenthood, it has also been argued that the ability to complete one's education at a later age may provide a primary opportunity to delay adulthood and self-explore (Arnett, 2000, 2004). Within Canada, many students remain in post-secondary training well into their twenties. Specifically, of those who pursued post-secondary education, 7.3% obtained a trades certificate/diploma, 12.6% reported obtaining a college or non-university diploma, and 12.3% reported obtaining a university degree (Statistics Canada, 2006b). The proportions of individuals between the ages of 20 and 24 who have pursued higher levels of educational attainment differ in Saskatchewan when compared to the national average. That is, 47.3% reported having a trades diploma/certificate (versus a national average of 7.3%), 19.2% indicated having a college or non-university diploma (versus

12.6%), and 16.6% indicated obtaining a university degree (versus 12.3%; Statistics Canada, 2006b).

As stated earlier, the present study is designed to consider both undergraduate and graduate environments (e.g., master's, doctorate). Within Canada, 86.6% of individuals between the ages of 20 to 24 who have gone to university have obtained a bachelor's degree, while the remaining 13.4% went on to obtain a degree higher than a bachelor's degree (Statistics Canada, 2006b). For instance, a master's degree or a doctoral degree. In Saskatchewan, 93.6% of individuals between the ages of 20 to 24 who have gone to university have obtained a bachelor's degree (Statistics Canada, 2006c). Approximately 6.5% of individuals 20 to 24 obtained a university degree higher than a bachelor's degree. Thus, Saskatchewan has a lower proportion of individuals aged 20 to 24 who pursue graduate level training when compared to the national average. It is important to note that these statistics have reported the proportion of Canadian and Saskatchewan residents aged 20 to 24 who have *obtained* a university degree. However, there are many individuals within this age group who have not yet obtained a degree higher than a bachelor's degree. That is, an individual's highest level of educational attainment might be a bachelor's degree, but s/he may be currently working towards a higher degree. Indeed, Clark (2009) has suggested that an increasing number of individuals pursue graduate level training and, as a result, many do not finish university until ages 29 to 30 (Clark, 2009).

Non-post-secondary youth. Clearly, not *all* individuals within Canadian society choose to attend post-secondary education. In fact, a high school diploma as the highest level of education was reported by approximately 52% of Canadian residents aged 18 to 34 in 2001 (Clark, 2009). The 2006 Canadian census indicates that among 20 to 24 year olds in Canada, 49% reported a high school diploma as their highest level of education (Statistics Canada, 2006b). Among Saskatchewan residents age 20 to 24, 42.9% indicated a high school diploma as their highest level of education. Within Canada, 18.2% of 20 to 24 year olds reported not having obtained any degrees, diplomas, or certificates (Statistics Canada, 2006b). In contrast, 13.8% of Saskatchewan 20 to 24 years reported having no degree, diploma, or certificate.

Marriage and parenthood. Arnett has noted that contexts that allow individuals to marry and have children at a later age are required for EA to occur (2004, 2012). Certainly, modern Canadian society generally allows for such delays with the average age of both marriage and parenthood dramatically on the rise (Clark, 2009). For example, in 1971 approximately 61% of

18- to 34-year olds were married or in a common-law relationship and 44% had a child. This is in contrast to young adults in 2001 wherein only 48% were married or in a common-law relationship and 29% had a child. More recent data from the 2011 Statistics Canada Census indicates that among 15 to 24 year olds in Canada, 4.6% are parents (Statistics Canada, 2006a). In contrast, nearly double that number (8.1%) of 15 to 24 year olds in Saskatchewan have entered parenthood. This suggests that experiences of EA within Saskatchewan may differ from that of Canadian 18 to 29 year olds as a whole due to increased proportions of parents within this age group.

Summary of the Environmental Context in Canada. It appears as though many of the environmental factors proposed to influence the experience of EA (e.g., educational attainment, postponed marriage and parenthood) are present within Canadian and Saskatchewan society. Thus, it may certainly be the case that many Saskatchewan young people aged 18 to 29 experiencing typical EA trajectories. However, there are also many environmental factors present within Canada that have been suggested to reduce the opportunity to have experiences characteristic of EA. For instance, many 18 to 29 year olds do not go on to attain a higher education after high school and many marry and have children during young adulthood. Thus, for these individuals, the opportunity to experience EA may not be available. Taken together, an overview of the Canadian and Saskatchewan environments reveals that sufficient (and predicted) variability in EA experience will likely emerge in the present investigation.

Individual Development during Emerging adulthood.

The LMM (Salmela-Aro, 2009, 2010) provides a foundation for operationalizing developmental pathways during EA. The model proposes that individuals regulate their own development by choosing goals that coincide with their own personal needs/motivations and their contextual environment (i.e. channeling, co-agency). The LMM has been used to explore what factors influence the personal goals (i.e., development) among young people. Personal goals are closely related to two other conceptualizations of development during EA that have been the focus of Arnett's (1999, 2001) work: developmental tasks and criteria for adulthood. Table 1 shows the significant overlap between the various personal goals, developmental tasks, and criteria for adulthood. For instance, the personal goal to "make own decisions" is linked to the developmental task of "independence and self-sufficiency" which is also linked to the criteria for adulthood to "accept responsibility for one's actions". Another example might be the links

between the personal goal, developmental task, and criteria for adulthood, to “develop friendships”, seek “peer involvement”, and “make lifelong commitments to others”, respectively.

The body of research within each of the separate yet interrelated domains of development provides a broad understanding of development during the age period from 18 to 29. The examination of personal goals will allow the current study to explore what developmental pathways individuals are striving towards, while the exploration of developmental tasks and criteria for adulthood will help aid our understanding of what young people consider to be important markers of adulthood. Finally, the current study will be able to test whether or not development during EA (i.e., personal goals, developmental task attainment) is associated with healthy outcomes. The following sections review the relevant literature in the areas of personal goals, developmental tasks, and criteria for adulthood in order to articulate the operationalization of development.

Personal goals. According to the LMM, individuals regulate their development through the channeling and choice of personal goals (Salmela-Aro, 2009, 2010). Goals have been defined as, “internal representations of desired states, where states are broadly construed as outcomes, events, or processes (Austin & Vancouver, 1996, p. 338). Personal goals build upon this definition by emphasizing that they are of “high relevance to the individual for longer periods in his [or her] development” (Negru, 2008, p. 266). Goal relevance indicates that the individual views the goal as important and, because of its importance, the individual will commit to and persist in working towards his or her goal attainment. In recent years, scholars have begun to examine personal goals among emerging adults (Messersmith & Schulenberg, 2010; Salmela-Aro, 2010; Salmela-Aro, Aunola, & Nurmi, 2007; Schulman & Nurmi, 2010). It has been suggested that many life transitions are associated with the period of EA, such as educational, career, and family transitions (Salmela-Aro, Aunola, & Nurmi, 2007; Schulman & Nurmi, 2010). The personal goals of emerging adults tend to reflect these transitions and are mainly related to the domains of education, occupation, social, and the self (Salmela-Aro, 2010). Thus, it may be the case that varying contexts within emerging adulthood will influence how the individual shapes his/her development. For instance, if the emerging adult chooses to attend university, then her or his personal goals will likely be pre-dominantly educational.

Studies have examined personal goals during the transition to adulthood among university students. For example, Salmela-Aro, Aunola, and Nurmi (2007) investigated how

Table 2-1

Comparison of personal goals, developmental tasks and criteria for adulthood.

Personal Goals	Developmental Tasks¹	Criteria for Adulthood
Live independent from parents Make own decisions	Independence and self-sufficiency	Accept responsibility for actions Determine personal beliefs/values Equal relationship with parents Do not live with parents Emotional regulation Driver's license Not deeply attached to parents Purchase own home
Complete high school Complete undergraduate degree Complete graduate degree	Education	Finish education
Obtain Career	Work	Long term career Full-time employment
Major purchases (e.g., home) Minor purchases Savings	Financial independence	Financial independence Can support a family
Find a romantic partner Marriage Sexual intimacy	Romantic involvement	Long-term romantic partner Have sexual intercourse One sexual partner Marry
Spend time with friends Develop friendships	Peer involvement	Make lifelong commitments to others
Avoid unhealthy behaviours Engage in healthy behaviours	Risky behaviour avoidance	Avoid committing crimes Use contraceptives Avoid drunk driving Avoid illegal drugs and excessive alcohol consumption Drive safely Decrease vulgar language
Parenthood Have a family Become a spouse	Family	Marry Have a child Run a household Keep family safe Care for children
		Reach age 18/21 Reach full height

¹ Developmental tasks were identified from the following sources: Arnett, 2001, 2006; Cohen, Kasen, Chen, Hartmark, & Gordon, 2003; Roisman, Masten, Coatsworth, & Tellegen, 2004; Schulenberg, Bryant & O'Malley, 2004; Seiffge-Krenke & Gelhaar, 2008.

personal goals change during the transition to adulthood and how biological age shaped personal goals. The study included 297 (n females = 219) university students from the Helsinki Longitudinal Youth Study (HELS) in Finland. Data was gathered over a period of 10 years with 5 data collections during that time period. The average age at the time of first contact with participants was 20.61 years. The overall retention rate was 77% and individuals who dropped out of the study were found to have made less progress in their educational studies when compared to those who continued to participate.

Personal goals were measured by Personal Project Analysis (Little, 1983; Salmela-Aro, Aunola, & Nurmi, 2007). First, participants were asked to write three of their current goals. Next, each goal was coded by two assessors into one of 13 categories based on the content of the goal. The categories included: education, friendship, travel, work, health, children, family, wealth, self, lifestyle, housing, daily life, and hobbies. Third, the number of goals endorsed within a single content area was calculated for each participant. Life events that participants may have experienced during participation and that may influence their goals were also assessed in the following areas using a dichotomous rating scale (yes = 1, no = 0): cohabitation or marriage, birth of a child, graduation from university, and full-time employment.

Results indicated that trajectories of increase, decrease, and stability were in evidence across personal goal domains throughout university (Salmela-Aro, Aunola, & Nurmi, 2007). Specifically, education-, friendship- and travel-related goals decreased over time. In contrast, work-related goals initially increased over the course of university, then leveled off around the 5th data collection period. Both family- and health-related goals increased throughout university. Several goals remained stable across time including: child-, daily life-, lifestyle-, hobby-related, and self-related goals. Personal goals were also analyzed with respect to gender and age (Salmela-Aro, Aunola, & Nurmi, 2007). Women endorsed more daily goals while men endorsed more leisure goals. In addition, women showed a greater increase over time with respect to child-related goals when compared to their male counterparts. With respect to age, older participants reported a higher number of work- and family- related goals and fewer friend-related goals over time. As well, as participants got older, they had smaller increases in family-related goals, but higher increases in child-related goals. Overall, the results suggest that as individuals progress through university, the types of goals they pursue change and tend to focus more on family and health. However, a limit of the study was the lack of diversity in the sample as all emerging

adults in the sample were, at some point, university students. Despite the fact that the present study was not designed to track individual change over time (longitudinally), it will be possible to consider (cross-sectionally) whether year of university study is associated with the articulation of personal goals.

The LMM model hypothesizes that individual goal pursuits are associated with well-being (Salmela-Aro, 2009, 2010). A recent study by Messersmith and Schulenberg (2010) examined the relations between goal aspirations, goal attainment, and well-being during the transition to adulthood. The study was longitudinal in design over six data collections taking place from age 18 (first data collection) to age 27/28 (final data collection). The study included a nationally representative sample ($N = 5,693$) within the United States. At age 18, participants were asked to report their aspirations to graduate from college, marry, and become a parent. Only individuals who expressed an interest in graduating from college, marrying, and becoming a parent were included in the analyses. At age 27/28, the attainment of college graduation, marriage, and parenthood were assessed. Measures of well-being included overall life satisfaction, global self-efficacy, self-satisfaction, and self-esteem. The results indicated that attainment of personal goals in the area of completing college was related to greater well-being in the area of self-efficacy (Messersmith & Schulenberg, 2010). Those who completed the goal of marriage were found to have higher life satisfaction and self-satisfaction. However, a positive relation was not found between parenthood and well-being. The authors suggest that the lack of connection may be due to the fact that the relationship between parenthood and well-being exists later on in life and that many individuals do not have children until after age 28. The results of this study suggest that goal attainment is associated with healthy development among individuals who are transitioning from adolescence to adulthood. However, a limitation of the research is that only individuals who expressed an interest in graduating from college, marrying, or becoming a parent were included. The well-being of those who did not endorse the aforementioned goals at age 18 cannot be inferred.

Salmela-Aro and Nurmi (1997) conducted similar research that took into account the fluctuating nature of goal setting. The authors examined personal goals not only in relation to life events, but also in relation to subjective well-being. A total of 256 university students completed Little's Personal Project Analysis (see previous studies for details on the method), the Beck Depression Inventory (BDI), and Rosenberg's Self-esteem Scale (RSE). Approximately one year

later, participants completed a life event scale, which assessed approximately 20 life events, such as beginning a new job, losing a job, moving away from their parents' home, birth of a child, marriage, and graduating from university, serious economic problems, and serious illness or accident. Two years after that they again completed all measures.

Results indicated that the goals university students pursued tended to align with the developmental tasks appropriate for their age group and mainly included goals related to education, occupation, and family. The goals individuals pursued tended to be relatively stable over time such that the goals endorsed at the initial assessment aligned with the goals endorsed two years later. Results indicated that individuals who were married or had children at the initial assessment had a higher level of family-related goals, whereas being single was related to self-related goals. Individuals who initially reported family-related goals were more likely to marry or cohabit at later assessments. These results suggest that individuals' personal goals shape their development in that the types of goals they pursue are related to their future life paths. Specifically, Salmela-Aro et al. (1997) suggest that the results reflect personal agency (or "choice") influencing development such that individual goals direct developmental paths and that the chosen paths influence goal pursuits in the future.

With respect to goal setting and well-being, the endorsement of family-related goals predicted higher self-esteem and lower depression. A decrease in self-esteem was observed among those who became interested in self-related goals and those who experienced a decrease in achievement-related goals (career, education). Gender did not change the relationship between goals and well-being. Thus, the results of the study provide evidence that life context, such as marriage or parenthood, influence the types of goals individuals pursue and that the types of goals individuals pursue are related to indices of well-being. Further, the pursuit of goals related to the major developmental tasks of an individual's age period (family, career, education) tended to be associated with positive outcomes.

In sum, research has begun to examine personal goals among emerging adults (Messersmith & Schulenberg, 2010; Salmela-Aro, 2010; Salmela-Aro, Aunola, & Nurmi, 2007; Schulman & Nurmi, 2010). Individuals appear to be active agents in choosing their personal goals and their goal pursuits seem to lay the foundation for development (Salmela-Aro et al., 1997). Results have shown that personal goal pursuits are not linear and personal goals may increase, decrease, or remain stable over time (Salmela-Aro, Aunola, & Nurmi, 2007). Further,

as one ages, the types of goals they pursue evolve to reflect current demands and role transitions. Finally, goal attainment is linked to healthy development during EA (Messersmith & Schulenberg, 2010) especially if the goals are related to the major developmental tasks to be attained during an individual's stage of development (Salmela-Aro et al., 1997). Despite what we know about personal goal pursuits during EA, a consistent limitation in the personal goal research among emerging adults is the focus on university samples (Messersmith & Schulenberg, 2010; Salmela-Aro, 2010; Salmela-Aro, Aunola, & Nurmi, 2007; Schulman & Nurmi, 2010). Reminiscent of the emerging adulthood work undertaken by Arnett (e.g., 2001, 2004), much less is known about personal goal pursuits among non-students and, hence, becomes an important feature of the proposed research.

Developmental Tasks. According to basic developmental theory, there are specific developmental tasks that must be completed by an individual within particular stages of life in order to ensure healthy developmental transitions to the next stage (Salkind, 2004). Developmental tasks have been defined as activities or goals that are completed at various stages of development and are based on biological, social, cultural, and psychological factors (Salkind, 2004). Similar to the association between goal pursuits and positive well-being (Salmela-Aro, 2009, 2010), the attainment of the developmental tasks at a given stage of development is hypothesized to be associated with positive psychosocial and emotional outcomes (Erikson, 1968; Salkind, 2004).

Developmental tasks to be completed at each stage of development are not biologically inherent, but depend, to a large extent, on the context in which individuals reside (Schulenberg, Bryant, & O'Malley, 2004). Originally, the main developmental task to be attained during young adulthood proposed by Erikson's (1968) psychosocial stages of development was that of intimacy versus isolation, or the development of committed romantic relationships. However, salient developmental tasks tend to shift over time based on socio-historical changes and, consequently, the development tasks for young adults proposed by Erikson have evolved over time. Indeed, Krings, Bangerter, Gomez, and Grob (2008) examined developmental tasks historically and found that younger generations tended to endorse tasks focusing on self and education (mapping onto Arnett's conception of EA), whereas older generations tended to endorse family- and career-related tasks (mapping onto Erikson's model). Thus, developmental tasks reflect current social expectations regarding developmental transitions. In other words,

varying contexts have different normative “developmental demands” which influence the ways in which emerging adults choose developmental tasks to strive towards (Negru, 2008).

Emerging adulthood may be perceived as an extension of adolescence with respect to the attainment of developmental tasks (Arnett, 2000). That is, development during this age period is characterized not only by the development of intimate relations, as described by Erikson (1968), but also by the continuing construction of identity in the domains of work, education, love, and family, among other areas. Scholars have started to research various developmental tasks during emerging adulthood in order to determine which tasks are most salient and necessary in order for healthy development to occur in later stages (i.e., adulthood, older adulthood; Arnett, 2001, 2006; Cohen, Kasen, Chen, Hartmark, & Gordon, 2003; Roisman, Masten, Coatsworth, & Tellegen, 2004; Schulenberg, Bryant & O’Malley, 2004; Seiffge-Krenke & Gelhaar, 2008). The main tasks identified within the literature are encompassed within the following domains: independence and self-sufficiency, education, work, financial independence, romantic involvement, peer involvement, substance use avoidance, and citizenship. Interestingly, the developmental tasks associated with EA overlap substantially with the personal goals individuals strive to attain (see Table 1). In fact, personal goals have been suggested to reflect the developmental tasks to be completed in any given developmental stage (Negru, 2008; Salmela-Aro, 2010). Thus, individual personal goals and developmental tasks may be conceived as related constructs marking development. However, a difference between the two constructs appears to be personal agency: individuals *choose* personal goals while developmental tasks are conceptualized as *requiring completion* in order to move from one stage of developmental to the next.

Studies have examined the relative importance of various developmental tasks with respect to successful attainment of future tasks during young adulthood (Roisman, Masten, Coatsworth, & Tellegen, 2004). For example, Roisman and colleagues (2004) examined the predictive validity of developmental tasks at around age 20 to adult success approximately 10 years later (around age 30). The authors hypothesized that the relationship between the resolution of developmental tasks and adjustment would vary depending on whether the task is well-established and salient (e.g., friendship, academic success, and conduct) or new and emerging (e.g., work and romantic relationships). Participants were a subsample from a longitudinal study that took place in a middle-class area of Minneapolis. The sample included 177 individuals (n

males = 74) with 29% from a visible minority group. Participants were between the ages of 8 to 12 years old during the first wave of data collection and were followed up 7, 10, and 20 years later. Roisman et al. report specifically on data from the 10 and 20-year follow-ups. At around age 20, success in five developmental task domains (academic achievement, conduct, peer social competence, romantic relationships, and work) was assessed via composite scores obtained through structured interviews and self-report measures. At around age 30, developmental tasks were modified to reflect the areas of development important during adulthood. Thus, the success was measured in the domains of academic attainment, abiding societal rules, romantic relations, work, and close friendship.

The results indicated that success in friendships, academics, and conduct at age 20 predicted success in similar domains at age 30 (Roisman et al., 2004). Further, success in the domains of social and academics predicted success in work and romantic competence. However, success in the areas of work and romance at age 20 did not significantly predict success in these areas at age 30. The authors suggest that the salient tasks that are widely held and supported within an individual's culture have a larger influence on future development when compared to tasks that are newly emerging. In other words, not all developmental tasks are equally important for healthy development to occur in the future (Roisman et al., 2004). Moreover, the importance of attaining certain tasks appears to be embedded culturally. Thus, as societal expectations change regarding the nature of development, it is plausible to hypothesize that the salience of developmental tasks will also evolve. It is important to note that one of the hallmark features of Arnett's theory is the attainment of independence and self-sufficiency. However, Roisman et al. (2004) did not examine all of the proposed developmental tasks of EA, including independence, self-sufficiency, and financial independence, and consequently less is known about how development in these areas influences future growth. It may have been the case that Roisman et al., 2004 did not measure these tasks as they were not considered central to development or were overlooked at the time of data collection. Despite the limited scope of the research, a strength of the study includes the rare use of both university and non-university students within a longitudinal framework.

The results from Roisman and colleagues (2004) suggests that not all developmental task attainment influences future development, but that specific salient tasks that are widely supported within society lay the foundation for healthy future development. Similar work has

also suggested that perhaps not all developmental tasks are equally salient across individuals and that variations in task attainment may be apparent between individuals (Cohen, Kasen, Chen, Hartmark, & Gordon, 2003). For instance, Cohen and colleagues (2003) examined differences in developmental transitions between individuals from varying SES, ethnicities, and genders. The data was collected longitudinally from participants aged 17 to 27 from 1967 to 1973 in the United States (N = 240). Several developmental tasks were assessed, including school attendance, living with family, receiving financial support from family, parenthood, and romantic involvement.

The authors presented results for each of the tasks separately (Cohen et al., 2003). First, differences in school attendance were apparent between sexes. Specifically, during the 4 years following high school graduation, more women attended college than males; however, by age 22 no sex differences were observed. Differences in school enrollment were also found consistently across time and SES with a significantly higher proportion of high SES individuals attending school compared to low SES individuals. No main effect of race was observed after controlling for SES. With respect to residential independence, as individuals aged, they were more likely to live independently. Sex differences were observed with women living independently at an earlier age then leveling off, whereas men tended to not live independently early on, but then quickly caught up to their female counterparts in their mid-twenties. No differences in independent living were found between SES groups or ethnicities.

Financially, individuals tended to achieve higher levels of independence as they aged, though males tended to have a greater increase in financial independence compared to females (Cohen et al., 2003). No significant SES or race differences were observed with respect to financial independence. Several demographic differences were found when examining romantic involvement and commitment (Cohen et al., 2003). Specifically, women had a consistently higher level of commitment in romantic relationships than males. Moreover, romantic commitment among females from low-SES was higher than females from higher SES though no differences were found between males from low- and high-SES. Among men and women combined, romantic commitments were lower among Black participants when compared to White participants. However, among Black participants, a high proportion of males tended to commit romantically early in their twenties, but fewer indicated romantic commitment in their mid- to late- twenties. In contrast, comparatively fewer Black women committed in their early

20s, but showed an increase in commitment in their mid- to late- twenties. Finally, engaging in parenthood was low during the early twenties, but increased as participants aged. Overall, differences were found with respect to parenthood: a higher proportion of women, Black participants, and low SES participants attained parenthood status.

Overall, perhaps the most notable result was the variability in task attainment over time across individual cases (Cohen et al., 2003). For instance, some individuals did not progress in task attainment across time (i.e., living with family), others progressed very quickly, and yet some tended to follow the group average and move in incremental steps towards task attainment. A strength of the study was that the authors examined the influence of multiple individual- and contextual-level factors on development and found that such factors appear to lead to different developmental pathways. An additional strength was the inclusion of both students and non-students, though differences between groups were not compared. It is important to note, however, that the study was conducted nearly thirty years ago. Thus, while the results of this study may inform the current study, historical changes in the nature of development may preclude the application of the findings to modern emerging adults. Moreover, the authors did not assess psychosocial adjustment in relation to task attainment. That is, are variations in individuals' task attainment associated with differences in well-being? Nevertheless, while it is likely that the timing of task attainment differs between the study sample and modern emerging adults, the non-linear nature of development as evidenced in the study is anticipated to remain characteristic of young adults today. In addition, the results illustrate the connection between individual factors, such as sex, race, and SES, and varying developmental trajectories. These results align with Arnett's (2004) argument that EA experiences are diverse. Cohen et al.'s (2003) findings provide evidence that developmental task attainment varies as function of a multitude of individual factors and, consequently, such factors should be considered when examining variations in EA experiences.

Although Cohen et al. (2003) did not examine the relationship between developmental task attainment and well-being, Schulenberg and colleagues (2004) did, in fact, examine how success and difficulties in the attainment of developmental tasks relate to trajectories of well-being. The authors examined progress in seven developmental task domains among participants aged 18 to 26 at three time points: age 18, age 22, and age 26. Only participants who were present at all three waves of data collection were included in the sample. The tasks examined the

domains of education, work, financial autonomy, romantic involvement, peer involvement, substance use avoidance, and citizenship (Schulenberg, Bryant & O'Malley, 2004). Participants were classified as succeeding (attained task), maintaining (working towards attainment), or stalling (not working towards attainment) in each of the seven task domains. Participants' well-being was based on self-rated self-esteem, self-efficacy, and social support.

Results indicated that individuals who were succeeding or maintaining in the work, romantic involvement, peer involvement, and citizenship domains experienced increases in well-being over time (Schulenberg, Bryant & O'Malley, 2004). In contrast, success in the areas of education and financial autonomy approached significance, but appeared to be of less importance in predicting well-being. Thus, the results provide evidence that developmental task pursuit and attainment in specific areas are related to adjustment. A strength of the study was the inclusion of individuals who both were students and non-students; however, the analyses were not conducted for each group independently limiting the ability to determine whether the attainment of developmental tasks is associated with well-being for both groups. Regardless, it is interesting to note that the relationship between well-being and task attainment was not found for all of the developmental task domains providing further evidence that some tasks are more central to positive adjustment than others.

The results from Schulenberg and colleagues' (2004) study indirectly support the argument that the importance individuals place on attaining each of the tasks may influence whether or not the task attainment connects to adjustment. Seiffge-Krenke and Gelhaar (2008) directly examined whether the subjective importance and achievement of development tasks were related to success in future developmental tasks. The sample included 146 participants from Germany. A majority of participants were from middle to high socioeconomic status (82.2%). Six waves of data were collected. Positive outcomes were operationalized as high self-esteem and low psychological maladjustment. The Developmental Task Questionnaire (DTQ) developed by Seiffge-Krenke (1998) was used to assess the overall level of developmental task progression. Participants rated the subjective importance of each task and their current attainment of each developmental task. Analyses were based on an overall index of task progression.

The results indicated that, overall, the subjective importance of each of the developmental tasks was higher than the individual's task attainment (Seiffge-Krenke & Gelhaar, 2008). Specifically, an increase in subjective importance of developmental tasks was observed between

the ages 21 and 23; however, no accompanying changes in developmental status were found. Thus, the results suggest that individuals are striving towards attaining the task and, once they achieve the task, it will no longer be as important. The results showed that subjective importance and achieved development tasks did not predict future well-being or success in future task attainment. However, one should note that only two indices of well-being were used and developmental task progression was measured using an overall index. Therefore, it is not clear whether relations between subjective importance, task progression and well-being would be found when examining developmental tasks independently. The authors also note that the study was conducted in Germany and among a middle-class sample and, as a result, results should not be generalized to other cultures or sample populations as differences in development may vary context to context (Seiffge-Krenke & Gelhaar, 2008).

In summary, research on developmental tasks during EA suggests that, overall, not all tasks are equally salient among young adults aged 20 to 30 (Roisman et al., 2004). Further, individual-level factors may influence task progression in that emerging adult developmental trajectories differ by sex, SES, and ethnicity (Cohen et al., 2003). Finally, task attainment in some areas has been associated with positive adjustment (Schulenberg, Bryant & O'Malley, 2004).

Conceptions of the transition to adulthood. As described above, the current study operationalizes development through the domains of personal goals, developmental tasks, and conceptions of the transition to adulthood. The current section reviews research on the conceptions of the criteria for adulthood as the third way to understand development among emerging adults.

Interest among scholars surrounding the criteria for adulthood has arisen based on the observation that an individual's chronological age is not necessarily an accurate representation of her or his subjective age (Schlossberg, 1987). Therefore, individuals may be classified as adults based on their age, but they may not classify themselves as adults. The examination of the developmental tasks has occurred in parallel with the literature investigating the criteria for adulthood. Many of the criteria required to transition to adulthood overlap with the developmental tasks to be attained during EA. Table 1 shows the similarities between the commonly examined developmental tasks and the criteria for adulthood. Thus, while the terms "developmental tasks" and "criteria for adulthood" are different, they appear to be examining

similar constructs that are potentially interchangeable. Consequently, it is important to consider research on the criteria for adulthood when assessing the developmental tasks to be attained during EA. Specifically, the examination of criteria for adulthood will shed light on whether the criteria deemed important for the transition to adulthood align with the developmental tasks outlined as important within the literature. Research has indicated that the attainment of some developmental tasks is more important than the attainment of others (Schulenberg, Bryant & O'Malley, 2004). Thus, understanding which criteria for adulthood individuals consider important may help us understand why some tasks are more closely related to healthy development than others.

Much like the changing nature of developmental tasks over time, conceptions of the transition to adulthood, too, have shifted across the past few decades. Only three decades ago, Hardwick (1984) asked 60 college students “How does one become an adult?” Overall, students did not endorse the formation of identity as important to becoming an adult. In contrast, the description of EA suggests that the central task during the transition to adulthood is intense identity exploration with the goal of learning to stand alone, becoming self-sufficient, and gaining independence (Arnett, 2000, 2006). Nelson and Barry (2005) recently examined differences in the criteria considered important to achieving adult status for a group of 232 college students (ages 18 to 29) who either identified as an adult or an emerging adult. The students attended an Atlantic university in the United States. In order to identify whether or not they perceived themselves as an adult, students were asked “Do you think you have reached adulthood” with the response options of “yes”, “no”, or “in some respects yes, in some respects no”. Students who indicated “no” or “in some respects yes, in some respects no” were collapsed into one group. Students were then provided a list of 43 criteria and were asked to rate the importance of each criteria in defining adulthood on a scale of 1 to 4 (1 = very important, 4 = not at all important). Next, they were asked to indicate the extent to which they met the criteria for adulthood on a scale of 1 to 4 (1 = very true, 4 = not true).

Results indicated that 25% of the participants reported that they had reached adulthood, 6% said that they had not reached adulthood, while 69% indicated they had reached adulthood in some ways, but not in others. No sex differences were found in self-perceptions of adulthood. No differences were found between students who identified as adult versus those who identified as emerging adult in terms of what they perceived as important criteria for adulthood. The criterion

that received the highest rating by both groups was independence. Students who perceived themselves as an adult reported significantly higher levels of independence, interdependence, and family capacities (ability to support and care for a family) compared to those who considered themselves an emerging adult. In addition, perceived adults also reported significantly more role transitions, or classic markers of adulthood, such as finishing school, being married, having a child, buying a house, and being employed full-time. Unfortunately, identification was not examined as a function of age.

A similar study was conducted by Arnett (2001) to examine conceptions of the transition to adulthood among a sample of 519 university and non-university students between the ages of 20 to 29 in an American mid-western community. Participants were provided with a list of criteria related to the transition to adulthood and were asked to “indicate whether you think the following must be achieved before an individual can be considered an adult”. Participants were to indicate “yes” or “no” for each item. The results indicated that students endorsed “accepting responsibility for the consequences of your actions” (93%) and “decide on personal beliefs and values independently of parents or other influences” (83%) most frequently. Only one gender difference was found: males were more likely than females to endorse being “capable of supporting a family financially” as an important criteria for adulthood (57% versus 41%). Life transitions, including finishing education, marriage, and parenthood were not identified as important criteria in defining the transition to adulthood. However, older participants endorsed more life transitions as important when compared to their younger counterparts. No other age differences were found. These findings suggest that the majority of young adults in the sample considered criteria related to individualism, rather than life transitions, as most important to achieving adult status. These results counter the findings of Salmela-Aro (1997) wherein university students’ personal goals were largely related to education, occupation, and family. However, Arnett’s sample included both university and non-university students and, as a result, the tasks observed to be important in each study may vary due to differing contexts. Arnett (2001) did not differentiate between the reports of students and nonstudents, nor did he ask participants to report whether or not they felt as though they had reached adulthood.

In an additional study, Arnett (1998) examined the criteria for adulthood among 140 young adults age 21 to 28 (n males = 74). A majority of the sample was Caucasian (94%) and the sample included a wide range of socioeconomic statuses. Participants were provided with a list

of 38 criteria for adulthood and were asked whether they felt that each criterion needed to be achieved before an individual could be considered an adult. Response options included “yes” or “no”. Participants were also asked if they felt as though they were an adult with response options “yes”, “no”, and “in some respects yes, in some respects no”. Participants also took part in a structured interview to explore the ways in which they felt they were an adult, and the ways in which they did not feel like an adult.

The results from the questionnaire indicated that the three most important criteria for reaching adulthood status included: accepting responsibility for oneself (i.e., “accept responsibility for the consequences of your actions”), making independent decisions (i.e., “decide on personal beliefs and values independently from parents”), and financial independence (i.e., “financially independent from parents”; Arnett, 1998). Based on the interview data, 64% of participants indicated that they were adults, 2% indicated they were not adults, and 35% of participants indicated that they were adults in some respects, but not others. Arnett indicated that the responses as to why they felt they both were and were not an adult were very ambiguous and that this ambiguity likely reflected the vague nature of the main criteria for adult status. Arnett suggested that it is difficult to define what “independence” might look like as it is an abstract concept. It follows that because the criteria for adulthood are ambiguous in nature, self-classification as an adult is also ambiguous. Arnett also noted that participants did not provide gender specific criteria for adulthood; that is, the criteria for adulthood were the same whether the individual under consideration was a male or female. The results from this study provide further support for the individualistic nature of modern conceptions of adulthood and suggest that the criteria for adulthood may not differ between males and females.

A majority of past research examining emerging adults’ conceptions of adulthood has used quantitative measures. Such measures allow little room for ambiguity in responses as participants are asked to choose from limited and pre-determined answers. The question of why individuals places greater importance on some criteria, but not others is not well understood. For instance, in the Nelson and Barry (2005) study, 69% indicated they had reached adulthood in some ways, but not in others. This begs the question: how are you like an adult, and how are you not? Therefore, aspects related to the participants’ conceptions of their own transition to adulthood were not represented by the survey. As such, it is important to also allow emerging adults to share their conceptions of adulthood using their own words.

Molgat (2007) did, in fact, provide an opportunity for adults aged 25 to 29 to discuss whether or not they consider themselves adults and what factors are important in defining oneself as an adult. Participants included 45 individuals from a mid-size city in Quebec, Canada. Although both university and non-university students were included in the sample, only 6 participants had less than a post-secondary level education. Approximately 9 individuals obtained some post-secondary education, while 30 had obtained a university degree. Students were individually interviewed and asked the open-ended questions: “Do you have the impression of being an adult?” and “Can you explain?”. Approximately half of the participants indicated that they felt as though they were adults (n=24, 53.3%). A total of 6 individuals indicated they were not adults, and in keeping with previous research (e.g., Arnett, 2001, 1998; Nelson & Barry, 2005) a notable proportion of the sample (33% n=15) reported they were “both”.

Three central dimensions in the definition of oneself as an adult were revealed among those who felt they had achieved adult status or who had partially obtained adult status. First, they indicated that independence from one’s parents was the most central aspect to becoming an adult and was related to having a sense of control over one’s life. The process of leaving home was identified as reaffirming the establishment of independence from parental authority. Financial independence was identified as the second central dimension to becoming an adult and was discussed in relation to obtaining a career and gaining financial independence. Moreover, financial independence was also linked to gaining independence and becoming responsible for oneself. Lastly, responsibility towards others was identified as a third central dimension of achieving adult status. Responsibility towards others was often relayed in terms of caring for a partner or child. That is, certain life transitions (i.e., marriage, parenthood) seemed to lead to the development of responsibility for others.

The results from Molgat’s (2007) study indicate that, at least retrospectively, individuals used *both* ‘individualistic’ criteria (independence and responsibility) and life transitions to define their transition to adulthood, which counters previous findings in which individualism was emphasized (Arnett, 2001). Lopez and colleagues (2005) found similar results in their qualitative analysis of conceptions of adulthood among 18 to 29 year olds. The authors interviewed 18 individuals (10 women, 8 men) between the ages of 18 to 29. A majority of participants (n = 14) were currently undergraduate students. The interviews were coded by a small group of researchers who determined the domains relevant to the transition based on group consensus.

Domains were considered “general” if they were observed across all 18 cases, “typical” if observed in 9 to 17 cases, and “variant” if found in 4 to 8 cases. Domains identified in fewer than four cases were not considered. Consistent with the results of Molgat (2005), life transitions were a central component to emerging adults’ conceptualizations of the transition to adulthood (Lopez et al., 2005). Specifically, all cases reported obtaining a career as central to becoming an adult and a majority considered having a family to be an important marker (“typical” category). Interestingly, developing an identity was only endorsed by 4 to 8 cases which counters the central developmental task previously suggested to be necessary for obtaining adult status (Arnett, 2001, 2006).

While quantitative approaches have generally found life transitions to be of little importance when defining adulthood, qualitative approaches reveal that such transitions may still be central to how emerging adults view adulthood. Therefore, it may be the case that emerging adults still use classic markers to define concepts of adulthood, but that these markers have previously been misinterpreted as less important due to differences in methodology.

Certainly, limitations have been identified with respect to the research on criteria for emerging adulthood (Shanahan, Porfeli, & Mortimer, 2004). First, it has been suggested that the criteria for adulthood considered important by young people likely vary based on experiences (Shanahan, Porfeli, & Mortimer, 2004). For instance, a young adult who is a parent may be more likely to identify parenthood as an important marker of adulthood when compared to an individual who is not a parent. Therefore, it may be the case that individuals’ life experiences (e.g., education, parenthood, marriage, career) shape their views regarding what criteria are necessary for adulthood status. As well, although few differences have been found in the literature with respect to the criteria individuals considered important in achieving adulthood status between self-perceived adults and non-adults, the samples in these studies have been limited to university students. Thus, the homogeneity of experience may potentially be context-dependent. That is, while similar developmental experiences may be shared among university students, few research studies have examined variability in development among non-student samples.

Second, historically there has been greater emphasis placed on “classic” or “role” markers as signifiers of adult status, such as marriage or parenthood (Shanahan, Porfeli, & Mortimer, 2004). It has been proposed that a delay in marriage and parenthood have provided the

opportunity for a prolonged period of exploration. However, certainly there have been individuals in times past that neither married nor entered parenthood, who also transitioned to adulthood. It has been argued that these individuals likely also used the “individualistic markers” for adult status, such as independence (Shanahan, Porfeli, & Mortimer, 2004) as opposed to role-related markers. Thus, it has been suggested that both role markers and individualistic criteria have been used in the past to classify individuals as adult. Indeed, Shanahan and colleagues (2004) examined the importance of individualistic and classic role markers in determining self-perceived adult status and found that family transitions, such as marrying, cohabitating, and parenthood, significantly predicted youth who self-identified as an adult compared to those who did not. In fact, youth who had experienced family transitions were twice as likely to identify as an adult. The authors suggest this reflects the enduring importance of “classic” markers of adulthood.

In summary, research has examined perceived adult status and the criteria for adulthood among emerging adults. Results from these studies indicate that many individuals aged 18 to 29 do not self-classify as adults; rather, they indicate that they are adults in some ways, but not in others (Arnett, 1998; Molgat, 2007; Nelson & Barry, 2005). In these cases of ambiguous adult status, it is not entirely clear how emerging adults conceptualize their perceived status. While some work has explored this question qualitatively (Lopez et al., 2005; Molgat, 2007), the samples largely consisted of university students and results may not be applicable to non-student populations. Research has also examined the various criteria that emerging adults may use when classifying themselves and others as adults (Arnett, 1998, 2001, 2006; Lopez et al., 2007; Molgat, 2007; Nelson & Narry, 2005; Shanahan, Porfeli, & Mortimer, 2004). Research in this area has been mixed: some research has shown that individualistic criteria characteristic of the description of EA are most relevant (Arnett, 2001, 1998), whereas other work has suggested classic or role markers, such as marriage and parenthood, remain of utmost importance (Lopez et al., 2007; Molgat, 2007; Nelson & Narry, 2005; Shanahan, Porfeli, & Mortimer, 2004). Again, research in this area has focused on university students and future work is required among non-university samples.

Research Questions and Hypotheses

Although a significant body of research exists regarding the theory of EA (Arnett, 2006, 2004, 2000), few studies have examined the factors that may influence diverging developmental

trajectories during this age period. The LMM model (Salmela-Aro, 2009, 2010) has been developed as a framework for understanding the individual and contextual factors that shape development and was utilized in the current study to systematically examine the period of EA. The current study explored the following central research questions:

1. Do markers of development differ between emerging adults in university and non-university contexts? Within the university context alone, are there developmental differences between undergraduate and graduate groups? In keeping with the literature reviewed herein, five areas of development were considered: ratings on the IDEA (identification with the period of EA), criteria for adulthood (both developmental task subjective importance and completion), self-reported adult status, and self-chosen personal goals. Development in each of these areas was compared between undergraduate students, graduate students, and non-university participants.

Hypotheses. Scholars have suggested that attending university may be a necessary condition for EA to occur (Arnett, 2012, 2000; Cote 2014; Cote & Bynner, 2008; Hamilton & Hamilton, 2006; Schwartz, 2016). Underlying this notion is the assumption that university and non-university contexts differ in such a way that would affect whether an individual is an emerging adult and the personal goals and tasks they deem salient. It may be the case that those who are not attending post-secondary education are more likely to have full-time employment and, consequently, are not afforded the opportunity to experience the features of EA. If it is the case that the context of university differs significantly from the non-university context, then it could be expected that the ratings on the IDEA, self-identified personal goals, the criteria for adulthood (subjective importance and completion), and subjective adult status differ between university and non-university students (refer to Table 2 for a summary of the hypotheses). Specifically, it would be predicted that when compared to non-university participants, university students would receive: higher scores on each domain of the IDEA with the exception of the other-focused domain (1a); endorse more self- and achievement-related personal goals (1b); rate criteria related to independence and self-sufficiency as the important markers of adulthood and, conversely, rate the criteria related to interdependence, role transitions, and family capacities as less important markers of adulthood (1c); and have completed fewer developmental tasks (1d). Further, it would be expected that fewer university students would self-identify as an adult as compared with those outside the university environment (1e). If it were not the case that the context of

Table 2-2

Summary of Research Question One and Hypotheses.

Research Question 1: Do markers of development differ between emerging adults in university and non-university contexts?

Hypothesis 1a	Non-university participants were expected to obtain higher scores on each of the domains of the IDEA when compared to both undergraduate and graduate students.
Hypothesis 1b	Non-university participants were expected to endorse more self- and achievement-related goals when compared to both undergraduate and graduate students.
Hypothesis 1c	Non-university participants were expected to rate criteria related to independence and self-sufficiency as important markers of adulthood and criteria related to interdependence, role transitions and family capacities as less important markers of adulthood when compared to both undergraduate and graduate students.
Hypothesis 1d	Non-university participants were expected to obtain lower scores on each of the achievement of the criteria when compared to both undergraduate and graduate students.
Hypothesis 1e	Non-university participants were expected to be more likely to self-identify as an adult when compared to both undergraduate and graduate students.
Hypothesis 1f	If the university context differs for undergraduate and graduate students, then we would expect differences in scores on each of the IDEA domains.
Hypothesis 1g	If the university context differs for undergraduate and graduate students, then we would expect differences in the types of personal goals identified.
Hypothesis 1h	If the university context differs for undergraduate and graduate students, then we would expect differences in scores on the domains important to adult status.
Hypothesis 1i	If the university context differs for undergraduate and graduate students, then we would expect differences in scores on the domains of achieving adult status.
Hypothesis 1j	If the university context differs for undergraduate and graduate students, then we would expect differences between groups in the frequency of participants self-identifying as an adult.
Hypothesis 1k	A negative correlation was expected between age and scores on the IDEA with the exception of the other-focused domain.

Hypothesis 1l	Older participants were expected to endorse fewer self-related goals.
Hypothesis 1m	Older participants were expected to rate independence-related criteria as less important to obtaining adult status.
Hypothesis 1n	Older participants were expected to have higher scores on each of achievement domains for reaching adult status.
Hypothesis 1o	Older participants were expected to be more likely to self-identify as an adult when compared to younger participants.
Exploratory Question 1	The analysis between gender and development during EA was exploratory in nature.

university differs significantly from the non-university context, then differences across these groups would be less likely.

No previous work has explicitly explored differences in the university context between undergraduate and graduate students. Further, no research has specifically examined development during EA among graduate students. One can speculate that because graduate students have chosen very specialized training that they have resolved some of the salient tasks of EA (i.e., choosing their life course, identity formation). However, it could also be the case that graduate students continue to feel “in-between” as they have not yet entered the work force and are less likely to be married or have children when compared to their non-university counterparts. If the contexts differ markedly, then we would expect scores on the IDEA (1f), personal goals (1g), the criteria for adulthood (subjective importance and completion; 1h and 1i), and subjective adult status (1j) to differ between graduate and undergraduate students, although no directional predictions can be made.

It is important to note that graduate students are mostly older than undergraduate students. Based on this observation, age was controlled when comparing status groups (undergraduate students, graduate students, and non-university participants) in order to determine whether any variations in development reflect differences in context or age-related differences. As individuals age, it would be expected that they would progress in their development. Thus, it was hypothesized that age would be negatively related to scores on the IDEA domains with the exception of the other-focused domain. That is, older participants were expected to receive lower scores on the domains of the IDEA (1k), indicative of lower identification with EA characteristics, except for the other-focused domain in which higher scores were expected. Further, following from the literature, older participants were expected to endorse fewer self-related goals (1l), rate independence-related criteria for adulthood as less important (1m), have completed more criteria for adulthood (1n), and be more likely to identify as adults when compared to younger participants (1o).

Gender is an individual-level factor that is of great interest within the developmental literature (Jacklin, 1989; Maccoby & Jacklin, 1974). Research to date has not established a clear relationship between gender and development during EA. Arnett (1998) found that both males and females reported similar criteria for adulthood and Salmela-Aro et al. (1997) observed that gender did not moderate the association between personal goals and subsequent well-being

during EA. However, other work has shown that women tend to report more daily- and child-related goals, while men report more leisure-related goals (Salmela-Aro, Aunola, & Nurmi, 2007). Based on these inconclusive results, the analysis of gender and development during EA was exploratory in nature (exploratory question 1).

2. Are there additional channeling factors (other than university/non-university) that explain variations in development between and within university and non-university contexts? Channeling factors are aspects of individuals' environment that influence her or his development. In the current study, channeling factors included employment status, income levels, relationship status, and parenthood. It may be the case that different results emerge from the three-group comparison (undergraduate, graduate, and non-university participants) when considering additional factors (i.e., that variables of interest interact). For example, does the connection between relationships status and development differ across undergraduate students, graduate students, and non-university participants? Because it is not certain whether differences in development vary as a function of student status, it remained difficult to provide hypotheses regarding such interactions. Thus, while interactions were explored in the analyses, only hypotheses for main effects are provided.

Hypotheses. Arnett (2004) suggests that postponement of marriage is required in order for EA to occur and a study by Reifman, Arnett and Colwell (2007) provided evidence that non-married individuals are more likely to explore their identity, experiment with possibilities, and engage in self-focused behaviours. Thus, it was expected that individuals in committed relationships, when compared to single individuals, would receive lower scores on the IDEA domains with the exception of the other-focused domain (2a), endorse fewer self-related goals and more family-related and partner-related goals (2b), rate family- and interdependence-related criteria as important criteria for adulthood (2c), have achieved more developmental tasks (2d), and be more likely to identify as an adult (2e).

Although Arnett has also indicated that postponement of parenthood is necessary for EA (Arnett, 2004), little research has been able to examine this relationship as it is difficult to obtain an adequate sample size of non-parents *and* parents between the ages of 18 and 25. The limited work available suggests that the personal goals of women change after childbirth and shift from achievement-focused to family- and child- focused goals (Salmela-Aro & Nurmi, 2007).

Consequently, it was expected that parents would receive lower scores on the IDEA with the exception of the other-focused domain (2f), endorse fewer self-related goals and more family- and parenthood-related goals (2g), rate family-related criteria as important for adulthood (2h), have completed more developmental tasks (2i), and be more likely to identify as an adult (2j).

It has been suggested that individuals from lower incomes may not be given the opportunity to engage in the tasks relevant to EA, such as identity exploration and experimenting with possibilities (Arnett, 2004, 2002; Arnett, 2016a; Arnett 2016b; du Bois-Reymond, 2016; Furstenberg, 2016; Schwartz, 2016; Silva, 2016). This may be due to the fact that individuals from low-income backgrounds are less able to attend university (Cheung, 2007; Cohen et al., 2003; Junor & Usher, 2004). Research has shown that individuals from working class backgrounds are less likely to engage in self-focused behaviours during EA compared to their middle- to upper-class counterparts (Reifman, Arnett & Colwell, 2007). Further, low-income youth are more likely to endorse wealth-related goals, while high-income youth are more likely to endorse education-related goals. Based on these findings, it was hypothesized that income would be positively associated with scores on the IDEA domains as lower incomes were expected to be associated with identifying less with the period of EA (with the exception of the other-focused domain; 2k). Further, compared to middle- to high-income, low income levels were expected to be associated with fewer self-related goals (2l), rating criteria for adulthood other than independence as important markers of adult status (2m), having attained more developmental tasks (2n), and being more likely to self-identify as an adult (2o).

Research has not examined development during EA as a function of employment status. However, being employed full-time may be indicative of a “commitment” of sorts, particularly if the individual is not enrolled in post-secondary education. While largely speculative, it may be the case that individuals who are employed full-time will receive lower scores on the IDEA domains with the exception of the other-focused domain (2p), endorse fewer self-related goals (2q), rate criteria other than independence as important for adult status (2r), have completed more criteria for adulthood (2s), and be more likely to identify as an adult (2t) when compared to part-time or unemployed participants. Refer to Table 3 for a summary of hypotheses.

3. Are there aspects of co-agency that explain variations in development? In the present study, co-agency factors included parent and peer support regarding the decision to attend or not attend university.

Table 2-3

Summary of Research Question Two and Hypotheses.

Research Question 2: Are there additional channeling factors (other than university/non-university) that explain variations in development between and within university and non-university contexts?

Hypothesis 2a	Individuals in committed relationships would receive lower scores on the IDEA with the exception of the other-focused domain when compared to single individuals.
Hypothesis 2b	Individuals in committed relationships would endorse fewer self-related personal goals and more family-related and partner-related personal goals when compared to single individuals.
Hypothesis 2c	Individuals in committed relationships would rate family- and interdependence-related criteria as important for adulthood when compared to single individuals.
Hypothesis 2d	Individuals in committed relationships would have achieved more developmental tasks when compared to single individuals.
Hypothesis 2e	Individuals in committed relationships would be more likely to identify as an adult when compared to single individuals.
Hypothesis 2f	Parents would receive lower scores on the IDEA with the exception of the other-focused domain when compared to non-parents.
Hypothesis 2g	Parents would endorse fewer self-related personal goals and more family- and parenthood-related goals when compared to non-parents.
Hypothesis 2h	Parents would rate family-related criteria as more important when compared to non-parents.
Hypothesis 2i	Parents would have completed more developmental tasks when compared to non-parents.
Hypothesis 2j	Parents would be more likely to self-identify as an adult when compared to non-parents.
Hypothesis 2k	Participants with lower income levels would receive lower scores on the IDEA with the exception of the other-focused domain when compared to participants with higher income levels.
Hypothesis 2l	Participants with lower income levels would endorse fewer self-related personal goals when compared to participants with higher income levels.
Hypothesis 2m	Participants with lower income levels would rate independence-related criteria as more important when compared to participants with higher income levels.

- Hypothesis 2n Participants with lower income levels would have completed more developmental tasks when compared to participants with higher income levels.
- Hypothesis 2o Participants with lower income levels would be more likely to self-identify as an adult when compared to participants with higher income levels.
- Hypothesis 2p Participants who are employed full-time would receive lower scores on the IDEA with the exception of the other-focused domain when compared to part-time and unemployed participants.
- Hypothesis 2q Participants who are employed full-time would endorse fewer self-related personal goals when compared to part-time and unemployed participants.
- Hypothesis 2r Participants who are employed full-time would rate independence as less important when compared to part-time and unemployed participants.
- Hypothesis 2s Participants who are employed full-time would have completed more developmental tasks when compared to part-time and unemployed participants.
- Hypothesis 2t Participants who are employed full-time would be more likely to self-identify as an adult when compared to part-time and unemployed participants.
-

Hypotheses. Both parent support and peer support reflect the influence of co-agency on individual development. While the LMM model indicates that co-agency factors help shape individuals' developmental pathways, the influence of co-agents on development in the context of university students versus individuals not enrolled in university is not clear. Although largely speculative in nature, it was hypothesized that parental and peer support for one's decision to attend or not attend university will be associated with lower scores on the IDEA domains with the exception of the other-focused domain (3a), higher completion of the criteria for adulthood (3b), and an increased likelihood of identifying as an adult (3c). However, the relationship between support or non-support as a function of student status or gender could not be speculated. Further, the association between parental and peer encouragement/discouragement for educational decisions and personal goal endorsements (exploratory question 3a) and ratings for the importance of the criteria for adulthood were exploratory in nature (exploratory question 3b). Refer to Table 4 for a summary of hypotheses.

4. Is there an association between developmental outcomes (progression through developmental tasks) and psychological outcomes (internalizing and externalizing behaviours)?

Hypotheses. According to stage-based theories of development, specific developmental tasks must be completed by an individual within particular periods of life in order to ensure positive and healthy development as the completion of such tasks lays the foundation for future growth (Salkind, 2004; Tanner, 2006). Therefore, completion of the associated developmental tasks during emerging adulthood should connect to positive outcomes. Thus, a relationship was expected between the number of developmental tasks completed and psychological outcomes such that individuals who have completed more developmental tasks would have lower levels of internalizing (i.e., higher levels of self-esteem, lower levels of loneliness, lower levels of anxiety symptoms, and high levels of life satisfaction) and externalizing behaviours (lower levels of risky driving, sexual behaviours, and substance use; 4a). Further, lower scores on the domains of the IDEA (with the exception of the other-focused domain) were also expected to be associated with lower levels of internalizing and externalizing behaviours (4b). Finally, those who self-identified as an adult were expected to have lower levels of internalizing and externalizing behaviours when compared to those who indicated they were not an adult, or only adult in some respects but not others (4c). Refer to Table 5 for a summary of hypotheses.

Table 4

Summary of Research Question Three and Hypotheses.

Research Question 3: Are there aspects of co-agency that explain variations in development?	
Hypothesis 3a	Parent and peer support for one's decision to attend or not attend university would be associated with lower scores on the IDEA with the exception of the other-focused domain.
Hypothesis 3b	Parent and peer support for one's decision to attend or not attend university would be associated with a higher achievement of developmental tasks.
Hypothesis 3c	Parent and peer support for one's decision to attend or not attend university would be associated with an increased likelihood of self-identifying as an adult.
Exploratory Question 3a	The association between parent and peer support for one's decision to attend or not attend university and the endorsement of personal goals was exploratory in nature.
Exploratory Question 3b	The association between parent and peer support for one's decision to attend or not attend university and ratings for the criteria for adulthood were exploratory in nature.

Table 2-5

Summary of Research Question 4 and Hypotheses.

Research Question 4: Is there an association between developmental outcomes (progression through developmental tasks) and psychological outcomes (internalizing and externalizing behaviours)?	
Hypothesis 4a	Higher level of achievement in each of the domains for the criteria for adulthood would be associated with lower levels of internalizing (i.e., higher levels of self-esteem, lower levels of loneliness, lower levels of anxiety symptoms, and high levels of life satisfaction) and externalizing behaviours (lower levels of risky driving, sexual behaviours and substance use).
Hypothesis 4b	Lower scores on the IDEA (with the exception of the other-focused domain) would be associated with lower levels of internalizing (i.e., higher levels of self-esteem, lower levels of loneliness, lower levels of anxiety symptoms, and high levels of life satisfaction) and externalizing behaviours (lower levels of risky driving, sexual behaviours and substance use).
Hypothesis 4c	Participants who self-identify as an adult would have lower levels of internalizing (i.e., higher levels of self-esteem, lower levels of loneliness, lower levels of anxiety symptoms, and high levels of life satisfaction) and externalizing behaviours (lower levels of risky driving, sexual behaviours and substance use) when compared to those who indicated they were not an adult or only an adult in some respects but not others.

CHAPTER THREE: METHODS

Participants

The sample consisted of 737 participants aged 18 to 29. There were 509 undergraduate students (n males = 109, 21.5%), 74 graduate students (n males = 23, 31.1%), and 154 non-university participants (n males = 38, 25%). The mean age of the overall sample was 21.50 years (SD = 3.04). Table 3-1 describes the sociodemographic information available for the entire sample as well as by status group (undergraduate students, graduate students, and non-university participants). A majority of the sample was female (76.8%) and reported a Caucasian ethnic background (81.0%). Regarding immigrant status, a greater proportion of graduate students indicated that they were immigrants (32.4%) compared to undergraduates (11.8%) and non-university participants (11.2%). A majority of participants reported either being single (81.9%) or in a common-law relationship (11.4%). Overall, only a few participants endorsed being parents (4.3%) and those that did were mainly from the non-university participant group. With respect to household income levels, a majority of the sample reported income within the <\$11,000, \$11,000 to \$20,000, and more than \$51,000 ranges. Approximately half of undergraduates (48.8%), 66.2% of graduate students, and 89.0% of non-university participants reported that they were employed. Overall, a majority of the sample lived either with their parents or other relatives (35.1%), with roommates (22.6%), or with their partner (18.7%). Among university students, 15.6% of undergraduate students and 18.9% of graduate students reported living in on-campus residence.

Table 3-2 shows the educational information for undergraduate and graduate students. Among undergraduate students, 97.6% were enrolled at the University of Saskatchewan, 95.3% were full-time students, a majority were in their first (36.4%) or second (28.7%) year of study, 7.3% were international students, and more than half reported being enrolled in the College of Arts and Science (61.1%). Among graduate students, 75.3% were enrolled at the University of Saskatchewan, 93.2% attended full-time, a majority were in their first (43.2%) or second (25.7%) year of study, a minority were international students (27.0%) and most were enrolled in Arts and Science (33.8%).

Limited information is known about the post-secondary educational pursuits of participants who reported not currently being a university student due to an error within the

Table 3-1

Sociodemographic Information by Status Group (n, %)

Sociodemographic variable	Undergraduate student (n = 509)	Graduate student (n = 74)	Non-university participants (n = 154)	Total (N = 737)
Mean Age	20.32 (SD = 2.21)	24.77 (SD = 1.89)	23.81 (SD = 3.44)	21.50 (SD = 3.04)
Gender				
Male	109 (21.5%)	23 (13.5%)	38 (22.4%)	170 (23.2%)
Female	400 (78.5%)	51 (68.9%)	114 (75.0%)	564 (76.8%)
Ethnicity				
White	407 (80.1%)	52 (72.2%)	135 (88.2%)	594 (81.0%)
Aboriginal	22 (4.3%)	0 (0.0%)	6 (3.9%)	28 (3.8%)
Latino, Hispanic	3 (0.6%)	1 (1.4%)	2 (1.3%)	6 (0.8%)
Black	2 (0.4%)	1 (1.4%)	1 (0.7%)	4 (0.5%)
Asian	54 (10.6%)	18 (25.0%)	8 (5.2%)	80 (10.9%)
Other	20 (3.9%)	0 (0.0%)	1 (0.7%)	21 (2.9%)
Immigrant status				
Yes	60 (11.8%)	24 (32.4%)	17 (11.2%)	101 (13.8%)
No	447 (88.2%)	50 (67.6%)	135 (88.8%)	632 (86.2%)
Marital Status				
Single	450 (89.3%)	53 (72.6%)	96 (62.3%)	599 (81.9%)
Married	15 (3.0%)	4 (5.5%)	27 (17.5%)	46 (6.3%)
Common-law	38 (7.5%)	16 (21.9%)	29 (18.8%)	83 (11.4%)
Separated	0 (0.0%)	0 (0.0%)	1 (0.6%)	1 (0.1%)
Divorced	1 (0.2%)	0 (0.0%)	0 (0.0%)	1 (0.1%)
Widowed	0 (0.0%)	0 (0.0%)	1 (0.6%)	1 (0.1%)
Parenthood				
Yes	8 (1.6%)	0 (0.0%)	24 (15.6%)	32 (4.3%)
No	501 (98.4%)	74 (100.0%)	130 (84.4%)	705 (95.7%)
Household Income				
<\$11,000	174 (34.9%)	15 (20.3%)	16 (10.4%)	205 (28.2%)
\$11,000 – \$20,000	85 (17.0%)	22 (29.7%)	22 (14.3%)	129 (17.7%)
\$21,000 – \$30,000	39 (7.8%)	8 (10.8%)	17 (11.0%)	64 (8.8%)
\$31,000 – \$40,000	27 (5.4%)	4 (5.4%)	15 (9.7%)	46 (6.3%)
\$41,000 – \$50,000	30 (6.0%)	5 (6.8%)	16 (10.4%)	51 (7.0%)
\$51,000+	144 (28.9%)	20 (27.0%)	68 (44.2%)	232 (31.9%)
Employed				
Yes	248 (48.8%)	49 (66.2%)	137 (89.0%)	434 (59.0%)
Full-time	19 (7.7%)	12 (24.5%)	107 (78.1%)	138 (31.9%)
Part-time	228 (92.3%)	37 (75.5%)	30 (21.9%)	295 (68.1%)
No	260 (51.2%)	25 (33.8%)	17 (11.0%)	302 (41.0%)
Living situation				
With parents, guardians or other	205 (40.5%)	15 (20.3%)	38 (24.7%)	258 (35.1%)

relatives				
Campus residence	79 (15.6%)	14 (18.9%)	1 (0.6%)	94 (12.8%)
With roommates	125 (24.7%)	13 (17.6%)	28 (18.2%)	166 (22.6%)
Living with my partner	55 (10.9%)	19 (25.7%)	63 (40.9%)	137 (18.7%)
Living by myself	31 (6.1%)	13 (17.6%)	19 (12.3%)	63 (8.6%)
Other	11 (2.2%)	0 (0.0%)	5 (3.2%)	16 (2.2%)

Table 3-2

Educational Information for Undergraduate and Graduate Students

	Undergraduate student (n = 509)	Graduate student (n = 74)
U of S Student		
Yes	495 (97.6%)	55 (75.3%)
No	12 (2.4%)	18 (24.7%)
Enrollment Status		
Part-time	24 (4.7%)	5 (6.8%)
Full-time	485 (95.3%)	69 (93.2%)
Year of Study		
1	185 (36.4%)	32 (43.2%)
2	146 (28.7%)	19 (25.7%)
3	89 (17.5%)	12 (16.2%)
4	72 (14.2%)	7 (9.5%)
5	12 (2.4%)	2 (2.7%)
6+	4 (0.8%)	2 (2.7%)
International Student		
Yes	37 (7.3%)	20 (27.0%)
No	471 (92.7%)	54 (73.0%)
Program		
Agriculture	30 (5.9%)	3 (4.1%)
Law	4 (0.8%)	2 (2.7%)
Arts & Science	310 (61.1%)	25 (33.8%)
Medicine	8 (1.6%)	5 (6.8%)
Nursing	19 (3.7%)	1 (1.4%)
Dentistry	1 (0.2%)	0 (0.0%)
Pharmacy/Nutrition	13 (2.6%)	1 (1.4%)
Physical Therapy	0 (0.0%)	3 (4.1%)
Commerce	50 (9.9%)	4 (5.4%)
Education	12 (2.4%)	4 (5.4%)
Engineering	31 (6.1%)	11 (14.9%)
Kinesiology	23 (4.5%)	5 (6.8%)
Veterinary Medicine	3 (0.6%)	1 (1.4%)
Social work	2 (0.4%)	1 (1.4%)
Public Health	0 (0.0%)	2 (2.7%)
Other	1 (0.2%)	6 (8.1%)

survey that was corrected midway through data collection. The available information (based on 154 respondents; 20.8% of the full sample) indicates that a majority of non-university participants (48.7%) had completed some type of post-secondary education, but it is uncertain whether or not they were currently pursuing additional education outside of the university context (refer to Table 3-3). It is known that approximately one-third (33.1%) of non-university participants had both completed post-secondary training and were not currently enrolled in additional training experiences. Of the remaining participants within this group, 3.8% had pursued post-secondary education but never completed, 2.6% pursued post-secondary education but it was uncertain whether they completed, 9.7% had never pursued or completed post-secondary training, and the post-secondary training experiences were completely unknown for 1.9% of non-university participants. Overall, the types of post-secondary training experienced by participants who were not currently enrolled in university were as follows: 62.0% attended university, 11.0% attended college, 3.8% attended trade school, 0.1% attended a vocational program, 5.8% had other training experiences, and for 27.3% it was unknown what post-secondary training they have experienced.

Measures

Sociodemographic Information

Participant sociodemographic information was collected in the following domains: age, gender, education level, employment status, living situation, income, ethnicity, immigration status, relationship status, and parenthood (see Appendix A).

Social Support for Pathways of Development

Information was collected regarding family member's expectations for the future plans of participants (undergraduate degree, graduate degree, other post-secondary education, or enter the work force). Participants also reported whether or not their parents and grandparents attended post-secondary education. Participants were then asked to identify the level of support they have received from their family and peers with respect to either attending post-secondary education or not attending post-secondary education. The following questions were asked: "I feel that at least one family member who is important to me encouraged my decision to either pursue or not pursue post-secondary education", "I feel that at least one family member who is important to me discouraged my decision to either pursue or no pursue post-secondary education", "I feel that at least one friend who is important to me encouraged my decision to either pursue or not pursue

Table 3-3

Educational Information for Non-University Participants

	Completed (n = 51, 33.1%)	Pursued (n = 6, 3.8%)	None (n = 15, 9.7%)	Completed, unknown if currently pursuing (n = 75, 48.7%)	Pursued, unknown if ever completed (n = 4, 2.6%)	Unknown (n = 3, 1.9%)	Total (N = 154)
Post-secondary training							
University	36 (72.0%)	3 (50.0%)	n/a	23 (30.6%)	2 (50.0%)	0 (0.0%)	64 (62.0%)
College	6 (12.0%)	1 (16.7%)	n/a	9 (12.0%)	1 (25.0%)	0 (0.0%)	17 (11.0%)
Trade School	3 (6.0%)	0 (0.0%)	n/a	3 (4.0%)	0 (0.0%)	0 (0.0%)	6 (3.8%)
Vocational Program	1 (2.0%)	0 (0.0%)	n/a	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.06%)
Other	4 (8.0%)	2 (33.3%)	n/a	2 (2.6%)	1 (25.0%)	0 (0.0%)	9 (5.8%)
Unknown	1 (1.9%)	0 (0.0%)	n/a	38 (44.7%)	0 (0.0%)	3 (100%)	42 (27.3%)

post-secondary education”, and “I feel that at least one friend who is important to me discouraged my decision to either pursue or not pursue post-secondary education”. Participants responded using a 4-point Likert-type scale (1 = “Strongly Disagree” to 4 = “Strongly Agree”). Higher scores were indicative of higher levels of encouragement or discouragement regarding the choice to attend or not attend post-secondary education.

Individual Development

Personal goals. Participants were asked to self-report their personal goals in order to assess “choice” as a factor related to individual development in the LMM (Salmela-Aro, Aunola, & Nurmi, 2007). In order to ensure the personal goals identified by participants were not biased by other measures (i.e., dimensions of EA or the criteria for adulthood), the participants completed a variation of Little’s (1983) Personal Project Analysis as the first measure of individual development. Specifically, participants were asked about their current personal goals through the following question: “People have many kinds of issues and goals that they think about, hope for, and try to accomplish. Consider the personal goals you have in your life at the moment. These goals may be related to any life domain, such as education, work, family, or self-related issues.” Participants were asked to provide up to three current goals. They were not required to list the goals in order of importance

Personal goals were coded into one of ten categories that were developed based on previous research (Salmela-Aro, Aunola, and Nurmi (2007) and adapted to reflect the current data. The personal goal categories are as follows: Achievement (e.g., “To complete my degree”, or “To get a full-time job”), Family of Origin (e.g., “To spend time with my parents”), Partner (e.g., “To get married”), Parenthood (e.g., “To have children”), Friendships (e.g., “To make new friends”), Property and Finances (e.g., “To buy a car”), Self (e.g., “To become a better person”), Health (e.g., “To get in shape”), Leisure, Learning, and Hobbies (e.g., “To travel”), and Other. No additional categories emerged from an analysis of goals reported within the Other domain.

In order to assess the frequency with which participants referenced different personal goal categories, each of participants’ three person goal statements was coded as to which personal goal category had been endorsed. Only a single coding category was assigned to each goal statement, yielding a maximum of three goal coding categories used for each participant. Aggregating across the three personal goals, endorsement of a specific personal goal category (e.g., family of origin) was only counted once even if the same category reappeared in more than

one goal statement. Thus, each participant obtained a score of 1 (endorsed) or 0 (not endorsed) for their reference to each of the ten personal goal categories.

A research assistant was trained to use the coding scheme and coded 20% of the participants' data in order to establish inter-rater reliability (see Appendix B). Previous work has shown inter-rater reliability for the coding of goals to range between .94 and .97 (Salmela-Aro, Aunola, & Nurmi, 2007). In the current study, the interrater reliability co-efficients ranged from .89 to .96 for each of the ten personal goal categories.

Dimensions of emerging adulthood. The degree to which individuals' experience aligns with the period of EA was measured through the Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007). The IDEA is a 31-item measure comprised of 5 dimensions of EA (Identity Exploration, Negativity/Instability, Experimentation/Possibilities, Self-Focused, and Feeling In-Between) and an Other-Focused domain to anchor the self-focused dimension. A stem question is provided ("Is this period of your life...") and followed by 31 phrases (i.e., "time of many possibilities?", "time of exploration?"). Participants were asked to reflect on the "the present time, plus the last few years that have gone by, and the next few years to come, as you see them." Participants indicated the degree to which they agree with each of the statements using a 4-point Likert-type scale ranging from 1 ("strongly disagree") to 4 ("strongly agree"). In order to obtain subscale scores for each EA dimension, averages were calculated for each participant who provided valid responses for at least 70% of the items on each subscale. Higher scores represent higher levels of the dimension assessed by that subscale (see Appendix C).

Cronbach's alpha levels for the measures of individual development can be found in Table 3-4. For the IDEA domains, alpha levels ranged from .69 to .85 and were similar to those reported in previous research (Cronbach's alpha = .70 to .85; Reifman, Arnett, & Colwell, 2007). Previous research has shown all domains to have sufficient test-retest reliability co-efficients over a one-month interval (.64 to .76) with the exception of the "feeling in-between" scale, which was observed to have a low test-retest reliability co-efficient of .37 (Reifman, Arnett, & Colwell, 2007).

Subjective adult status. Subjective adult status was assessed using a common research method within the EA literature (Arnett, 1997; Barry & Nelson, 2005). Participants were asked

Table 3-4

Cronbach's Alpha Reliability Coefficients for Measures of Development

Subscale	A
IDEA Domains	
Identity Exploration	.77
Experimentation/Possibilities	.79
Negativity/Instability	.78
Other-Focused	.70
Self-Focused	.69
Feeling In-Between	.75
Subjective Importance of the Criteria for Adulthood Domains	
Independence	.49
Interdependence	.73
Role Transitions	.87
Norm Compliance	.85
Biological Transitions	.66
Chronological Transitions	.75
Family Capacities	.89
Completion of the Criteria for Adulthood Domains	
Independence	.60
Interdependence	.61
Role Transitions	.84
Norm Compliance	.75
Biological Transitions	.34
Chronological Transitions	.20
Family Capacities	.86

Note. The deletion of individual items within each domain did not meaningfully increase the internal consistency for any measures.

the following question: “Do you think that you have reached adulthood?”. Participants selected one of three responses (“yes”, “no”, or “in some respects yes, in some respects no”).

Subjective importance of the criteria for adulthood. In order to assess the criteria participants rate as important to achieving adult status, 34 criteria for adulthood were presented (refer to Appendix D). The 34 criteria were adapted from previous studies (Arnett, 1994, 1997, 1998, 2001; Barry & Nelson, 2005). Participants were asked to rate each criterium on its level of importance to the achievement of adult status from 1 (“Not at all important”) to 4 (“Very important”). The measure produced seven domains: Independence (e.g., Financially independent of parents), Interdependence (e.g., Committed to long-term love relationships), Role transitions (e.g., Finish education), Norm compliance (e.g., Avoid becoming drunk), Biological transitions (e.g., Grow to full height), Chronological transitions (e.g., Have obtained a driver’s license), and Family capacities (e.g., Be capable of caring for children). In order to obtain a subscale score, averages were calculated for each participant who provided valid responses for at least 70% of the items on each subscale. Higher scores reflect higher levels of importance in each of the domains of development. Table 9 shows that the alpha levels for each domain of the criteria for adulthood ranged from .49 to .89 reflecting previous research that found similar internal consistency scores in each of the domains (alphas ranging from .42 to .93; Arnett, 2001; Barry & Nelson, 2005).

Completion of the criteria for adulthood. In order to assess the completion of developmental tasks, participants were presented with the same 34 criteria for adulthood (see Appendix D) and asked to “Indicate the extent to which the statement currently applies to you” (Barry & Nelson, 2005). A 3-point Likert-type scale was used for 22 of the criteria (i.e., “Decide on personal beliefs and values independently of parents”) ranging from 1 (“not true”) to 3 (“very true”). Participants responded “yes” (3) or “no” (1) for 12 items that require dichotomous outcomes (i.e., “have purchased a house”, “obtained a driver’s license”). In order to obtain subscale scores, averages were calculated for each participant who provided valid responses for at least 70% of the items on each subscale. Scores on seven domains were produced with higher mean scores indicative of higher levels of developmental attainment in each of the categories: Independence, Interdependence, Role transitions, Norm compliance, Biological transitions, Chronological transitions, and Family capacities. Reliability coefficients have not been previously reported. Table 9 shows that the Biological transitions and Chronological transitions

domains had poor internal consistency levels with Cronbach's alphas of .34 and .20, respectively. As a result, the Biological transitions and Chronological transitions domains were excluded from all analyses.

Psychosocial correlates

Self-esteem. Self-esteem was measured using the Rosenberg Self-Esteem Scale (see Appendix E; Rosenberg, 1965). The scale includes ten items rated on a 4 point Likert-type scale (4 = "Strongly agree", 1 = "Strongly disagree"). Two sample items include: "I feel that I have a number of good qualities" and "I am able to do things as well as most other people". Scores were computed by averaging the responses across at least seven items. Items 2, 5, 6, 8, and 9 were reverse scored. Higher scores reflect higher levels of self-esteem. Adequate internal consistency was demonstrated ($\alpha = .88$) and was consistent with past work that indicated a Cronbach's alpha of .92 (Rosenberg, 1979). Previous research also demonstrated sufficient test-retest reliability over a two-week period ($\alpha = .85$; Rosenberg, 1979).

Symptoms of anxiety. The Beck Anxiety Inventory (BAI) is a 21-item inventory that was completed to assess symptoms of anxiety (Appendix F; Beck & Steer, 1990). Participants were provided with a list of 21 symptoms and were asked to indicate how much each of the symptoms has bothered them over the past week, including the day of completion. The severity of each symptom was rated on a scale from 0 (not at all) to 3 (severely). Mean scores were computed by calculating the average across at least 15 or more valid responses to the measure. Higher scores reflect higher levels of anxiety symptoms. The alpha level was sufficient ($\alpha = .93$) and was consistent with past work (Cronbach's alphas ranging from .92 to .94; Beck, Epstein, Brown & Steer, 1988). In addition, previous research established adequate test-retest reliability over a one-week period (co-efficient = .75; Beck, Epstein, Brown, & Steer, 1988).

Loneliness. Participants completed the UCLA Loneliness Scale to assess loneliness (see Appendix G; Russell, 1996). The UCLA Loneliness Scale is a one-dimensional measure that assesses loneliness using a 4-point Likert scale ranging from 1 ("Never") to 4 ("Always"). There are 20 items in this measure (e.g., "How often do you feel that you lack companionship?"). Items 1, 5, 6, 9, 10, 15, 16, 19, and 20 are reverse scored. Average scores for loneliness were calculated across 14 or more valid item responses with higher scores indicative of higher levels of loneliness. Past research has demonstrated that the scale has high internal consistency

(Cronbach's Alpha ranging from .89 to .94) and high test-retest reliability ($r = .73$ over a one year period). In the current study, an alpha level of .94 was established.

Life satisfaction. Subjective life satisfaction was measured through the Satisfaction with Life Scale (SWLS; Diener, Emmons, Sem & Griffin, 1985; Pavot & Diener, 1993). The SWLS was created in order to measure individual satisfaction with life as a whole (Pavot & Diener, 1993). The SWLS has been recommended as a complement to additional psychological measures because the SWLS assesses an individuals' subjective well-being using her or his own personal criteria. The SWLS consists of five items rated on a 7-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree" (see Appendix H). Sample questions include: "I am satisfied with my life" and "In most ways, my life is ideal". Scores were obtained by averaging responses across at least three valid items with higher scores indicative of higher levels of life satisfaction. Research has indicated the SWLS has good convergent and divergent validity with other scales of well-being (Pavot & Diener, 1993), high internal consistency (Cronbach's Alpha ranging from .89 to .94) and high test-retest reliability ($r = .73$ over a one-year period; Diener et al., 1985). In the current study, the SWLS had good internal consistency ($\alpha = .89$).

Risk taking behaviours. Risk taking behaviours were measured using the Risk and Reckless Behavior Questionnaire (Appendix I; Bradley & Wildman, 2002). The measure examines risk taking within the past year and contains three subscales focusing on the frequency of risk and reckless behaviours including: substance use (e.g., "smoked or otherwise used marijuana"), sexual behavior (e.g., "intercourse with stranger") and driving (e.g., "ridden a motorcycle"). The measure includes 18 items and participants may choose from 10 response options ranging from "zero times" to "100+ times" over the past year. In order to obtain subscale scores, averages were calculated for each participant who provided valid responses for at least 70% of the items on each subscale. Higher scores on each subscale reflect more frequent participation in risk or reckless behaviours. In the current study, the subscales had adequate internal consistency (α 's of .83 for substance use, .82 for sexual behaviour and .72 for driving). This is consistent with previous research that reported Cronbach's alphas of 0.73 (reckless driving), 0.80 (substance use), and 0.91 (sexual behavior; Bradley & Wildman, 2002). In addition, previous work has demonstrated that each subscale has sufficient test-retest reliabilities ranging from 0.80 to 0.90 (Bradley & Wildman, 2002).

Procedure

Participants were recruited in a variety of ways including: (1) using an online University of Saskatchewan student announcement board, (2) from the Psychology Participant Pool, (3) via classroom presentations, (4) using posters placed throughout the university campus and (5) within Saskatoon businesses, (6) a newspaper advertisement within the Saskatoon Neighborhood Express, and (7) Facebook statuses (refer to Appendix I for all recruitment materials). Only participants between the ages of 18 to 29 were invited to complete the measures described above via a link to an online questionnaire using FluidSurveys. Participants could also receive more information about the study before or after participating by contacting the author via email. Consent was obtained before participation (see Appendix K). The information provided included the general purpose of the study, the time requirement, the format of the measures, and discussion of confidentiality. Participants completed the measures in the following order: sociodemographic information, social support for individual development, a variation of Little's (1983) Personal Project Analysis, the IDEA (Reifman, Arnett, & Colwell, 2007), conceptions of adulthood (Barry & Nelson, 2005), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the BAI (Beck & Steer, 1990), the UCLA Loneliness Scale (Russell, 1996), the SWLS (Pavot & Diener, 1993) and the Risk and Reckless Behavior Questionnaire (Bradley & Wildman, 2002). The administration of measures was piloted and resulted in a finalized protocol that took approximately 30 minutes to complete. Data collected was anonymous and kept in a secure computer. After completing the survey, participants received a debriefing letter describing the main purpose of the investigation and how the results would be used (see Appendix L).

CHAPTER FOUR: RESULTS

Data Overview

Data were collected from 908 participants. Participants between the ages of 18 to 29 years were recruited in order to ensure that their age fell within the most recent emerging adulthood age range proposed by Arnett (2014, 2012). Accordingly, participants who were not between the ages of 18 to 29 ($n = 40$) and participants who did not indicate their age ($n = 58$) were excluded from the analyses. In addition, participants who did not provide enough information to identify their status group (i.e., undergraduate student, graduate student, or non-university participant) were also excluded ($n = 14$). Fifty-nine cases were deleted from analyses because they were missing a majority of data across key variables of interest. An examination of the dataset indicated that more non-university participants (13.0%) had missing data when compared to both undergraduate (5.9%) and graduate (5.1%) students. Due to the cell size being less than $n = 5$, a chi-square analysis could not be conducted to determine whether the difference between groups was statistically significant. Further examination among non-university participants demonstrated no significant demographic differences (e.g., gender, ethnicity) between those who completed a majority of the survey versus those who did not.

Missing data were also examined among each variable of interest and it was observed that for all developmental measures there was less than 5% missing data. However, there was greater than 5% missing data for all measures of psychosocial adjustment (in order of completion): the Rosenberg Self-Esteem Scale (5.7%), the BAI (7.1%), the UCLA Loneliness Scale (7.3%), the Life Satisfaction Scale (7.9%), Substance Use (7.9%), Sexual Behaviours (7.9%), and Driving Behaviours (7.9%). No significant demographic patterns were observed between those who completed the psychosocial measures and those who did not.

Data were next screened for univariate outliers. Univariate outliers with standardized z-scores greater than $|3.29|$ were removed from the dataset (Tabachnick & Fidell, 2007). Multivariate outliers were identified using Mahalanobis distance ($p < .001$; Tabachnick & Fidell, 2007). Each analysis was repeated both with and without multivariate outliers included. No differences were observed in the pattern of findings. Thus, all analyses were conducted with multivariate outliers included.

Non-parametric tests were used for analyses with dichotomous dependent variables. For analyses with continuous dependent variables, parametric tests were conducted. There are

several assumptions that need to be satisfied when using parametric tests (Tabachnick & Fidell, 2007). The observations must be independent, which was satisfied in the current study. As well, the data should follow a normal distribution. Among undergraduate students, the assumption of normality was violated for the domains of the IDEA and the completion of developmental task domains (see Appendix M). However, it was not unexpected that a high proportion of undergraduate students would identify with experiences during emerging adulthood and a low proportion would have completed the tasks associated with the transition to adulthood. For all status groups, there was a high proportion of individuals who did not frequently engage in risky behaviours thus the assumption of normality was also violated for the measures of sexual behaviours, substance use, and driving behaviours. Finally, the variance of the data should be the same between groups (homogeneity of variance) when conducting parametric tests. In the current study, homogeneity of variance was violated in multiple instances (see Appendix Q). Although the current data violated several of the assumptions (assumption of normality and homogeneity of variance), the F-statistic was utilized as it is known to be robust to these violations (Tabachnick & Fidell, 2007).

The current study examined the relations between variables using both statistical and clinical or practical significance (Kraemer et al., 2003; Sink & Stroh, 2006). Statistical significance allows researcher to determine whether the results are due to chance. For all analyses, $p < .01$ was considered significant in order to control the Type I error rate. Although statistical significance was of interest, the current study emphasized clinical or practical significance. Statistical significance provides information regarding whether the findings are due to chance (Norman & Streiner, 2008). In contrast, clinical significance pertains to the magnitude or importance of the association. Clinical significance allows researchers to decipher how large of an association exists between the variables of interest (effect size) and whether the association is large enough to have practical, clinical or meaningful value. That is, are the results meaningful in real world contexts? Unlike statistical significance, there is no consistent or well-established cut-off for determining clinically significant effect sizes (Kraemer, 1992). However, previous authors have provided guidelines for determining the cut-off for clinical significance (Kraemer et al., 2003; Sink & Stroh, 2006). Based on these suggestions, the following effect sizes were considered clinically significant in the current study: partial eta squared $\geq .04$, $r \geq .30$, and OR ≥ 2.0 . The statistical significance of the results was presented in the results section whereas the

primary focus of the discussion section was the interpretation of findings that achieved clinical significance.

Preliminary Analyses

Intercorrelations Between the Domains of Each Marker of Development

Bivariate correlations were conducted to assess the relations between the domains of the IDEA, the subjective importance of the criteria for adulthood, and the completion of the criteria for adulthood. For the IDEA, all domains were significantly and positively correlated with one another with the exception of the Negativity/Instability and Self-focused domains (refer to Table 4-1). The Other-Focused domain was included in the IDEA as an anchoring domain. It was observed that higher scores on the Other-focused domain were associated with lower scores on the Experimentation/Possibilities domain. Table 4-2 shows the correlations between the domains for the subjective importance of the criteria for adulthood. Significant, positive correlations were observed between all domains. Similarly, significant positive correlations were found among all domains for the completion of the criteria for adulthood (see Table 4-3).

Correlations Between the Markers of Development

Bivariate correlations were completed to determine the relations between the various markers of development (IDEA domains, subjective importance of the criteria for adulthood, and the completion of the criteria for adulthood). Table 4-4 shows the correlations between the subjective importance and completion of the criteria for adulthood domains. The results indicated that participants who tended to rate Independence as highly important to achieving adulthood status also tended to report significantly higher levels of completion in the domains of Independence, Role transitions, and Family capacities. Further, those who rated the Interdependence and Family capacity domains as important to the achievement of adulthood also tended to have significantly higher levels of completion across all domains with the exception of the Independence domain. Higher mean scores regarding the importance of the Role transition, Norm compliance, and Chronological transition domains for the transition to adulthood were all significantly associated with higher reported levels of completion within the Norm compliance domain. Finally, those who received higher scores on the importance of the Norm compliance domain also tended to report significantly higher levels of completion within that domain.

Table 4-5 shows the correlations between the IDEA and the subjective importance of the various criteria for adulthood. The results demonstrated that higher mean scores on the Identity

Table 4-1

Correlations between the Domains on the IDEA

	Identity exploration	Experimentation/ Possibilities	Negativity/ Instability	Other- focused	Self- focused	Feeling in- between
Identity exploration						
Experimentation/ Possibilities	.48*					
Negativity/instability	.28*	.13*				
Other-focused	.09	-.10*	-.08			
Self-focused	.47*	.58*	.02	.10*		
Feeling in-between	.39*	.23*	.26*	-.07	.17*	

Note. df range from 721 to 737. Bold values indicate clinical significance.

*Correlation is significant at the 0.01 level (2-tailed).

Table 4-2

Correlations between the Subjective Importance of Adulthood Criteria Domains

	Independence	Interdependence	Role transitions	Norm compliance	Biological transitions	Chronological transitions	Family capacities
Independence							
Interdependence	.25*						
Role transitions	.19*	.56*					
Norm compliance	.18*	.50*	.52*				
Biological transitions	.12*	.40*	.50*	.32*			
Chronological transitions	.18**	.29*	.47*	.34*	.57*		
Family capacities	.21*	.46*	.56*	.43*	.34*	.30*	

Note. df range from 712 to 715.

*Correlation is significant at the 0.01 level (2-tailed).

Table 4-3

Correlations between Adulthood Criteria Achievement Domains

	Independence	Interdependence	Role Transitions	Norm Compliance	Family Capacities
Independence					
Interdependence	.42*				
Role Transitions	.45*	.41*			
Norm Compliance	.16*	.23*	.13*		
Family Capacities	.49*	.47*	.59*	.21*	

Note. Both biological and chronological transition domains have been omitted due to poor internal consistency. The df range from 684 to 702. Bold values indicate clinical significance.

*Correlation is significant at the 0.01 level (2-tailed).

Table 4-4

Correlations between the Subjective Importance of the Adulthood Criteria Domains and the Criteria for Adulthood Domains

Completion	Subjective importance						
	Independence ⁱ	Interdependence ⁱ	Role Transitions ⁱ	Norm Compliance ⁱ	Biological Transitions ⁱ	Chronological Transitions ⁱ	Family Capacities ⁱ
Independence ^c	.33*	.09	-.06	.04	.02	.04	.09
Interdependence ^c	.05	.26*	.09	.09	.07	.07	.17*
Role Transitions ^c	.14*	.18*	.09	.08	.11*	.05	.14*
Norm Compliance ^c	.02	.15*	.12*	.39*	.05	.08*	.16*
Family Capacities ^c	.10*	.11*	-.04	.06	.03	-.05	.19*

Note. df range from 681 to 701. Bold values indicate clinical significance.

*Correlation is significant at the 0.01 level (2-tailed).

^c Completion

ⁱ Importance

Table 4-5

Correlations between the Domains on the IDEA and the Subjective Importance/Completion of the Adulthood Criteria Domains

	Identity exploration	Experimentation / Possibilities	Negativity/ Instability	Other-focused	Self-focused	Feeling in-between
Subjective Importance of Criteria for adulthood domains						
Independence	.24*	.09	.06	.05	.16*	.09
Interdependence	.19*	.08	.01	.31*	.15*	.09
Role transitions	.13*	-.01	.06	.13*	.06	.16*
Norm compliance	.16*	.01	.07	.23*	.04	.06
Biological transitions	.06	.02	-.04	.12*	.10*	.04
Chronological transitions	.11*	.01	.04	.04	.04	.07
Family Capacities	.14*	.01	.06	.25*	.09	.10*
Completion of Criteria for adulthood domains						
Independence	.01	-.06	-.20*	.26*	.14*	-.26*
Interdependence	-.05	-.13*	-.18*	.45*	.07	-.13*
Role transitions	-.08	-.18*	-.22*	.43*	-.05	-.23*
Norm compliance	.06	-.11*	-.01	.23*	.01	-.01
Family Capacities	-.08	-.15*	-.17*	.40*	.01	-.09

Note. df range from 690 to 707. Bold values indicate clinical significance.

*Correlation is significant at the 0.01 level (2-tailed).

exploration domain of the IDEA were significantly associated with higher mean scores on all of the subjective importance of the criteria for adulthood domains. Higher mean scores on the Other-focused domains of the IDEA were significantly associated with higher mean scores for the subjective importance for adulthood within the Interdependence, Role Transitions, Norm compliance, Biological transitions, and Family capacity domains. As well, individuals with higher scores on the Self-focused domain of the IDEA tended to report the Independence, Interdependence, and Biological transition domains as highly important in achieving adulthood status. A significant, positive correlation was observed between the Feeling in-between domain of the IDEA and ratings on the importance of the Role transition domain where individuals with high scores on the Feeling in-between domain tended to report Role transitions as highly important for the transition to adulthood. Finally, The Experimentation/Possibilities and the Negativity/Instability domains were not significantly associated with any of the subjective importance of the criteria for adulthood domains.

The correlations between the IDEA and the completion of the criteria for adulthood are also found in Table 4-5. It was observed that scores on the Independence domain of the IDEA were not related to the completion of the criteria for adulthood in any of the domains. Higher scores on the Experimentation/Possibilities domain were significantly associated with lower completion scores in the Interdependence, Role transitions, Norm compliance, and Family capacity domains. High scores on Negativity/Instability domain were significantly correlated with lower completion scores in all domains with the exception of the Norm compliance domain. Scores on the Other-focused domain were significantly related to all of the completion domains. In contrast, higher scores on the Self-focused domain were only significantly associated with higher completion scores within the Independence domain. Lastly, individuals who scored high on the Feeling in-between domain tended to have lower completion scores within the Independence, Interdependence, and Role transition domains.

Developmental Differences between University and Non-University Contexts

Age Differences Between Status Groups

Due to the potential of age confounding the relations between status group and the various markers of development, differences in age by status group were assessed. The distribution of age by status group can be found in Table 4-6. A one-way ANOVA analysis indicated that significant differences in age existed between the groups, $F(2, 736) = 189.82, p <$

Table 4-6

Distribution of Age by Status Groups (n, %)

Age	Undergraduate students (n = 509)	Graduate students (n = 74)	Non-university participants (n = 154)	Total (N = 737)
18	125 (24.6%)	0 (0.0%)	13 (8.4%)	138 (18.7%)
19	93 (18.3%)	1 (1.4%)	13 (8.4%)	107 (14.5%)
20	86 (16.9%)	1 (1.4%)	8 (5.2%)	95 (12.9%)
21	70 (13.8%)	0 (0.0%)	7 (4.5%)	77 (10.4%)
22	56 (11.0%)	8 (10.8%)	14 (9.1%)	78 (10.6%)
23	32 (6.3%)	10 (13.5%)	11 (7.1%)	53 (7.2%)
24	27 (5.3%)	17 (23.0%)	21 (13.6%)	65 (8.8%)
25	11 (2.2%)	16 (21.6%)	14 (9.1%)	41 (5.6%)
26	3 (0.6%)	5 (6.8%)	12 (7.8%)	20 (2.7%)
27	3 (0.6%)	4 (5.4%)	12 (7.8%)	19 (2.6%)
28	1 (0.2%)	6 (8.1%)	14 (9.1%)	21 (2.8%)
29	2 (0.4%)	6 (8.1%)	15 (9.7%)	23 (3.1%)

.001. Post-hoc testing demonstrated that undergraduate students (mean age = 20.32, SD = 2.21) were significantly younger than graduate students (mean age = 24.77, SD = 1.89; $p = .000$) and non-university participants (mean age = 23.81, SD = 3.44; $p < .001$). As well, non-university participants were significantly younger than graduate students ($p < .01$). As a result, age was controlled for as a potential confounding variable in all comparative analyses between status groups.

General Overview of the Analyses

In order to explore whether developmental differences existed between university and non-university contexts, a series of general linear models were conducted to compare undergraduate students, graduate students, and non-university participants on the IDEA domains (hypothesis 1a and 1f), the domains for the subjective importance of criteria for adulthood (hypothesis 1c and 1h), and the domains for the achievement of the criteria for adulthood (hypothesis 1d and 1i). Gender (exploratory question 1) and age (hypothesis 1k, 1m, 1n, and 1o) were also considered in the analyses as were the interactions between status group, gender, and age. In Model 1, status group (undergraduate student, graduate student, non-university participant) and gender (male, female) were included as independent variables. Next, the analyses were repeated with age included as a continuous independent variable in order to determine whether age confounds any potential connection between status group and the outcome variable of interest (Model 2). Finally, the analyses were repeated to consider the interactions between the independent variables (status group by age, status group by gender, gender by age; Model 3). Post-hoc tests using the Bonferroni correction were conducted to examine significant main effects.

Logistic regression analysis was also used to examine the association between status group, gender and age, and self-reported adult status with the Models 1, 2, and 3 guiding the analyses (hypothesis 1e and 1j). A series of logistic regression analyses were also conducted to compare the frequencies of each personal goal category between undergraduate students, graduate students, and non-university participants (hypothesis 1b and 1g). Again, gender (exploratory question 1) and age (hypothesis 1l) were also considered in addition to the interactions between independent variables. When possible (cell sizes equal to or larger than 5), gender and age were also considered in addition to the interactions between the variables (status group, gender, and age).

Relations Between the Dimensions of EA and Status Group

Contextual differences in emerging adulthood experiences as measured by the IDEA were assessed through general linear modeling analyses. Six separate groups of analyses were conducted with each of the IDEA domains as dependent variables (Identity exploration, Experimentation/Possibilities, Negativity/Instability, Other-focused, Self-focused, Feeling in-between). The means and adjusted means for each of the domains of the IDEA as a function of status group, gender, and age are shown in Appendix N.

Variations on the Identity Exploration domain of the IDEA were first examined. The first model revealed a significant main effect of status group with undergraduate students ($M = 3.32$, $SD = .46$; refer to Table 4-7) obtaining significantly higher scores than non-university participants ($M = 3.18$, $SD = .51$; $p < .01$). Graduate students did not significantly differ from undergraduate students or non-university participants ($M = 3.31$, $SD = .46$). The main effect for status group was no longer significant after controlling for age in Model 2. A significant main effect was observed for age in Model 2 with increasing age associated with lower scores on the Identity Exploration domain ($\beta = -.02$, $p < .01$). The third model showed no significant interactions between the independent variables.

The analyses were next conducted with the Experimentation/Possibilities domain of the IDEA as the dependent variable. Table 4-8 shows a significant main effect for status group in Model 1 with post-hoc testing revealing that undergraduate students ($M = 3.38$, $SD = .46$) obtained significantly higher scores than non-university participants ($M = 3.14$, $SD = .49$; $p < .001$) but no significant differences were observed between graduate students and either undergraduates or non-university participants ($M = 3.28$, $SD = .46$). The main effect for status group was no longer significant once age was included in Model 2 and a significant main effect for age was observed with increasing age associated with lower scores in the Experimentation/Possibilities domain ($\beta = -.04$, $p < .001$). No significant interactions were found in the third model.

The Negativity/Instability domain of the IDEA was next examined. Model 1 revealed a significant main effect for gender (refer to Table 4-9). Females ($M = 3.07$, $SD = .53$) obtained significantly higher scores on the Negativity/Instability domain when compared to males ($M =$

Table 4-7

Identity Exploration Domain of the IDEA as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	2.13	2	1.07	4.73	<.01*	.01
Gender	.69	1	.69	3.02	.08	.01
Error	163.17	723	.23			
<i>Model 2</i>						
Status Group	1.23	2	.61	2.74	.07	.01
Gender	.68	1	.68	3.04	.08	.00
Age	1.75	1	1.75	7.81	<.01*	.01
Error	161.43	722	.22			
<i>Model 3</i>						
Status Group	.26	2	.13	.58	.56	.00
Gender	.10	1	.10	.44	.51	.00
Age	1.21	1	1.21	5.38	.02	.01
Status Group*Gender	.05	2	.02	.10	.90	.00
Status Group*Age	.33	2	.17	.74	.48	.00
Gender*Age	.17	1	.17	.74	.39	.00
Error	160.87	717	.22			

**p* < .01

Table 4-8

Experimentation/Possibilities Domain of the IDEA as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	6.74	2	3.37	14.86	<.001**	.04
Gender	.01	1	.01	.01	.95	.00
Error	162.95	718	.23			
<i>Model 2</i>						
Status Group	1.70	2	.85	3.91	.02	.01
Gender	.00	1	.01	.01	.96	.00
Age	6.90	1	6.90	31.68	<.001**	.04
Error	156.05	717	.22			
<i>Model 3</i>						
Status Group	.33	2	.16	.75	.47	.00
Gender	.01	1	.01	.02	.90	.00
Age	1.80	1	1.80	8.25	<.01*	.01
Status Group*Gender	.20	2	.10	.45	.64	.00
Status Group*Age	.54	2	.27	1.24	.29	.00
Gender*Age	.01	1	.01	.02	.90	.00
Error	155.34	712	.22			

**p* < .01, ** *p* < .001

Note: Bold values indicate clinical significance.

Table 4-9

Negativity/Instability Domain of the IDEA as a Function of Status Group, Gender and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	3.320	2	1.660	5.863	.03	.02
Gender	3.396	1	3.396	11.994	<.01*	.02
Error	205.577	726	.283			
<i>Model 2</i>						
Status Group	1.364	2	.682	2.417	.09	.01
Gender	3.397	1	3.397	12.032	<.01*	.02
Age	.907	1	.907	3.213	.07	.00
Error	204.670	725	.282			
<i>Model 3</i>						
Status Group	.152	2	.076	.268	.77	.00
Gender	.192	1	.192	.676	.41	.00
Age	.112	1	.112	.396	.53	.00
Status Group*Gender	.247	2	.124	.436	.65	.00
Status Group*Age	.249	2	.124	.439	.65	.00
Gender*Age	.054	1	.054	.192	.66	.00
Error	204.155	720	.284			

**p* < .01

2.90, SD = .54). The main effect of gender remained a significant predictor after controlling for age with females (M = 3.05, SE = .03) continuing to report higher levels of Negativity/Instability than males (M = 2.89, SE = .05). Age was non-significant and no significant interactions were observed in Model 3.

Next, the Other-focused domain of the IDEA was explored. Model 1 showed a significant main effect for both status group and gender (see Table 4-10). Post hoc analyses revealed that undergraduate students (M = 2.31, SD = .67) obtained significantly lower scores than non-university participants (M = 2.81, SD = .80; $p < .01$) but did not differ from graduate students (M = 2.48, SD = .73). Females (M = 2.47, SD = .73) obtained significantly higher scores on the Other-focused domain when compared to males (M = 2.31, SD = .72). The second model indicated that the main effects for status group and gender remained significant after including age as an independent variable: undergraduate students continued to obtain significantly lower scores (adjusted M = 2.34, SE = .04) when compared to non-university participants (adjusted M = 2.62, SE = .06), and females obtained significantly higher scores (adjusted M = 2.49, SE = .04) compared to males (adjusted M = 2.31, SE = .06). Age was also a significant predictor with increasing age associated with higher scores on the Other-focused domain ($\beta = .06, p < .001$). The interactions between independent variables were non-significant in Model 3.

An exploration of the Self-focused domain of the IDEA revealed no significant associations between status group, gender, or age and the Self-focused domain (refer to Table 4-11). Next, the Feeling in-between domain was examined. Results demonstrated significant main effects for status group and gender (refer to Table 21). Females obtained significantly higher scores (M = 3.25, SD = .66) compared to males (M = 3.08, SD = .05), and undergraduate students obtained significantly higher scores (M = 3.30, SD = .58) compared to non-university participants (M = 2.97, SD = .81; $p < .01$) with no significant differences observed between graduate students and either undergraduates or non-university participants (M = 3.33, SD = .40). After age was included in Model 2, gender remained a significant predictor of mean scores on the Feeling in-between domain while status group was no longer significant. Females continued to obtain significantly higher scores (adjusted M = 3.25, SE = .04) when compared to males (adjusted M = 3.09, SE = .05). Age was significantly associated with scores on the Feeling in-between domain ($\beta = -.06, p < .001$) with increasing age associated with lower scores. Model 3 revealed no significant interactions between age, gender, and status group.

Table 4-10

Other Focused Domain of the IDEA as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	29.52	2	14.76	29.86	<.001**	.08
Gender	3.98	1	3.98	8.05	<.01*	.01
Error	360.83	730	.49			
<i>Model 2</i>						
Status Group	10.18	2	5.09	10.81	<.001**	.03
Gender	4.08	1	4.08	8.67	<.01*	.01
Age	17.69	1	17.49	37.13	<.001**	.05
Error	343.34	729	.47			
<i>Model 3</i>						
Status Group	1.12	2	.56	1.19	.30	.00
Gender	.05	1	.05	.10	.73	.00
Age	6.12	1	6.12	13.01	<.001**	.02
Status Group*Gender	1.8	2	.94	1.99	.14	.01
Status Group*Age	.67	2	.33	.71	.49	.00
Gender*Age	3.8	1	3.84	.00	.93	.00
Error	340.74	724	.47			

p* < .01, *p* < .001*Note:* Bold values indicate clinical significance.

Table 4-11

Self-Focused Domain of the IDEA as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	1.37	2	.69	3.87	.02	.01
Gender	.38	1	.38	2.77	.14	.00
Error	128.25	723	.18			
<i>Model 2</i>						
Status Group	1.19	2	.59	3.35	.04	.00
Gender	.38	1	.38	2.10	.14	.00
Age	.01	1	.01	.06	.81	.00
Error	128.24	722	.18			
<i>Model 3</i>						
Status Group	.27	2	.13	.75	.47	.00
Gender	.03	1	.03	.15	.70	.00
Age	.06	1	.06	.35	.55	.00
Status Group*Gender	.20	2	.10	.55	.58	.00
Status Group*Age	.24	2	.12	.67	.51	.00
Gender*Age	.01	1	.01	.02	.89	.00
Error	127.75	717	.18			

Relations Between the Subjective Importance of the Criteria for Adulthood and Status Group

Subjective reports regarding the importance of the criteria for adulthood were compared between undergraduate students, graduate students, and non-university participants through a series of general linear modeling analyses. Seven separate groups of analyses were completed with each of the domains of the criteria for adulthood as dependent variables: Independence, Interdependence, Role transitions, Normative, Biological, Chronological, and Family domains. Three models were tested: the first model included status group (undergraduate student, graduate student, non-university participant) and gender (male, female) as independent variables, age was added into the second model as a covariate, and the third model considered the interactions between the independent variables (status group by age, status group by gender, gender by age). Significant main effects were examined using the Bonferroni correction. The means and means adjusted for age for each of the subjective importance of the criteria for adulthood domains as a function of status group and gender are found in Appendix O.

First, variations in the subjective importance of the Independence domain were assessed. Table 4-13 shows a significant main effect for status group with undergraduate students ($M = 3.05$, $SD = .40$) rating independence as significantly more important to the transition to adulthood when compared to non-university participants ($M = 3.17$, $SD = .45$; $p < .01$). However, after controlling for age, the main effect for status group was no longer significant. Model 3 revealed no significant interactions between independent variables. Next, the Role transitions domain was assessed (refer to Table 4-14). The results demonstrated that status group was not significantly associated with scores on the Role transitions domain. However, a significant main effect for gender was observed wherein females ($M = 2.57$, $SD = .78$) rated Role transitions as significantly more important to the transition to adulthood when compared to males ($M = 2.36$, $SD = .85$). Gender remained a significant predictor even after controlling for age, with females (adjusted $M = 2.58$, $SE = .05$) continuing to obtain significantly higher mean scores than males (adjusted $M = 2.37$, $SE = .07$). Age was not significantly associated with scores on the Role transition domain though Model 3 demonstrated no significant interaction between status group and age.

The subjective importance of the Family domain was next explored. Model 1 revealed a significant main effect for status group. Specifically, mean scores in the Family domain were

Table 4-12

Feeling In-Between Domain of the IDEA as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	12.91	2	6.46	15.64	<.001**	.04
Gender	3.17	1	3.17	7.67	<.01*	.01
Error	298.86	724	.41			
<i>Model 2</i>						
Status Group	2.37	2	1.18	3.01	.05	.01
Gender	3.10	1	3.10	7.87	<.01*	.01
Age	14.27	1	14.27	36.26	<.001**	.05
Error	284.59	723	.39			
<i>Model 3</i>						
Status Group	1.45	2	.72	1.85	.16	.01
Gender	.08	1	.08	.20	.66	.00
Age	7.88	1	7.88	20.13	<.001**	.03
Status Group*Gender	1.90	2	.95	2.43	.09	.01
Status Group*Age	1.56	2	.78	1.99	.14	.01
Gender*Age	.16	1	.16	.41	.52	.01
Error	280.89	718	.39			

p* < .01, *p* < .001*Note:* Bold values indicate clinical significance.

Table 4-13

Independence Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	Df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	1.73	2	.87	5.02	<.01*	.01
Gender	.44	1	.44	2.52	.11	.00
Error	122.31	708	.17			
<i>Model 2</i>						
Status Group	1.00	2	.50	2.90	.06	.01
Gender	.44	1	.44	2.38	.11	.00
Age	.48	1	.48	2.81	.09	.00
Error	121.83	707	.17			
<i>Model 3</i>						
Status Group	.86	2	.43	2.50	.08	.01
Gender	.15	1	.15	.85	.36	.00
Age	.45	1	.45	2.62	.11	.00
Status Group*Gender	.08	2	.04	.23	.79	.00
Status Group*Age	.95	2	.47	2.76	.06	.01
Gender*Age	.24	1	.24	1.37	.24	.00
Error	120.50	702	.17			

**p* < .01

Table 4-14

Role Transition Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	.39	2	.19	.30	.74	.00
Gender	5.34	1	5.34	8.31	<.01*	.01
Error	455.06	709	.64			
<i>Model 2</i>						
Status Group	.23	2	.12	.18	.83	.00
Gender	5.38	1	5.38	8.40	<.01*	.01
Age	1.50	1	1.50	2.33	.13	.00
Error	453.57	708	.64			
<i>Model 3</i>						
Status Group	6.21	2	3.11	4.91	.08	.01
Gender	.01	1	.01	.01	.97	.00
Age	.17	1	.17	.27	.60	.00
Status	2.45	2	1.23	1.94	.14	.01
Group*Gender	6.80	2	3.40	5.38	.10	.00
Status Group*Age	.03	1	.03	.04	.84	.00
Error	444.14	703	.63			

**p* < .01

significantly higher among non-university participants ($M = 3.19$, $SD = .75$) when compared to both undergraduate students ($M = 3.00$, $SD = .84$; $p < .01$) and graduate students ($M = 2.81$, $SD = .89$; $p < .01$; refer to Table 4-15). Model 2 demonstrated that status group remained significant even after controlling for age with non-university participants (adjusted $M = 3.15$, $SE = .09$) obtaining significantly higher mean scores in the Family domain when compared to graduate students (adjusted $M = 2.76$, $SE = .24$; $p < .01$) but not undergraduate students (adjusted $M = 3.00$, $SE = .05$). No significant interactions were observed in Model 3. Variations by status group were also assessed for the subjective importance of the Interdependence, Normative transitions, Biological transitions, and Chronological domains. The results indicated that no significant relations existed between any of the independent variables (status group, gender, age) and any of the aforementioned domains (refer to Appendix P for the results tables for the association between status group and subjective importance of the criteria for adulthood).

Relations Between the Completion of the Criteria for Adulthood and Status group

Status group differences in the completion of the criteria for adulthood were also assessed through a series of general linear modeling analyses. Five separate groups of analyses were conducted with each of the criteria domains as dependent variables (Independence, Interdependence, Role transitions, Normative transitions, and Family). Note that both the Biological and Chronological domains were omitted from the analyses due to poor internal consistency. For each dependent variable, three separate models were tested. Model 1 included status group (undergraduate student, graduate student, non-university participant), and gender (male, female) as independent variables, Model 2 added in age as a covariate (refer to Appendix Q for means and means adjusted for age). Finally, Model 3 included the interactions between the independent variables (status group by age, status group by gender, gender by age). Post hoc tests using the Bonferroni correction were used to examine significant main effects.

Scores obtained on the Independence domain for the achieved criteria for adulthood were first examined as a function of status group and gender. Results demonstrated a significant main effect for status group (see Table 4-16). Undergraduate students obtained significantly lower scores on the Independence domain ($M = 2.00$, $SD = .38$) when compared to both graduate students ($M = 2.20$, $SD = .36$) and non-university participants ($M = 2.36$, $SD = .39$; $p < .01$). Further, graduate students also obtained significantly lower scores when compared to non-university participants ($p < .01$). The main effect for status group remained significant even after

Table 4-15

Family Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	Df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	7.75	2	3.88	5.67	<.01*	.02
Gender	.08	1	.08	.11	.74	.00
Error	483.48	707	.68			
<i>Model 2</i>						
Status Group	7.57	2	3.78	5.53	<.01*	.02
Gender	.07	1	.07	.10	.75	.00
Age	.70	1	.70	1.02	.31	.00
Error	482.78	706	.68			
<i>Model 3</i>						
Status Group	1.00	2	.50	.73	.48	.00
Gender	.18	1	.18	.26	.61	.00
Age	.75	1	.75	1.09	.30	.00
Status Group*Gender	1.63	2	.82	1.19	.30	.00
Status Group*Age	.80	2	.40	.58	.56	.00
Gender*Age	.16	1	.16	.23	.63	.00
Error	480.33	701	.69			

**p* < .01

Table 4-16

Independence Domain of the Achieved Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	14.62	2	7.31	51.09	<.01*	.13
Gender	.22	1	.22	1.51	.22	.00
Error	99.42	695	.14			
<i>Model 2</i>						
Status Group	3.40	2	1.70	13.35	<.01*	.04
Gender	.21	1	.21	1.63	.20	.00
Age	11.00	1	11.00	86.33	<.001*	.11
Error	88.43	694	.13			
<i>Model 3</i>						
Status Group	.26	2	.13	1.01	.37	.00
Gender	.22	1	.22	1.72	.19	.00
Age	4.93	1	4.93	38.60	<.01*	.05
Status Group*Gender	.09	2	.04	.35	.71	.00
Status Group*Age	.15	2	.08	.60	.55	.00
Gender*Age	.18	1	.18	1.44	.23	.00
Error	87.10	689	.13			

p* < .01; *p* < .001

Note: Bold values indicate clinical significance.

controlling for age in Model 2 with non-university participants obtaining higher scores on the Independence domain (adjusted $M = 2.24$, $SE = .04$) when compared to both undergraduate (adjusted $M = 2.07$, $SE = .02$; $p < .01$) and graduate students (adjusted $M = 2.04$, $SE = .05$; $p < .01$). Age was also significantly associated with scores on the Independence domain in Model 2, with increasing age significantly associated with higher scores on the Independence domain ($\beta = .05$, $p < .001$). Model 3 revealed no significant interactions between age, gender, and status group.

Next, variations on the Interdependence domain for the achieved criteria for adulthood were assessed. The results from the general linear model analyses can be found in Table 4-17. Model 1 revealed a significant main effect of status group. Post hoc tests indicated that undergraduate students ($M = 1.90$, $SD = .47$) obtained significantly lower mean scores than graduate students ($M = 2.08$, $SD = .49$; $p < .01$) and non-university participants ($M = 2.14$, $SD = .52$; $p < .001$). However, the second model demonstrated that the main effect for status group was no longer significant when including age as a covariate. Age was revealed as a significant predictor with older participants reporting higher mean levels of interdependence ($\beta = .04$, $p < .001$). No significant interactions between age, gender, and status group were observed. Differences in mean levels of completion within the Role transition domain were next examined. Model 1 demonstrated a significant main effect for status group (see Table 4-18) with undergraduate students ($M = 1.18$, $SD = .34$) obtaining significantly lower scores on the Role transition domain compared to graduate students ($M = 1.47$, $SD = .60$; $p < .001$) and non-university participants ($M = 1.96$, $SD = .62$; $p < .001$). Graduate students also received significantly lower scores when compared to non-university participants ($p < .001$). In model 2, the main effect of status group continued to be significant even after controlling for age. Non-university participants (adjusted $M = 1.72$, $SE = .05$) received higher scores on the role transition domain when compared to undergraduate students (adjusted $M = 1.27$, $SE = .03$; $p < .001$) and graduate students (adjusted $M = 1.30$, $SE = .09$) but no significant difference was observed between undergraduate and graduate students. Age was significantly associated with scores on the Role transition domain with older participants tending to obtain significantly higher mean scores ($\beta = .07$, $p < .001$). Model 3 revealed a significant interaction between age and status group: among the non-university group, older age was associated with completing more tasks

Table 4-17

Interdependence Domain of the Achieved Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	7.82	2	3.91	16.74	<.01*	.05
Gender	.73	1	.73	3.13	.08	.00
Error	162.29	695	.23			
<i>Model 2</i>						
Status Group	1.27	2	.63	2.81	.06	.01
Gender	.74	1	.74	3.28	.07	.01
Age	5.40	1	5.39	23.85	<.01*	.03
Error	156.90	694	.23			
<i>Model 3</i>						
Status Group	.58	2	.29	1.28	.28	.00
Gender	.29	1	.29	1.27	.26	.00
Age	1.73	1	1.73	7.68	.01	.01
Status						
Group*Gender	.86	2	.43	1.91	.15	.01
Status Group*Age	.33	2	.17	.73	.48	.00
Gender*Age	.34	1	.34	1.49	.22	.00
Error	155.62	689	.23			

**p* < .01

Note: Bold values indicate clinical significance.

Table 4-18

Role Transition Domain of the Achieved Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	67.06	2	33.53	171.41	<.01*	.34
Gender	.06	1	.06	.32	.57	.00
Error	132.43	677	.20			
<i>Model 2</i>						
Status Group	28.38	2	14.19	85.29	<.01*	.20
Gender	.05	1	.05	.30	.58	.00
Age	19.97	1	19.97	120.02	<.01*	.15
Error	112.46	676	.17			
<i>Model 3</i>						
Status Group	1.01	2	.50	3.12	.05	.01
Gender	.05	1	.05	.32	.57	.00
Age	9.12	1	9.12	56.51	<.001**	.08
Status Group*Gender	1.11	2	.55	3.43	.03	.01
Status Group*Age	3.01	2	1.51	9.34	<.01**	.03
Gender*Age	.02	1	.02	.13	.72	.00
Error	108.29	671	.16			

p* < .01, *p* < .001

Note: Bold values indicate clinical significance.

related to Role transitions. No significant association with age was found among participants in the undergraduate or graduate student groups (refer to Appendix V for a figure of the interaction).

Variations on the Normative domain of the achieved criteria for adulthood were next examined as a function of status group and gender (see Table 4-19). Model 1 revealed a significant main effect for gender with females ($M = 2.35$, $SD = .42$) obtaining significantly higher scores on the Normative domain when compared to males ($M = 2.25$, $SD = .44$). The second model indicated that gender remained a significant predictor of Normative domain mean scores after controlling for age with females continuing to report higher mean scores (adjusted $M = 2.34$, $SE = .07$) than males (adjusted $M = 2.24$, $SE = .03$). No significant interactions between age, status group, and gender were shown in Model 3.

Lastly, the Family domain of the achieved criteria for adulthood was explored (refer to Table 4-20). Model 1 demonstrated a significant main effect for status group. Post hoc testing indicated that undergraduate students ($M = 1.56$, $SD = .54$) obtained significantly lower mean completion scores when compared to both graduate students ($M = 1.90$, $SD = .56$; $p < .001$) and non-university participants ($M = 2.12$, $SD = .72$; $p < .001$). The main effect for status group remained significant even after controlling for age. Specifically, non-university participants continued to obtain significantly higher scores (adjusted $M = 1.93$, $SE = .05$) when compared to both undergraduate (adjusted $M = 1.67$, $SE = .03$; $p < .001$) and graduate students (adjusted $M = 1.62$, $SE = .07$; $p < .001$). Age was also a significant predictor of mean scores within the Family domain with significantly higher scores on the Family domain observed with increasing age ($\beta = .09$, $p < .001$). No significant interactions were observed between age, status group, and gender.

Relations Between Subjective Adult Status and Status Group

In order to assess how participants subjectively viewed their own adult status, they were asked the question “Do you feel you have reached adulthood?”. They were provided with the following response options: “yes”, “no”, and “in some respects yes, in some respects no”. The proportion of undergraduate students, graduate students, and non-university participants reporting to have subjectively reached adulthood are shown in Table 4-21. “In some respects yes, in some respects no” was the most common response for each status group. Further, only a minority of participants indicated “no” although, comparatively, the highest proportion was observed among undergraduate students. The proportion of males and females reporting to have

Table 4-19

Normative Domain of the Achieved Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	.45	2	.23	1.27	.28	.00
Gender	1.35	1	1.35	7.58	<.01*	.01
Error	123.06	694	.18			
<i>Model 2</i>						
Status Group	.02	2	.01	.05	.95	.00
Gender	1.35	1	1.35	7.64	<.01*	.01
Age	.76	1	.76	4.30	.03	.01
Error	122.30	693	.18			
<i>Model 3</i>						
Status Group	.06	2	.03	.16	.85	.00
Gender	.05	1	.05	.26	.61	.00
Age	.10	1	.10	.59	.44	.00
Status Group*Gender	.46	2	.23	1.30	.27	.00
Status Group*Age	.04	2	.02	.11	.89	.00
Gender*Age	.09	1	.09	.51	.47	.00
Error	121.79	688	.18			

**p* < .01

Table 4-20

Family Domain of the Achieved Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Status Group	36.93	2	18.46	54.17	<.01*	.14
Gender	.10	1	.10	.30	.58	.00
Error	236.89	695	.34			
<i>Model 2</i>						
Status Group	7.14	2	3.57	12.04	<.01*	.03
Gender	.09	1	.09	.31	.58	.00
Age	31.19	1	31.19	105.23	<.01*	.13
Error	205.69	694	.30			
<i>Model 3</i>						
Status Group	.07	2	.03	.11	.90	.00
Gender	.00	1	.00	.00	.99	.00
Age	13.55	1	13.55	45.62	<.01*	.06
Status Group*Gender	.93	2	.47	1.57	.21	.00
Status Group*Age	.01	2	.01	.01	.99	.00
Gender*Age	.01	1	.01	.01	.92	.00
Error	204.71	689	.30			

**p* < .01

Note: Bold values indicate clinical significance.

Table 4-21

Subjective Adulthood Status as a Function of Status Group (n, %)

	Undergraduate student (n = 502)	Graduate student (n = 74)	Non-university participants (n = 150)	Total (N = 726)
Yes	97 (19.3%)	29 (39.2%)	67 (44.7%)	193 (26.6%)
No	69 (13.7%)	5 (6.8%)	9 (6.0%)	83 (11.4%)
In some respects yes, in some respects no	336 (66.9%)	40 (54.1%)	74 (49.3%)	450 (62.0%)

subjectively reached adulthood are shown in Table 4-22. A majority of both genders indicated “in some respects yes, in some respects no”.

In order to enable the logistic regression analyses to explore the relationship between status group and subjective adulthood status, the outcome variable of interest (subjective adulthood status) was collapsed into “Yes” (including those who responded “Yes”) and “No” (including those who responded “No” and “In some respects yes, in some respects no”). Gender and age were also considered in the analyses. The first model indicated a significant relationship between status group and subjective adulthood status, with both graduate students and non-university participants significantly more likely to report reaching adulthood when compared to undergraduate students (see Table 4-23). Gender did not significantly predict subjective adulthood status after controlling for status group. Age was included in the second model as a covariate. When controlling for age, neither status group nor gender significantly predicted adulthood status. However, age was a significant predictor with increasing age significantly associated with an increased likelihood of endorsing having achieved adult status. The interactions between gender, status group, and age were non-significant in Model 3.

Relations Between Personal Goals and Status Group

In order to determine whether or not status group was significantly associated with the identification of specific personal goals, a total of nine logistic regression models were examined with each personal goal type as the dependent variable (Achievement, Family of Origin, Partner, Parenthood, Friendships, Property and Finance, Self, Health, and Leisure). Participants were considered to have endorsed the personal goal type if they reported a personal goal within that category for either personal goal one, two or three. The first model included status group (undergraduate student, graduate student, non-university participant) and gender (male, female) as independent variables. In order to control for age, the second model included status group, gender, and age. Although the interactions between the independent variables were of interest, they were not considered in the analyses due to low cell n (cell sizes less than 5).

The types of personal goals endorsed by each status group are depicted in Table 4-24. Overall, undergraduate students reported the highest proportion of personal goals within the Achievement-related, Health-related, and Leisure-related categories. Among graduate students, the top three most endorsed personal goals included Achievement, Partner, and Leisure. Finally, the most frequently endorsed goals among non-university participants included Achievement,

Table 4-22

Subjective Adulthood Status as a Function of Gender (n, %)

	Male (n = 167)	Female (n = 556)	Total (N = 723)
Yes	48 (28.7%)	144 (25.9%)	192 (26.6%)
No	21 (12.6%)	62 (11.2%)	83 (11.4%)
In some respects yes, in some respects no	98 (58.7%)	350 (62.9%)	448 (62.0%)

Table 4-23

Multivariate Models for Subjective Adulthood Status

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					<.001**
Graduate Students (Undergraduate = 0)	2.66	.26	1.59	4.47	<.001**
Non-University Participants (Undergraduate = 0)	3.35	.20	2.26	4.96	<.001**
Gender (male = 0)	1.09	.20	.73	1.62	.678
<i>Model 2</i>					
Status Group					.271
Graduate Students (Undergraduate = 0)	.79	.31	.43	1.46	.444
Non-University Participants (Undergraduate = 0)	1.28	.25	.79	2.08	.323
Gender (male = 0)	1.10	.21	.72	1.68	.651
Age	1.33	.03	1.24	1.44	<.001**
<i>Model 3</i>					
Status Group					.29
Graduate Students (Undergraduate = 0)	25.64	3.10	.06	11.50	.30
Non-University Participants (Undergraduate = 0)	12.21	1.81	.35	43.25	.17
Gender (male = 0)	2.34	1.88	.06	9.40	.65
Age	1.40	.06	1.20	1.59	<.001**
Status Group*Gender					.55
Graduate Students (Undergraduate = 0)* Gender (male = 0)	1.21	.68	.32	4.52	.78
Non-University Participants (Undergraduate = 0)* Gender (male = 0)	.62	.58	.20	1.94	.41
Age*Status Group					.33
Age*Graduate Students (Undergraduate = 0)	.86	.13	.67	1.12	.23
Age*Non-University Participants (Undergraduate = 0)	.91	.08	.78	1.06	.22
Age* Gender (male = 0)	.97	.09	.82	1.65	.74

***p* < .001*Note:* Bold values indicate clinical significance.

Table 4-24

Personal Goals as a Function of Status Group (n, %)

	Undergraduate student (n = 491)	Graduate student (n = 72)	Non-university participants (n = 154)	Total (N = 717)
Achievement	465 (94.7%)	68 (94.4%)	108 (70.1%)	641 (89.4%)
Family of Origin	35 (7.1%)	5 (6.9%)	6 (3.9%)	46 (6.4%)
Partner	80 (16.3%)	15 (20.8%)	31 (20.1%)	126 (17.6%)
Parenthood	42 (8.6%)	5 (6.9%)	40 (26.0%)	87 (12.1%)
Friendships	37 (7.5%)	5 (6.9%)	3 (1.9%)	45 (6.3%)
Property and Finances	89 (18.1%)	11 (15.3%)	70 (45.5%)	170 (23.7%)
Self	95 (19.3%)	14 (19.4%)	34 (22.1%)	143 (19.9%)
Health	114 (23.2%)	14 (19.4%)	42 (27.3%)	170 (23.7%)
Leisure, Learning, & Hobbies	100 (20.4%)	15 (20.8%)	35 (22.7%)	150 (20.9%)
Other	44 (9.0%)	6 (8.3%)	16 (10.4%)	66 (9.2%)

Note. Not all percentages sum up to 100%, due to not all participants reporting a goal for all three personal goals.

Property and Finance, and Health. Table 4-25 shows the frequencies of each goal category for males and females. Overall, the top three reported goals by males included Achievement, Property and Finances, and Leisure whereas the top three reported goals for females included Achievement, Health, and Property and Finance.

For some personal goal types (the Achievement and Friendship categories), cell n was less than five when considering status group. That is, for some status groups there were fewer than five participants who did not report Achievement-related goals and fewer than five who reported Friendship-related goals. As a result, statistical differences by status group were not explored for those categories. Descriptively, it was observed that within the Achievement category, both undergraduate and graduate students had a similar prevalence (94.7% and 94.4%, respectively). In contrast, only 70.1% of non-university student participants reported achievement-related goals. Similarly, the prevalence of friendship-related goals was comparable between undergraduate (7.5%) and graduate students (6.9%) whereas only 1.9% of non-university participants identified goals within the Friendship category. Chi-square analyses indicated that no significant differences were observed between males' and females' endorsement of Friendship-related goals (3.1% versus 7.2%, respectively) or Achievement-related goals (89.5% versus 89.5%, respectively).

Logistic regression analyses were conducted with Family of Origin, Partner, Self and Leisure as the dependent variables. Status group, gender, and age were not significantly associated with the endorsement of personal goals in any of the aforementioned categories. Refer to Appendix R for the results tables. The analyses were next conducted with Parenthood as the dependent variable (see Table 4-26). The first model demonstrated a significant relationship between status group and the endorsement of parenthood-related goals, with non-university participants more likely to endorse goals within this category when compared to undergraduate students. Status group remained significant after controlling for both gender and age, with non-university participants continuing to report more parent-related goals when compared to undergraduate students. Furthermore, after controlling for status group and gender, a significant relationship was observed between age and parent-related goals, with increasing age significantly associated with an increased likelihood of reporting of parenthood-related goals.

The personal goal category of Property and finance was next considered (see Table 4-27). The first model indicated a significant relationship between Property and finance personal goals

Table 4-25

Personal Goals as a Function of Gender (n, %)

	Male (n = 162)	Female (n = 551)
Achievement	145 (85.3%)	494 (87.6%)
Family of Origin	8 (4.7%)	38 (6.7%)
Partner	31 (18.2%)	94 (16.7%)
Parenthood	15 (8.8%)	71 (12.6%)
Friendships	5 (2.9%)	40 (7.1%)
Property and Finances	45 (26.5%)	123 (21.8%)
Self	33 (19.4%)	109 (19.3%)
Health	25 (14.7%)	144 (25.5%)
Leisure, Learning & Hobbies	34 (20.0%)	115 (20.4%)
Other	18 (10.6%)	48 (8.5%)

Note. Not all percentages sum up to 100%, due to not all participants reporting a goal for all three personal goals.

Table 4-26

Multivariate models for the Parenthood Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					<.001**
Graduate Students (Undergraduate = 0)	.83	.49	.32	2.17	.70
Non-University Participants (Undergraduate = 0)	3.76	.25	2.32	6.10	<.001**
Gender (male = 0)	1.54	.31	.84	2.80	.16
<i>Model 2</i>					
Status Group					<.001**
Graduate Students (Undergraduate = 0)	.49	.53	.17	1.37	.17
Non-University Participants (Undergraduate = 0)	2.45	.29	1.38	4.37	<.001*
Gender (male = 0)	1.55	.31	.85	2.84	.16
Age	1.13	.04	1.04	1.23	<.001*

**p* < .01, ** *p* < .001*Note:* Bold values indicate clinical significance.

Table 4-27

Multivariate Models for the Property and Finance Personal Goal Category

Factor	OR	SE	CI for OR		p-value
			Lower	Upper	
<i>Model 1</i>					
Status Group					<.001**
Graduate Students (Undergraduate = 0)	.80	.35	.40	1.59	.52
Non-University Participants (Undergraduate = 0)	3.77	.20	2.54	5.59	<.001**
Gender (male = 0)	1.32	.21	.87	2.01	.19
<i>Model 2</i>					
Status Group					<.001**
Graduate Students (Undergraduate = 0)	.49	.38	.23	1.04	.06
Non-University Participants (Undergraduate = 0)	2.60	.23	1.64	4.10	<.001**
Gender (male = 0)	1.33	.21	.87	2.01	.19
Age	1.12	.04	1.05	1.20	<.001**

* $p < .01$, ** $p < .001$ *Note:* Bold values indicate clinical significance.

and status group. Non-university participants were more likely to report goals within this category when compared to undergraduate participants. This pattern of findings remained significant even after controlling for both gender and age in the second model. Age was significant with older participants more likely to report Property and finance related personal goals when compared to younger participants.

Lastly, the analyses were conducted with Health-related personal goals as the dependent variable (see Table 4-28). Status group was not significant when controlling for gender (Model 1), or when controlling for both gender and age (Model 2). However, gender contributed significantly to the model when controlling for status group, with females significantly more likely to report personal goals in the area of health when compared to males. The relationship between gender and the endorsement of Health-related goals remained significant even after controlling for both status group and age. Age was not significantly associated with the endorsement of health-related goals.

Relations between Development and Channeling Factors

This section examines the channeling factors that align with the LMM (LMM; Nurmi, 2004; Salmela-Aro, 2007). Channeling factors included employment status, household income levels, relationship status, and parenthood. Status group and gender were included in the analyses in order to determine if the channeling factors (employment status, household income levels, relationship status, and parenthood) were significant in the presence of those variables. In order to enable analyses (increase cell n), several of the channeling variables were collapsed. Marital status was collapsed into “single” and “in a committed relationship”, household income was collapsed into “\$0 - \$20,000”, “\$21,000 to \$40,000” and “\$41,000+”, and employment was collapsed into “Part-Time”, “Full-time” and “Unemployed”.

Age Differences and Channeling Factors

Due to the potential of age confounding the relations between the various channeling factors (employment status, household income levels, relationship status, parenthood) and the various markers of development, differences in age by each factor were assessed. A series of one-way ANOVAs indicated that significant differences in age existed between groups based on employment status, $F(2, 736) = 189.82, p < .001$, household income levels, $F(2, 736) = 189.82, p < .001$, relationship status, $F(2, 736) = 189.82, p < .001$, and parenthood, $F(2, 736) = 189.82, p < .001$. Specifically, those who were unemployed ($M = 20.47, SD = 2.37$) were significantly

Table 4-28

Multivariate Models for the Health Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					.44
Graduate Students (Undergraduate = 0)	.84	.32	.45	1.57	.59
Non-University Participants (Undergraduate = 0)	1.25	.21	.82	1.90	.29
Gender (male = 0)	.52	.24	.32	.83	<.01*
<i>Model 2</i>					
Status Group					.40
Graduate Students (Undergraduate = 0)	.64	.35	.32	1.28	.21
Non-University Participants (Undergraduate = 0)	1.00	.25	.62	1.64	.99
Gender (male = 0)	.51	.24	.32	.82	<.01*
Age	1.07	.04	.99	1.14	.07

**p* < .01, ** *p* < .001

younger than those who were employed part-time ($M = 21.36$, $SD = 2.90$; $p < .001$) and full-time ($M = 24.07$, $SD = 3.17$; $p < .001$), and part-time employees were significantly younger than full-time employees ($p < .001$). Participants who reported a yearly income between \$0 and \$20,000 ($M = 20.79$, $SD = .16$) were significantly younger than both those who reported income between \$21,000 - \$40,000 ($M = 21.81$, $SD = .28$) and \$41,000+ ($M = 22.27$, $SD = .17$). Finally, those who reported being in a committed relationship ($M = 24.43$, $SD = 3.26$) were significantly younger than those who reported being single ($M = 20.85$, $SD = 2.61$); and parents ($M = 24.88$, $SD = 3.26$) were significantly older than non-parents (mean age = 21.34, $SD = 2.94$). Consequently, age was treated as a potential confounding variable and was controlled for in all comparative analyses for each channeling factor.

General Overview of the Analyses

A series of general linear models were conducted to assess the relations between channeling factors (employment status (hypotheses 2p, 2r, and 2s), relationship status (hypotheses 2a, 2c, and 2d), household income (hypotheses 2k, 2m, and 2n), and parental status (hypotheses 2f, 2h, and 2i)) and developmental outcomes (mean ratings on the IDEA, the subjective importance of each criteria for adulthood, and completion of developmental tasks). Three models were tested (refer to Table 39). Status group and gender were also included in each model. Age was included in the analyses because it had the potential of confounding the relations between the various channeling factors and developmental markers. The interactions between the channeling factors and status group, gender, and age were examined. However, the interactions between parenthood and status group, and parenthood and gender could not be assessed due to low cell n ($n \leq 7$). Significant associations with age will not be reported in these sets of analyses because they have already been described in the previous analyses.

Logistic regression analyses were conducted to determine the association between channeling factors and self-reported adult status. A series of logistic regression analyses using the three models was also conducted to compare variability in personal goals as a function of employment (hypothesis 2q), relationship status (hypothesis 2b), household income (hypothesis 2l), and parenthood (hypothesis 2g). Logistic regression analyses were also conducted to examine the relations between employment (hypothesis 2t), relationship status (hypothesis 2e), household income (hypothesis 2o), and parenthood (hypothesis 2j) and self-identification as an

Table 4-29

Experimentation/Possibilities Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	4.21	1	4.21	18.92	<.001**	.03
Parenthood	.00	1	.00	.01	.93	.00
Employment Status	.18	2	.09	.40	.67	.00
Income	.10	2	.05	.22	.80	.00
Status Group	1.15	2	.58	2.59	.08	.01
Gender	.10	1	.10	.44	.51	.00
Error	154.43	694	.22			
<i>Model 2</i>						
Relationship Status	1.89	1	1.86	8.53	<.01*	.01
Parenthood	.07	1	.07	.30	.59	.00
Employment Status	.02	2	.01	.05	.95	.00
Income	.04	2	.02	.10	.90	.00
Status Group	.87	2	.43	1.99	.14	.01
Gender	.09	1	.04	.18	.68	.00
Age	3.47	1	3.47	15.91	<.001**	.02
Error	150.97	693	.23			
<i>Model 3</i>						
Relationship Status	.12	1	.12	.56	.45	.00
Parenthood	.47	1	.47	2.16	.14	.00
Employment Status	.43	2	.21	.97	.38	.00
Income	.13	2	.07	.30	.74	.00
Status Group	.98	2	.49	2.24	.11	.01
Gender	.16	1	.16	.73	.39	.00
Age	.06	1	.06	.29	.59	.00
Relationship Status*Status Group	.13	2	.07	.30	.74	.00
Relationship Status*Gender	.44	1	.44	2.00	.16	.00
Relationship Status*Age	.04	1	.04	.17	.68	.00
Parenthood*Age	.52	1	.52	2.38	.12	.00
Employment Status*Status Group	.68	4	.17	.77	.54	.00
Employment Status*Gender	.35	2	.17	.79	.46	.00
Employment Status*Age	.33	2	.17	.75	.47	.00
Income*Status Group	.07	4	.02	.08	.99	.00
Income*Gender	.17	2	.08	.38	.68	.00
Income*Age	.17	2	.08	.38	.68	.00
Error	147.52	672	.22			

* $p < .01$, ** $p < .001$

Table 4-30

Negativity/Instability Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	.51	1	.51	1.85	.18	.00
Parenthood	.14	1	.14	.50	.48	.00
Employment Status	4.74	2	2.37	8.53	<.001**	.03
Income	.69	2	.35	1.24	.29	.00
Status Group	.38	2	.19	.69	.50	.00
Gender	2.96	1	2.96	10.66	<.01*	.02
Error	194.76	701	.28			
<i>Model 2</i>						
Relationship Status	.39	1	.39	1.42	.23	.00
Parenthood	.12	1	.12	.44	.51	.00
Employment Status	4.61	2	2.31	8.29	<.001**	.02
Income	.67	2	.33	1.20	.30	.00
Status Group	.37	2	.18	.66	.52	.00
Gender	2.92	1	2.92	10.49	<.01*	.02
Age	.03	1	.03	.10	.76	.00
Error	194.73	700	.28			
<i>Model 3</i>						
Relationship Status	.37	1	.37	1.32	.25	.00
Parenthood	.00	1	.00	.02	.90	.00
Employment Status	1.30	2	.65	2.35	.10	.01
Income	.01	2	.01	.02	.98	.00
Status Group	.91	2	.45	1.65	.19	.01
Gender	.52	1	.52	1.89	.17	.00
Age	.05	1	.05	.17	.68	.00
Relationship Status*Status Group	1.18	2	.59	2.14	.12	.01
Relationship Status*Gender	.10	1	.10	.34	.56	.00
Relationship Status*Age	.31	1	.31	1.11	.29	.00
Parenthood*Age	.01	1	.01	.02	.88	.00
Employment Status*Status Group	.27	4	.07	.25	.91	.00
Employment Status*Gender	1.70	2	.85	3.08	.05	.01
Employment Status*Age	1.13	2	.57	2.05	.13	.01
Income*Status Group	1.74	4	.43	1.57	.18	.01
Income*Gender	.69	2	.34	1.25	.29	.00
Income*Age	.14	2	.07	.25	.78	.00
Error	187.29	679	.28			

* $p < .01$, ** $p < .001$

adult. In cases where the size of *n* in each of the cells was greater than or equal to five, the interaction between the channeling factors, and status group and gender were also considered.

Association Between Channeling Factors and Scores on the IDEA Domains

The means and means adjusted for age are found in Appendix S. The results from the general linear model analyses demonstrated that none of the channeling variables of interest (relationship status, parenthood, employment status, and income levels) in Models 1, 2, or 3 were significantly associated with the mean scores on the Identity exploration, Self-focused, or Feeling in-between domains of the IDEA (refer to Appendix T).

The Experimentation/Possibilities domain was next explored in relation to the contextual variables. The results indicated that even after controlling for age (Model 2), relationship status continued to be significantly associated with the Experimentation/Possibilities domain with single participants ($M = 3.21$, $SE = .06$) obtaining significantly lower scores than those in a committed relationship ($M = 3.36$, $SE = .05$; refer to Table 4-29). No significant interactions were observed between the independent variables in Model 3.

The Negativity/Instability domain of the IDEA was next assessed. The results revealed a significant relationship between employment status and the Negativity/Instability domain with participants employed full-time ($M = 2.79$, $SD = .55$) obtaining significantly lower scores than both those who were unemployed ($M = 3.06$, $SD = .52$) and those who were employed part-time ($M = 3.11$, $SD = .53$; refer to Table 4-30). No significant differences were found between those who were unemployed and those who were employed part-time. The pattern of findings for employment status remained even after controlling for age with full-time employees ($M = 2.82$, $SE = .11$) receiving significantly lower scores than those unemployed ($M = 3.01$, $SE = .09$; $p < .01$) and part-time employees ($M = 3.11$, $SE = .10$; $p < .01$). No statistically significant interactions between the independent variables were demonstrated.

The Other-focused domain of the IDEA was next examined, with several significant main effects observed. Table 4-31 shows a significant main effect of relationship status, with participants in committed relationships obtaining significantly higher mean scores ($M = 3.07$, $SD = .69$) when compared to single participants ($M = 2.30$, $SD = .67$). Significant differences were also observed between parents and non-parents, with parents tending to obtain significantly higher mean scores ($M = 3.48$, $SD = .52$) when compared to non-parents ($M = 2.38$, $SD = .70$). Finally, income was shown to be significantly associated with the Other-focused domain. Post-

Table 4-31

Other-Focused Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	33.58	1	33.58	80.18	<.001**	.10
Parenthood	9.74	1	9.74	23.26	<.001**	.03
Employment Status	1.74	2	.87	2.08	.13	.01
Income	8.13	2	4.06	9.70	<.001**	.03
Status Group	1.91	2	.96	2.28	.10	.01
Gender	1.06	1	1.06	2.52	.11	.00
Error	295.29	705	.42			
<i>Model 2</i>						
Relationship Status	24.88	1	24.88	59.91	<.001**	.08
Parenthood	8.38	1	8.38	20.18	<.001**	.03
Employment Status	1.05	2	.52	1.26	.28	.00
Income	8.79	2	4.40	10.58	<.001**	.03
Status Group	1.49	2	.75	1.80	.17	.01
Gender	1.29	1	1.29	3.10	.08	.00
Age	2.85	1	2.85	6.87	<.01*	.01
Error	292.44	704	.42			
<i>Model 3</i>						
Relationship Status	.02	1	.02	.04	.84	.00
Parenthood	3.08	1	3.08	7.55	<.01*	.01
Employment Status	3.52	2	1.76	4.32	.01	.01
Income	.66	2	.33	.81	.45	.00
Status Group	3.30	2	1.65	4.05	.02	.01
Gender	.04	1	.04	.10	.76	.00
Age	.05	1	.05	.13	.72	.00
Relationship Status*Status Group	3.37	2	1.69	4.14	.02	.01
Relationship Status*Gender	.19	1	.19	.47	.49	.00
Relationship Status*Age	.43	1	.43	1.04	.31	.00
Parenthood*Age	2.11	1	2.11	5.17	.02	.01
Employment Status*Status Group	.53	4	.13	.32	.86	.00
Employment Status*Gender	.38	2	.19	.47	.63	.00
Employment Status*Age	3.72	2	1.86	4.57	.01	.01
Income*Status Group	1.79	4	.45	1.10	.36	.01
Income*Gender	1.25	2	.62	1.53	.22	.00
Income*Age	.13	2	.07	.16	.85	.00
Error	278.17	683	.41			

* $p < .01$, ** $p < .001$. Note: Bold values indicate clinical significance.

hoc tests revealed that participants who reported an annual household income of \$21,000 to \$40,000 (mean = 2.53, SD = .55) obtained significantly higher scores on the Other-focused domain when compared to participants who reported an annual income of 0 to \$20,000 (M = 2.41, SD = .69; $p < .01$) or \$41,000+ (M = 2.43, SD = .78; $p < .01$). No statistically significant difference was found between participants who reported an annual income of 0 to \$20,000 and participants who reported an annual income of \$41,000+. The pattern of findings for relationship status, parenthood, and income levels remained the same even after including age as a covariate in Model 2. No statistically significant interactions were observed in Model 3.

Association Between Channeling factors and the Subjective Importance of Each Criteria for Adulthood

A series of general linear model analyses was conducted in order to assess the relations between the channeling variables of interest (relationship status, parenthood, employment status, and income levels) and mean ratings within each of the domains of the subjective importance for adulthood criteria. The results indicated that no relations existed between the independent variables in Models 1, 2, or 3 and participants' subjective importance ratings for any of the domains of subjective criteria for adulthood. The means and means adjusted for age can be found in Appendix U and V, respectively.

Association Between Channeling Factors and the Completion of the Criteria for Adulthood

The relations between the channeling factors (relationship status, parenthood, employment status, and income) and the completion of the various criteria for adulthood domains (Independence, Interdependence, Role Transitions, Normative Transitions, and Family Capacities) were explored through a series of GLM analyses. Note that due to low internal consistency, the Chronological and Biological domains were omitted from the analyses. The means and means adjusted for age can be found in Appendix X.

The relations between the channeling factors and the Independence domain were first examined. Table 4-32 shows that relationship status, parenthood, and employment status were all significantly related to mean scores on the completion of adulthood criteria within the Independence domain. Specifically, those in a committed relationship (M = 2.41, SD = .36) obtained higher mean scores than those who were single (M = 2.03, SD = .38) and parents (mean = 2.50, SD = .30) reported higher mean scores compared to non-parents (M = 2.07, SD = .40). Post hoc analyses indicated that those who worked full-time obtained significantly higher mean

Table 4-32

Independence Domain the Achieved Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	6.32	1	6.32	49.61	<.001**	.07
Parenthood	1.06	1	1.06	8.35	<.01*	.01
Employment Status	1.54	2	.77	6.04	<.01*	.02
Income	1.18	2	.59	4.61	.01	.01
Status Group	1.77	2	.89	6.96	<.01*	.02
Gender	.46	1	.46	3.61	.06	.01
Error	85.47	671	.13			
<i>Model 2</i>						
Relationship Status	2.87	1	2.87	23.85	<.001**	.03
Parenthood	.55	1	.55	4.57	.03	.01
Employment Status	.85	2	.43	3.55	.03	.01
Income	1.48	2	.74	6.13	.10	.02
Status Group	.45	2	.22	1.86	.16	.01
Gender	.29	1	.29	2.37	.12	.00
Age	4.93	1	4.93	41.04	<.001**	.06
Error	80.54	670	.12			
<i>Model 3</i>						
Relationship Status	.00	1	.00	.03	.86	.00
Parenthood	.22	1	.22	1.79	.18	.00
Employment Status	.70	2	.35	2.88	.06	.01
Income	.23	2	.11	.94	.39	.00
Status Group	.13	2	.07	.55	.58	.00
Gender	.14	1	.14	1.14	.29	.00
Age	1.02	1	1.02	8.42	<.01*	.01
Relationship Status*Status Group	.06	2	.03	.24	.79	.00
Relationship Status*Gender	.03	1	.03	.23	.63	.00
Relationship Status*Age	.06	1	.06	.45	.50	.00
Parenthood*Age	.15	1	.15	1.20	.27	.00
Employment Status*Status Group	.16	4	.04	.33	.86	.00
Employment Status*Gender	.17	2	.09	.70	.50	.00
Employment Status*Age	.52	2	.26	2.16	.12	.01
Income*Status Group	.46	4	.12	.94	.44	.01
Income*Gender	.04	2	.02	.17	.85	.00
Income*Age	.25	2	.12	1.01	.36	.00
Error	78.88	649	.12			

* $p < .01$; ** $p < .001$. Note: Bold values indicate clinical significance.

scores (mean = 2.37, SD = .36) when compared to both those who worked part-time (mean = 2.04, SD = .39; $p = .002$; $p = .005$) and those who were unemployed ($M = 2.03$, SD = .39; $p = .005$). After controlling for age, the pattern of findings for relationship status remained the same but parenthood and employment status were no longer statistically significant. No interactions were observed among the channeling factors of interest in Model 3.

Next, the Interdependence domain was examined. Table 4-33 shows a main effect of relationship status: those in a committed relationship received significantly higher mean scores (mean = 2.44, SD = .39) when compared to single participants (mean = 1.87, SD = .45) even after controlling for age. No other significant main effects or interactions were observed. Several main effects were observed when examining the relations between the channeling factors and Role Transitions (refer to Table 4-34). Participants working full-time ($M = 2.02$, SD = .08) obtained higher mean scores when compared to both participants working part-time ($M = 1.67$, SD = .07; $p < .001$) and those who were unemployed ($M = 1.64$, SD = .07; $p < .001$). Further, unemployed participants obtained significantly lower mean scores on the Role Transitions domain when compared to participants working part-time ($p < .001$). These main effects remained significant even after controlling for age in Model 2. The main effect for relationship status was not interpreted as in Model 3, a significant interaction was observed between age and relationship status: among participants in a committed relationship, increasing age was associated with higher mean scores on the Role Transitions domain (refer to Appendix Y). Among single participants, a weaker, positive correlation was observed between age and mean scores on the Role Transitions domain.

The Normative transitions domain was next examined as the dependent variable (refer to Table 4-35). No significant main effects or interactions were observed. Finally, the Family Capacities domain was explored. Table 4-36 shows that even after controlling for age, the items of relationship status, parenthood, and employment status were all significantly associated with mean scores within the Family Capacities domain. Participants in a committed relationship ($M = 2.42$, SD = .11) obtained significantly higher mean scores compared to single participants ($M = 2.19$, SD = .08). Parents ($M = 2.78$, SD = .15) obtained significantly higher mean scores compared to non-parents ($M = 1.83$, SD = .06). Post-hoc tests demonstrated that a trend towards significance for employment status: unemployed participants ($M = 2.18$, SD = .09) received lower scores on the Normative Transitions domain when compared to participants working full-

Table 4-33

Interdependence Domain the Achieved Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	22.65	1	22.65	118.10	<.001**	.15
Parenthood	.85	1	.85	4.44	.04	.01
Employment Status	1.05	2	.52	2.73	.07	.01
Income	1.77	2	.89	4.62	.01	.01
Status Group	.55	2	.27	1.43	.24	.00
Gender	.01	1	.01	.03	.87	.00
Error	128.69	671	.19			
<i>Model 2</i>						
Relationship Status	19.55	1	19.55	101.85	<.001**	.13
Parenthood	.77	1	.77	3.99	.05	.01
Employment Status	.94	2	.47	2.46	.09	.01
Income	1.83	2	.91	4.75	.01	.01
Status Group	.26	2	.13	.67	.51	.00
Gender	.01	1	.01	.05	.83	.00
Age	.10	1	.10	.52	.47	.00
Error	128.59	670	.19			
<i>Model 3</i>						
Relationship Status	.02	1	.02	.10	.75	.00
Parenthood	1.00	1	1.00	5.22	.02	.01
Employment Status	1.80	2	.90	4.71	.01	.00
Income	.19	2	.10	.51	.60	.00
Status Group	.36	2	.18	.95	.39	.00
Gender	.07	1	.07	.38	.54	.00
Age	.08	1	.08	.43	.51	.01
Relationship Status*Status Group	.61	2	.30	1.60	.20	.00
Relationship Status*Gender	.06	1	.06	.34	.56	.00
Relationship Status*Age	.30	1	.30	1.55	.21	.01
Parenthood*Age	.84	1	.84	4.40	.04	.01
Employment Status*Status Group	.78	4	.19	1.02	.40	.00
Employment Status*Gender	.10	2	.05	.26	.77	.01
Employment Status*Age	1.73	2	.87	4.55	.02	.00
Income*Status Group	.01	4	.00	.02	1.00	.00
Income*Gender	.07	2	.03	.18	.84	.00
Income*Age	.26	2	.13	.69	.50	.00
Error	123.73	649	.19			

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

Note: Bold values indicate clinical significance.

Table 4-34

Role Transitions Domain the Achieved Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	7.60	1	7.60	51.79	<.001**	.07
Parenthood	9.92	1	9.92	67.59	<.001**	.09
Employment Status	8.75	2	4.38	29.81	<.001**	.08
Income	.20	2	.10	.67	.51	.00
Status Group	5.81	2	2.90	19.78	<.001**	.06
Gender	.58	1	.58	3.96	.05	.00
Error	95.87	653	.15			
<i>Model 2</i>						
Relationship Status	3.62	1	3.62	25.99	<.001**	.04
Parenthood	8.06	1	8.06	57.91	<.001**	.09
Employment Status	6.59	2	3.29	23.67	<.001**	.07
Income	.07	2	.04	.27	.77	.00
Status Group	2.75	2	1.37	9.88	<.001**	.03
Gender	.37	1	.37	2.65	.10	.00
Age	5.15	1	5.15	37.03	<.001	.05
Error	90.72	652	.14			
<i>Model 3</i>						
Relationship Status	1.15	1	1.15	8.64	<.01*	.01
Parenthood	.67	1	.67	5.03	.03	.01
Employment Status	.15	2	.07	.55	.58	.00
Income	.07	2	.04	.28	.76	.00
Status Group	1.49	2	.75	5.60	<.01*	.02
Gender	.75	1	.75	5.62	.02	.01
Age	1.51	1	1.51	11.36	<.01*	.02
Relationship Status*Status Group	.73	2	.37	2.75	.07	.01
Relationship Status*Gender	.63	1	.63	4.73	.03	.01
Relationship Status*Age	1.80	1	1.80	13.47	<.01*	.02
Parenthood*Age	.23	1	.23	1.74	.19	.00
Employment Status*Status Group	1.14	4	.29	2.14	.07	.01
Employment Status*Gender	.02	2	.01	.06	.95	.00
Employment Status*Age	.00	2	.00	.00	.99	.00
Income*Status Group	.39	4	.10	.73	.58	.01
Income*Gender	.30	2	.15	1.14	.32	.00
Income*Age	.07	2	.04	.27	.76	.00
Error	84.11	631	.13			

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

Note: Bold values indicate clinical significance.

Table 4-35

Normative Transitions Domain the Achieved Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	1.05	1	1.05	5.99	.02	.01
Parenthood	.46	1	.46	2.61	.11	.00
Employment Status	.02	2	.01	.07	.93	.00
Income	1.13	2	.57	3.24	.04	.01
Status Group	.26	2	.13	.75	.47	.00
Gender	.67	1	.67	3.83	.05	.01
Error	117.04	670	.18			
<i>Model 2</i>						
Relationship Status	.69	1	.69	3.95	.05	.01
Parenthood	.38	1	.38	2.15	.14	.00
Employment Status	.01	2	.00	.02	.98	.00
Income	1.17	2	.59	3.35	.04	.01
Status Group	.12	2	.06	.35	.71	.00
Gender	.71	1	.71	4.09	.04	.01
Age	.20	1	.20	1.16	.28	.00
Error	116.84	669	.18			
<i>Model 3</i>						
Relationship Status	.01	1	.01	.03	.86	.00
Parenthood	.01	1	.01	.04	.84	.00
Employment Status	.27	2	.13	.78	.46	.00
Income	1.20	2	.60	3.52	.03	.01
Status Group	.22	2	.11	.65	.52	.00
Gender	.29	1	.29	1.69	.19	.00
Age	.32	1	.32	1.86	.17	.00
Relationship Status*Status Group	.62	2	.31	1.81	.16	.01
Relationship Status*Gender	.01	1	.01	.06	.81	.00
Relationship Status*Age	.01	1	.01	.08	.77	.00
Parenthood*Age	.00	1	.00	.00	.95	.00
Employment Status*Status Group	.36	4	.09	.52	.72	.00
Employment Status*Gender	.29	2	.14	.83	.44	.00
Employment Status*Age	.21	2	.11	.62	.54	.00
Income*Status Group	2.59	4	.65	3.80	.02	.01
Income*Gender	.75	2	.37	2.19	.11	.01
Income*Age	1.44	2	.72	4.22	.02	.01
Error	110.71	648	.17			

Table 4-36

Family Capacities Domain the Achieved Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>	η^2_p
<i>Model 1</i>						
Relationship Status	11.84	1	11.84	43.13	<.001**	.06
Parenthood	18.76	1	18.76	68.34	<.001**	.09
Employment Status	4.62	2	2.31	8.41	<.001**	.02
Income	.24	2	.12	.43	.65	.00
Status Group	4.35	2	2.18	7.93	<.001**	.02
Gender	1.82	1	1.82	6.64	.01	.01
Error	184.18	671	.27			
<i>Model 2</i>						
Relationship Status	5.22	1	5.22	20.08	<.001**	.03
Parenthood	15.19	1	15.19	58.39	<.001**	.08
Employment Status	2.61	2	1.30	5.01	<.01*	.02
Income	.09	2	.04	.17	.85	.00
Status Group	.25	2	.13	.48	.62	.00
Gender	1.31	1	1.31	5.04	.03	.01
Age	9.88	1	9.88	37.96	<.001**	.05
Error	174.30	670	.26			
<i>Model 3</i>						
Relationship Status	.47	1	.47	1.80	.18	.00
Parenthood	2.06	1	2.06	7.93	<.01*	.01
Employment Status	.72	2	.36	1.38	.25	.00
Income	.07	2	.04	.14	.87	.00
Status Group	.79	2	.40	1.52	.22	.01
Gender	2.05	1	2.05	7.89	<.01*	.01
Age	1.52	1	1.52	5.83	.02	.01
Relationship Status*Status Group	1.21	2	.60	2.32	.10	.01
Relationship Status*Gender	1.01	1	1.01	3.89	.05	.01
Relationship Status*Age	1.03	1	1.03	3.95	.05	.01
Parenthood*Age	.96	1	.96	3.71	.06	.01
Employment Status*Status Group	.48	4	.12	.46	.77	.00
Employment Status*Gender	.83	2	.42	1.60	.20	.01
Employment Status*Age	.47	2	.23	.90	.41	.00
Income*Status Group	.12	4	.03	.12	.98	.00
Income*Gender	.28	2	.14	.54	.58	.00
Income*Age	.080	2	.04	.15	.86	.00
Error	168.62	649	.26			

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

Note: Bold values indicate clinical significance.

time ($M = 2.40$, $SD = .09$; $p = .03$) and participants working part-time ($M = 2.33$, $SD = .10$; $p = .03$). Model three revealed no significant interactions.

Relations Between Subjective Adulthood Status and Channeling Factors

The proportion of individuals reporting to have subjectively reached adulthood based on their relationship status, parenthood, employment status, and income is shown in Table 4-37. Notably, parents, those in committed relationships, and those working full-time had the highest proportions of participants who identified as an adult. Logistic regression analyses were next used to examine whether subjective adult status varied as a function of the various channeling factors (relationship status, parenthood, employment status, and income). The dependent variable (subjective adulthood status) was collapsed into “Yes” (including those who responded “Yes”) and “No” (including those who responded “No” and “In some respects yes, in some respects no”) in order to enable the analyses. The first model testing included relationship status, parenthood, employment status, and income as independent variables. Status group and gender were also included. Age was included in the second model as a covariate. The third model tested the interactions between the channeling variables of interest (relationship status, parenthood, employment status, and income) and age, status group, and gender. Note that the following interactions were not examined due to cell sizes less than 5: parenthood*status group, parenthood*gender, employment*status group, and income*status group.

Table 4-38 shows that after controlling for status group and gender, significant relations were demonstrated between relationship status, parenthood and employment status, and subjective adulthood status. Specifically, participants in committed relationships as well as having parents were significantly more likely to report being an adult. Participants employed full-time were also significantly more likely to report being an adult when compared to unemployed participants, while no significant difference was observed between unemployed participants and those employed part-time. However, after adding age into the model as a covariate, only relationship status and parenthood remained significant predictors of subjective adult status, with parents more likely to report being an adult compared to non-parents, and a higher proportion of participants in a committed relationship endorsing reaching adult status compared to single participants. No significant interactions were observed in Model 3.

Table 4-37

Subjective Adult Status as a Function of Relationship Status, Parenthood, Income, and Employment (n, %)

	Yes	No	In some respects yes, in some respects no
Relationship status			
Single (n = 589)	20.7% (122)	13.1% (77)	66.2% (39.0)
In a committed relationship (n = 129)	54.3% (70)	2.3% (3)	43.4% (56)
Parenthood			
Parent (n = 32)	78.1% (25)	0 (0)	21.9% (7)
Non-parent (n = 694)	24.2% (168)	12.0% (83)	63.8% (443)
Employment status			
Unemployed (n = 299)	19.7% (59)	13.0% (39)	67.2% (201)
Part-time (n = 290)	23.1% (67)	13.4% (39)	63.4% (184)
Full-time (n = 135)	49.6% (67)	3.6% (5)	46.7% (63)
Income			
0-\$20,000 (n = 327)	22.6% (74)	11.6% (38)	65.7% (215)
\$21,000-\$40,000 (n = 107)	28.0% (30)	9.3% (10)	62.6% (67)
\$41,000+ (n = 282)	30.9% (87)	12.1% (34)	57.1% (161)

Table 4-38

Multivariate Models for Subjective Adulthood Status in Relation to Channeling Factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	2.90	.24	1.82	4.60	<.01*
Parenthood (Non-parent = 0)	8.60	.51	3.17	23.54	<.01*
Income					.78
\$21,000-\$40,000 (0-\$20,000 = 0)	.92	.28	.53	1.60	.77
\$41,000+ (0-\$20,000 = 0)	.86	.22	.56	1.32	.48
Employment status					<.01*
Part-time (Unemployed = 0)	1.16	.22	.76	1.79	.49
Full-time (Unemployed = 0)	3.19	.34	1.64	6.18	<.01*
Status Group					.02
Graduate Students (Undergraduate = 0)	2.11	.28	1.22	3.66	<.01*
Non-University Participants (Undergraduate = 0)	1.02	.32	.55	1.90	.95
Gender (male = 0)	1.41	.22	.92	2.16	.12
<i>Model 2</i>					
Relationship status (Single = 0)	1.91	.25	1.16	3.14	<.01*
Parenthood (Non-parent = 0)	7.35	.534	2.57	20.98	<.01*
Income					.42
\$21,000-\$40,000 (0-\$20,000 = 0)	.86	.29	.49	1.52	.60
\$41,000+ (0-\$20,000 = 0)	.74	.23	.47	1.16	.19
Employment status					.02
Part-time (Unemployed = 0)	1.04	.23	.67	1.62	.86
Full-time (Unemployed = 0)	2.50	.35	1.27	4.94	.01
Status Group					.39
Graduate Students (Undergraduate = 0)	.87	.33	.46	1.64	.66
Non-University Participants (Undergraduate = 0)	.63	.34	.32	1.22	.17
Gender (male = 0)	1.33	.23	.86	2.07	.20
Age	1.26	.04	1.16	1.37	<.01*
<i>Model 3</i>					
Relationship status (Single = 0)	4.91	2.32	.05	461.16	.49
Parenthood (Non-parent = 0)	.01	3.93	.00	9.60	.17
Income					.10
\$21,000-\$40,000 (0-\$20,000 = 0)	66.62	2.25	.81	5505.23	.06
\$41,000+ (0-\$20,000 = 0)	.43	1.89	.01	17.61	.66
Employment status					.05
Part-time (Unemployed = 0)	.02	2.72	.00	3.28	.13
Full-time (Unemployed = 0)	.01	1.91	.00	.46	.02

Status Group					.34
Graduate Students (Undergraduate = 0)	.93	.39	.44	2.01	.86
Non-University Participants (Undergraduate = 0)	.58	.38	.27	1.21	.15
Gender (male = 0)	.75	.49	.29	1.94	.55
Age	1.05	.18	.74	1.48	.80
Relationship status*Status group					.96
Relationship status*Gender	2.01	.67	.54	7.50	.30
Relationship status*Age	.95	.10	.78	1.17	.63
Parenthood*Age	1.15	.16	.84	1.58	.37
Employment status*Gender					.11
Employment status*Age					.25
Income*Gender					.08
Income*Age					.09

* $p < .01$

Note: Bold values indicate clinical significance.

Relations Between Personal Goals and Channeling Factors

The types of personal goals endorsed as a function of relationship status, parenthood, income, and employment status are shown in Tables 4-39 to 4-42. Descriptively, both participants in a committed relationship and single participants tended to endorse most frequently Achievement-related goals. Similarly, achievement-related goals were most often endorsed across all employment types and income levels. In contrast, while non-parent participants endorsed goals related to achievement most frequently, parent participants had higher endorsement rates of Parenthood-related goals.

In order to determine whether each channeling factor was significantly associated with the identification of each specific personal goal, a total of nine logistic regression models were built, with each personal goal type as a dependent variable (Achievement, Family of Origin, Partner, Parenthood, Friendships, Property and Finance, Self, Health, and Leisure). Participants were considered to have endorsed the personal goal type if they reported a personal goal within that category for either personal goal one, two, or three. The main independent variables of interest were relationship status, parenthood, income, and employment status. Gender and status group were also considered. The models guiding the analyses are shown in Table 4-43. In some cases, the cell n was less than five and as a result the independent variable was not included in the model (refer to Table 4-43). Further, the personal goal category Friendships was not examined due to low cell n (<5). Although the interactions between the independent variables were of interest, they were not considered in the analyses due to low cell n (cell sizes < than 5).

The results indicated that none of the channeling factors were associated with personal goals in the categories of Family of Origin, Partner, Self, or Health (refer to Appendix X for the results tables). After controlling for all other independent variables, both relationship status and parenthood were significantly associated with endorsing Parenthood related goals (see Table 4-44). Specifically, parent participants and participants in a committed relationship were more likely to report goals within the Parenthood category when compared to non-parents and single participants, respectively. Further, these patterns of findings continued to be observed even after controlling for the effects of age. Within the Property and Finances personal goal category, employment status was a significant predictor even after controlling for all other independent variables and age in Model 2, with participants employed part-time and full-time both having a higher likelihood of endorsing finance goals when compared to unemployed participants (refer to

Table 4-39

Personal Goals as a Function of Relationship Status (n, %)

	Single (n = 580)	In a committed relationship (n = 128)
Achievement	528 (90.9%)	106 (82.8%)
Family of Origin	40 (6.9%)	6 (4.7%)
Partner	96 (16.4%)	29 (22.7%)
Parenthood	45 (7.7%)	42 (32.8%)
Friendships	42 (7.2%)	2 (1.6%)
Property and Finances	122 (21.0%)	47 (36.7%)
Self	119 (20.5%)	22 (17.2%)
Health	130 (22.4%)	39 (30.5%)
Leisure, Learning, and Hobbies	133 (22.9%)	15 (11.7%)
Other	61 (10.5%)	3 (2.3%)

Note. Not all percentages sum to 100% due to not all participants reporting a goal for all three personal goals.

Table 4-40

Personal Goals as a Function of Parenthood (n, %)

	Parent (n = 685)	Non-parent (n = 32)
Achievement	22 (68.8%)	619 (90.4%)
Family of Origin	1 (3.1%)	45 (6.6%)
Partner	3 (9.4%)	123 (18.0%)
Parenthood	23 (71.9%)	64 (9.3%)
Friendships	0 (0)	45 (6.6%)
Property and Finances	15 (46.9%)	155 (22.6%)
Self	5 (15.6%)	138 (20.1%)
Health	11 (34.4%)	159 (23.2%)
Leisure, Learning, and Hobbies	3 (9.4%)	147 (21.5%)
Other	0 (0)	66 (9.6%)

Note. Not all percentages sum to 100% due to not all participants reporting a goal for all three personal goals.

Table 4-41

Personal Goals as a Function of Income (n, %)

	0 - \$20,000 (n = 321)	\$21,000 - \$40,000 (n = 107)	\$41,000+ (n = 279)
Achievement	303 (94.4%)	94 (87.0%)	235 (84.2%)
Family of Origin	24 (7.5%)	1 (0.9%)	21 (7.5%)
Partner	54 (16.8%)	19 (17.6%)	52 (18.6%)
Parenthood	31 (9.7%)	9 (8.3%)	46 (16.5%)
Friendships	25 (7.8%)	4 (3.7%)	13 (4.7%)
Property and Finances	54 (16.8%)	32 (29.6%)	82 (29.4%)
Self	60 (18.7%)	25 (23.1%)	56 (20.1%)
Health	63 (19.6%)	29 (26.9%)	77 (27.6%)
Leisure, Learning, and Hobbies	68 (21.2%)	23 (21.3%)	58 (20.8%)
Other	27 (8.4%)	11 (10.2%)	28 (10.0%)

Note. Not all percentages sum to 100% due to not all participants reporting a goal for all three personal goals.

Table 4-42

Personal Goals as a Function of Employment Status (n, %)

	Unemployed (n = 292)	Part-time (n = 286)	Full-time (n = 136)
Achievement	275 (94.2%)	267 (93.4%)	97 (70.7%)
Family of Origin	25 (8.6%)	14 (4.9%)	6 (4.4%)
Partner	52 (17.8%)	42 (14.7%)	31 (22.6%)
Parenthood	29 (9.9%)	26 (9.1%)	32 (23.4%)
Friendships	25 (8.6%)	16 (5.6%)	4 (2.9%)
Property and Finances	35 (12.0%)	66 (23.1%)	68 (49.6%)
Self	60 (20.5%)	58 (20.3%)	25 (18.2%)
Health	71 (24.3%)	61 (21.3%)	38 (27.7%)
Leisure, Learning, and Hobbies	59 (20.2%)	58 (20.3%)	33 (24.1%)
Other	21 (7.2%)	32 (11.2%)	13 (9.5%)

Note. Not all percentages sum to 100% due to not all participants reporting a goal for all three personal goals.

Table 4-43

Logistic regression Models for Channeling Factors and Each Personal Goal Category

	Relationship status	Parenthood	Income	Employment status
Achievement	✓	✓	✓	✓
Family of Origin	✓			✓
Partner	✓		✓	✓
Parenthood	✓	✓	✓	✓
Friendships				
Property and Finances	✓	✓	✓	✓
Self	✓	✓	✓	✓
Health	✓	✓	✓	✓
Leisure, Learning, & Hobbies	✓		✓	✓

Note: Status group and gender will also be included in Model 1. Model 2 will include age as a covariate.

Table 4-44

Multivariate Models for the Parenthood Personal Goal Category as a Function of Channeling Factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	3.21	.30	1.77	5.81	<.01*
Parenthood (Non-parent = 0)	12.78	.49	4.90	33.36	<.01*
Income					.67
\$21,000-\$40,000 (0-\$20,000 = 0)	.68	.43	.29	1.58	.37
\$41,000+ (0-\$20,000 = 0)	.91	.31	.49	1.67	.75
Employment status					.40
Part-time (Unemployed = 0)	.77	.32	.41	1.44	.41
Full-time (Unemployed = 0)	1.34	.46	.54	3.33	.53
Status Group					.44
Graduate Students (Undergraduate = 0)	.71	.51	.26	1.93	.50
Non-University Participants (Undergraduate = 0)	1.47	.41	.65	3.29	.35
Gender (male = 0)	.93	.33	.48	1.79	.83
<i>Model 2</i>					
Relationship status (Single = 0)	3.23	.32	1.72	6.08	<.01*
Parenthood (Non-parent = 0)	12.87	.50	4.86	34.09	<.01*
Income					.67
\$21,000-\$40,000 (0-\$20,000 = 0)	.68	.43	.29	1.59	.37
\$41,000+ (0-\$20,000 = 0)	.91	.32	.49	1.69	.76
Employment status					.40
Part-time (Unemployed = 0)	.77	.33	.41	1.45	.42
Full-time (Unemployed = 0)	1.35	.47	.54	3.39	.52
Status Group					.44
Graduate Students (Undergraduate = 0)	.72	.55	.25	2.12	.55
Non-University Participants (Undergraduate = 0)	1.48	.43	.64	3.40	.36
Gender (male = 0)	.93	.33	.49	1.79	.83
Age	1.00	.05	.90	1.11	.94

* $p < .01$

Note: Bold values indicate clinical significance.

Table 4-45). Finally, Table 4-46 demonstrates that relationship status was shown to be significantly associated with endorsement of goals within the Leisure, Learning, and Hobbies category even when controlling for age: participants in a committed relationship were significantly less likely to report goals within this category when compared to single participants.

Association Between Co-agency Factors and Developmental Markers

Preliminary Analyses

The means and distribution of each support variable (parental encouragement to attend or not attend university, parental discouragement to attend or not attend university, peer encouragement to attend or not attend university, and peer discouragement to attend or not attend university) were examined both overall and by status group (see Table 4-47). It was observed that the distributions for each variable were significantly skewed, such that a majority of participants endorsed high levels of encouragement and low levels of discouragement from both parents and peers. In order to increase the variability of the data, an overall encouragement variable was created by calculating an average score using the parental encouragement and peer encouragement variables ($M = 3.94$, $SD = 1.03$). Similarly, an overall discouragement score was determined by using the average of both the parental discouragement and peer discouragement variables ($M = 1.54$, $SD = .80$). A significant relationship was not observed between overall encouragement and overall discouragement ($r = -.04$, $p = .29$).

Table 4-48 shows the means for overall encouragement and overall discouragement by gender and by status group. Two ANOVAs were conducted in order to examine the association between status group, gender and status group*gender, and overall discouragement and overall encouragement. No gender differences were observed for overall encouragement for educational decisions, $F(1, 725) = 1.38$, $p = .24$, but males reported receiving significantly higher levels of discouragement from their parents and peers when compared to females, $F(1, 729) = 13.45$, $p = .000$. Although no differences were observed between status groups with respect to overall discouragement for educational decisions, $F(2, 729) = .64$, $p = .53$, a main effect was observed for overall encouragement ($F(2, 725) = 5.90$, $p < .01$), with post-hoc tests revealing that non-university participants reported receiving significantly less encouragement for their educational decisions when compared to both undergraduate and graduate students. No statistically significant interactions were observed between status group and gender for either overall encouragement or discouragement for educational decisions.

Table 4-45

Multivariate Models for the Property and Finances Personal Goal Category as a Function of Channeling Factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	1.33	.26	.80	2.19	.27
Parenthood (Non-parent = 0)	2.06	.44	.87	4.90	.10
Income					.61
\$21,000-\$40,000 (0-\$20,000 = 0)	1.30	.29	.74	2.27	.36
\$41,000+ (0-\$20,000 = 0)	1.19	.23	.76	1.86	.44
Employment status					<.01*
Part-time (Unemployed = 0)	2.24	.24	1.40	3.58	<.01*
Full-time (Unemployed = 0)	5.26	.35	2.68	1.34	<.01*
Status Group					.15
Graduate Students (Undergraduate = 0)	.60	.37	.29	1.23	.16
Non-University Participants (Undergraduate = 0)	1.35	.30	.75	2.43	.32
Gender (male = 0)	1.55	.23	.99	2.43	.05
<i>Model 2</i>					
Relationship status (Single = 0)	1.17	.27	.69	1.98	.56
Parenthood (Non-parent = 0)	1.88	.45	.78	4.53	.16
Income					.68
\$21,000-\$40,000 (0-\$20,000 = 0)	1.27	.29	.73	2.22	.40
\$41,000+ (0-\$20,000 = 0)	1.15	.23	.73	1.80	.55
Employment status					<.01*
Part-time (Unemployed = 0)	2.18	.24	1.36	3.49	<.01*
Full-time (Unemployed = 0)	4.90	.35	2.47	9.70	<.01*
Status Group					.08
Graduate Students (Undergraduate = 0)	.48	.40	.22	1.03	.06
Non-University Participants (Undergraduate = 0)	1.20	.31	.65	2.22	.56
Gender (male = 0)	1.53	.23	.98	2.39	.06
Age	1.06	.04	.98	1.15	.13

* $p < .01$

Note: Bold values indicate clinical significance.

Table 4-46

Multivariate Models for the Leisure, Learning, and Hobbies Personal Goal Category as a function of Channeling Factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	.35	.32	.19	.65	<.01*
Income					.94
\$21,000-\$40,000 (0-\$20,000 = 0)	.95	.29	.54	1.66	.84
\$41,000+ (0-\$20,000 = 0)	1.04	.22	.68	1.59	.85
Employment status					.65
Part-time (Unemployed = 0)	1.05	.21	.69	1.59	.83
Full-time (Unemployed = 0)	1.39	.35	.69	2.78	.36
Status Group					.86
Graduate Students (Undergraduate = 0)	1.16	.32	.62	2.19	.64
Non-University Participants (Undergraduate = 0)	1.13	.32	.61	2.09	.71
Gender (male = 0)	.85	.23	.54	1.34	.48
<i>Model 2</i>					
Relationship status (Single = 0)	.32	.34	.17	.62	<.01*
Income					.96
\$21,000-\$40,000 (0-\$20,000 = 0)	.94	.29	.54	1.66	.84
\$41,000+ (0-\$20,000 = 0)	1.03	.22	.67	1.57	.91
Employment status					.74
Part-time (Unemployed = 0)	1.03	.21	.68	1.57	.89
Full-time (Unemployed = 0)	1.32	.36	.65	2.67	.44
Status Group					.99
Graduate Students (Undergraduate = 0)	1.01	.36	.50	2.04	.97
Non-University Participants (Undergraduate = 0)	1.05	.33	.56	2.00	.87
Gender (male = 0)	.84	.23	.54	1.32	.45
Age	1.04	.04	.96	1.12	.37

Table 4-47

Mean (SD) for Parental and Peer Encouragement and Discouragement for Educational Decisions by Student Status

	Overall	Undergraduate Student	Graduate Student	Non-university Participants
Parental encouragement	4.16 (1.12)	4.22 (1.09)	4.42 (1.21)	3.85 (1.32)
Parental discouragement	1.49 (1.01)	1.43 (.94)	1.48 (1.07)	1.70 (1.17)
Peer encouragement	3.72 (1.30)	3.81 (1.24)	3.86 (1.34)	3.39 (1.40)
Peer discouragement	1.58 (.97)	1.59 (.95)	1.61 (1.08)	1.55 (.97)

Table 4-48

Mean (SD) for Overall Encouragement and Overall Discouragement for Educational Decisions by Gender and Student Status

		Overall encouragement	Overall discouragement
Gender			
	Male	3.86 (1.03)	1.74 (.85)
	Female	3.97 (1.02)	1.47 (.77)
Student Status			
	Undergraduate	4.01 (.96)	1.51 (.76)
	Graduate Student	4.14 (1.11)	1.55 (.83)
	Non-university participant	3.61 (1.14)	1.62 (.88)

General overview of the analyses

Correlations were conducted between each developmental outcome (IDEA (hypothesis 3a), the importance of each criteria for adulthood (hypothesis 3b), and completion of each developmental tasks (hypothesis 3c) and overall encouragement and overall discouragement in order to determine whether co-agency accounts for variability in development. Spearman Product-Rank correlations were used as the familial and peer support variables were not normally distributed. A series of independent samples t-tests were also conducted to determine if endorsement within each personal goal category was associated with mean levels of encouragement and discouragement for educational decisions (exploratory question 3a). Lastly, two one-way ANOVAs were conducted to assess the association between subjective adult status and overall encouragement and overall discouragement (exploratory question 3b).

Relations Between Overall Encouragement and Discouragement and Developmental Outcomes

First, the relations between scores on the IDEA domains and overall encouragement and discouragement were examined (refer to Table 4-49). Results indicated that higher levels of encouragement from parents and peers for educational decisions were significantly related to higher scores on the Identity Exploration, Experimentation/Possibilities, and Self-Focused domains of the IDEA. Overall Discouragement for educational decisions was not significantly associated with any of the IDEA domains. Next, the correlations between overall encouragement and discouragement, and scores on the domains of the subjective importance of the criteria for adulthood were assessed.

Table 4-50 shows that individuals who reported being discouraged by parents and peers regarding their educational decisions tended to rate Independence as an important criterion for adulthood. Individuals who reported receiving higher levels of encouragement regarding their educational decisions rated Interdependence, Role Transitions, Biological Transitions, and Family as important criteria for adulthood. Table 4-51 shows the relations between overall encouragement and discouragement, and scores on the completed domains of the criteria for adulthood. Overall discouragement was not associated with the completion of any criteria for adulthood. However, those who reported higher levels of encouragement for educational decisions tended to have lower levels of completion within the Role Transitions domains.

Table 4-49

Correlations between overall encouragement and discouragement, and scores on the domains of the IDEA

	Overall Encouragement	Overall Discouragement
Identity Exploration	.18*	.06
Experimentation/Possibilities	.12*	-.04
Negativity/Instability	.07	.07
Other-Focused	-.05	-.03
Self-Focused	.19*	-.04
Feeling In-Between	.17*	-.05

Note. df range from 706 to 711.

*Correlation is significant at the 0.01 level (2-tailed).

Table 4-50

Correlations between overall encouragement and discouragement, and scores on the domains of the subjective importance of the criteria for adulthood

	Overall Encouragement	Overall Discouragement
Independence	.03	.08
Interdependence	.14*	-.05
Role Transitions	.13*	-.05
Normative Transitions	.06	.02
Biological	.11*	.05
Chronological	.10	.05
Family	.11*	-.05

Note. df range from 674 to 698.

*Correlation is significant at the 0.01 level (2-tailed).

Table 4-51

Correlations between overall encouragement and discouragement, and scores on the completed domains of the criteria for adulthood

	Overall Encouragement	Overall Discouragement
Independence	-.08	-.01
Interdependence	-.02	-.03
Role Transitions	-.10*	.03
Normative Transitions	.02	-.04
Family	-.03	.05

Note. df range from 694 to 698.

*Correlation is significant at the 0.01 level (2-tailed).

In order to assess whether significant differences existed in overall encouragement and discouragement between those who endorsed each personal goal category and those who did not, a series of t-tests were conducted (refer to Tables 4-52 and 4-53). The results demonstrated that individuals who endorsed achievement-related personal goals reported receiving significantly higher levels of encouragement for their educational decisions when compared to those individuals who did not endorse achievement-related personal goals, $t(707) = -3.11, p = .011$.

Finally, a one-way ANOVA was conducted to determine the relationship between subjective adult status (Yes, No, In some respects yes, in some respects no) and overall encouragement and discouragement for educational decisions. Neither overall encouragement, $F(2,717) = 1.58, p = .21$, nor overall discouragement, $F(2,721) = .66, p = .52$, significantly varied as a function of subjective adult status.

Relations between Developmental Outcomes and Psychosocial Correlates

In order to assess the association between developmental outcomes and psychosocial correlates, a series of bivariate correlations were conducted between each developmental outcome (scores on each domain of the IDEA (hypothesis 4b), scores on each domain for the completion of the criteria for adulthood (hypothesis 4a)) and mean scores on the measures of psychosocial adjustment, including internalizing (self-esteem, symptoms of anxiety, loneliness, life satisfaction) and externalizing (risk and reckless behaviours) behaviours. Further, multiple one-way ANOVAs were conducted to assess the relations between subjective adult status and psychosocial correlates (hypothesis 4c).

The correlations between the domains of the IDEA and the measures of psychosocial adjustment are shown in Table 4-54. Results indicated that higher levels of self-esteem were significantly associated with higher scores on the Experimentation/Possibilities and Self-Focused domains, and lower scores on the Negativity/Instability domain. Higher endorsement of anxiety symptoms was significantly associated with higher scores on the Identity Exploration and Negativity/Instability domains, and lower scores on the Self-Focused Domain. Higher levels of loneliness were significantly associated with higher scores on the Negativity/Instability domain, and lower scores on the Other-Focused and Self-Focused domains. Positive, significant associations were observed between Life Satisfaction and the Experimentation/Possibilities, Other-Focused, and Self-Focused domains with increasing life satisfaction related to higher

Table 4-52

Overall means for encouragement of educational decisions as a function of personal goal endorsement

	Goal Category Endorsed		t	p
	Yes	No		
	Mean (SD)	Mean (SD)		
Achievement	3.98 (.99)	3.59 (1.26)	-3.11	.01*
Family of Origin	3.85 (1.22)	3.85 (1.02)	.64	.52
Partner	4.04 (1.04)	3.91 (1.03)	-1.23	.21
Parenthood	3.82 (1.08)	3.96 (1.03)	1.12	.26
Friendships	4.32 (.85)	3.92 (1.04)	-2.56	.02
Property and Finances	3.79 (1.05)	3.99 (1.02)	2.08	.04
Self	3.97 (.99)	3.93 (1.04)	-4.65	.64
Health	3.93 (1.04)	3.94 (1.03)	.10	.92
Leisure, Learning, and Hobbies	3.89 (1.01)	3.96 (1.02)	.67	.51

Note df = 707

* $p < .01$

Table 4-53

Overall means for discouragement of educational decisions as a function of personal goal endorsement

	Goal Category Endorsed		t	p
	Yes	No		
	Mean (SD)	Mean (SD)		
Achievement	1.54 (.78)	1.51 (.89)	-.35	.73
Family of Origin	1.44 (.63)	1.54 (.80)	.81	.42
Partner	1.52 (.76)	1.54 (.80)	.21	.84
Parenthood	1.63 (.91)	1.52 (.78)	-1.13	.26
Friendships	1.51 (.85)	1.54 (.79)	.23	.82
Property and Finances	1.64 (.86)	1.64 (.86)	-1.86	.06
Self	1.52 (.74)	1.54 (.81)	.26	.79
Health	1.53 (.86)	1.53 (.77)	.04	.97
Leisure, Learning, and Hobbies	1.51 (.84)	1.54 (.78)	.52	.60

Note: df = 710

mean scores in each of the aforementioned domains. Higher levels of life satisfaction were found to be significantly associated with lower scores on the Negativity/Instability domain. Greater participation in risky substance use, sexual behaviours, and driving behaviours was significantly associated with higher scores on the Experimentation/Possibilities domain. Participants who reported frequently engaging in risky substance use and sexual behaviours tended to have significantly lower scores on the Other-Focused domain.

No significant associations were observed between anxiety and completion of the criteria for adulthood in any of the domains (refer to Table 63). However, significant associations were found between self-esteem, loneliness, and life satisfaction, and completion of the criteria for adulthood within the domains of Interdependence, Role Transitions, and Family Capacity domains. Specifically, higher levels of task completion within the aforementioned domains were associated with higher levels of self-esteem and life satisfaction, and lower levels of loneliness. It was also observed that higher levels of task completion within the Independence domain were associated with higher levels of self-esteem and lower levels of loneliness. Risky sexual behaviours, substance use and driving behaviours were all significantly associated with the Norm Compliance domain with more frequent engagement in these risky behaviours associated with lower levels of norm compliance.

Multiple one-way ANOVAs were conducted to determine the relationship between subjective adult status (Yes, No, In some respects yes, in some respects no) and psychosocial adjustment (depression, symptoms of anxiety, loneliness, life satisfaction, substance use, sexual behaviours, driving behaviours). Table 4-55 illustrates that psychosocial adjustment significantly varied as a function of subjective adult status for self-esteem, $F(2,691) = 16.24, p = .000$, symptoms of anxiety, $F(2,680) = 10.17, p = .000$, loneliness, $F(2, 680) = 10.84, p = .000$, and life satisfaction, $F(2,676) = 10.17, p = .001$. Post-hoc tests were conducted to examine significant main effects of subjective adult status (Table 64). The results indicated that participants who self-identified as an adult had significantly higher self-esteem levels when compared to both those who indicated that they had not yet reached adulthood and those who indicated they were an adult in only some respects. Further, those who indicated that they felt like an adult in at least some respects had significantly higher self-esteem than those who did not at all feel as though they were an adult.

Table 4-54

Correlations between Developmental Outcomes and Psychosocial Correlates

	Self-esteem	Anxiety	Loneliness	Life satisfaction	Substance use	Sexual behaviours	Driving behaviours
IDEA							
Identity Exploration/Experimentation/Possibilities	.01	.11**	.01	.04	.01	-.02	.07
Negativity/Instability	.17*	-.06	-.06	.17*	.11*	.08	.13*
Other-Focused	-.42*	.33**	.35*	-.37*	.02	.03	.06
Self-Focused	.07	.03	-.15*	.09	-.20*	-.17*	-.07
Feeling In-Between	.25*	-.11*	-.22*	.28*	.05	.04	.07
	-.09	.07	.03	.03	-.04	-.02	.02
Completion of Adulthood Criteria							
Independence	.16*	-.07	-.10*	.10	.01	.01	.03
Interdependence	.26*	.01	-.30*	.24*	-.05	-.05	.05
Role Transitions	.14*	-.02	-.15*	.14*	-.04	.02	.02
Norm Compliance	.06	-.05	-.02	.08	-.53*	-.25*	-.27*
Family Capacities	.18*	-.05	-.15*	.14*	-.07	.02	-.06

*. Correlation is significant at the 0.01 level (2-tailed).

Note: Bold values indicate clinical significance.

Table 4-55

One-way ANOVAs comparing Psychosocial Correlates as a function of Subjective Adult Status

		<u>Subjective Adult Status</u>			η^2_p	Post-Hoc Results
		Yes (Y)	No (N)	In some respects yes, in some respects no (Y&N)		
Self-esteem**	M (SD)	3.12 (.55)	2.73 (.55)	2.93 (.49)	.04	Y > N Y > Y&N Y&N > N
Anxiety**	M (SD)	.68 (.53)	1.01 (.64)	.85 (.57)	.03	N > Y Y < Y&N
Loneliness**	M (SD)	1.53 (.73)	1.99 (.78)	1.67 (.72)	.03	Y < N Y < Y&N N > Y&N
Life Satisfaction*	M (SD)	4.93 (1.40)	4.20 (1.54)	4.69 (1.36)	.02	Y > N
Substance Use	M (SD)	1.28 (1.18)	1.33 (1.32)	1.35 (1.29)	.00	
Sexual Behaviours	M (SD)	.27 (.64)	.30 (.56)	.31 (.66)	.00	
Driving Behaviours	M (SD)	.73 (.83)	1.06 (1.23)	.82 (.99)	.00	

Note. * $p < .01$, ** $p < .001$. Bold values indicate clinical significance.

Significantly lower self-reported symptoms of anxiety were observed among those who identified as an adult when compared to both those who did not identify as an adult and those who identified as an adult in only some respects. Participants who reported being an adult had significantly lower levels of loneliness when compared to both those who had not reported being an adult and those who had reported being an adult status in only some respects. Significantly higher levels of loneliness were also found among those who did not self-report as an adult when compared to those who reported being an adult at least in some respects. Life satisfaction was significantly higher among participants who identified as an adult when compared to those who indicated that they did not feel as though they reached adulthood. Externalizing behaviours were not found to significantly vary as a function of subjective adult status.

CHAPTER FIVE: DISCUSSION

Arnett (2001) proposed a new period in the lifespan termed “emerging adulthood” (EA) to describe changing cultural norms during the transition to adulthood. EA is proposed to have resulted from heightened societal pressure to obtain a post-secondary education subsequently leading to prolonged educational periods post-high school as well as delayed entry into employment, parenthood and marriage (Arnett, 2001; Gaudet, 2007; Blatterer, 2007a). Those who identify with EA describe experiencing intense identity exploration, instability, a sense of being “in-between”, and having endless life possibilities. Over the past decade, research on EA has been prolific (Arnett, 2012). However, many are skeptical about the inclusion of EA as an additional stage of development akin to childhood and adolescence (Bynner, 2005; du Bois-Reymond, 2016; Cote, 2014; Cote & Bynner, 2008; Furstenberg, 2016; Schoon & Schulenberg; 2013; Silva, 2016). Perhaps the most glaring limitation of Arnett’s description is the predominance of studies using college or university samples and a near absence of research among non-university populations (i.e., “the forgotten half”; Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; Schoon & Schulenberg; 2013). This has led to a debate as to whether EA is a true developmental stage or if it is simply limited to a description of university/college student experiences. Most scholars, including Arnett (2012), agree that EA is a heterogeneous period of development (Bynner, 2005; Cote, 2014; Cote & Bynner, 2008; Schoon & Schulenberg, 2013) though a clear and unifying framework for systematically examining factors leading to variations in development has yet to be proposed. Therefore, the present study used an existent framework, the Lifespan Model of Motivation (LMM; Nurmi, 2004; Salmela-Aro, 2007), to better understand the factors associated with diverging developmental pathways during EA.

More recent developmental theories place a strong emphasis on understanding the interactions between individuals and their surrounding contexts. Thus, the LMM’s focus on the active nature of development between a person and the environment renders it a suitable model for examining EA experiences (Nurmi, 2004; Salmela-Aro, 2007). Four key developmental processes are proposed by the LMM: channeling (the environment in which an individual resides), choice (the pathways of development chosen by an individual), co-agency (the relations between individual development and social forces), and compensation (re-adjusting goals when necessary). Healthy development occurs when individuals make choices that fit with their environment, personal motivations, and social context (Nurmi, 2004; Salmela-Aro, 2007).

The channeling process of the LMM was of keen interest as it delineates a clear framework for examining how context influences development. The main channeling factor of interest was student status (students versus non-students) as it has largely been ignored within the literature. Of additional interest was a broader array of factors speculated to influence development during EA, including parenthood, relationship status, employment, and income. The present study further added to the literature on EA by examining choice through the measurement of self-selected personal goals. Co-agency was assessed through the relations between parental and peer support for educational decisions and developmental experiences during EA. Finally, the current study also examined the relations between development during EA and psychosocial functioning.

The following sections discuss the main findings from the present study. First, the main clinically significant findings (i.e., results that are discussed in relation to the current study's research questions and hypotheses. Next, the limitations and the implications for future studies are presented. Last, overall conclusions are drawn by integrating the findings with current concepts and theories of human development.

The relations between channelling factors and development during EA. The current study was keenly interested in the channelling process of the LMM in relation to development during EA. The key channelling factors of interest (student status, age, and gender) are described first. Next, the results from the examination of secondary channelling factors of interest (parenthood, relationship status, employment status, and income) are discussed.

Status Group, Age, and Development during EA. Many have suggested that because a vast majority of the research conducted on EA has focused exclusively on university students, experiences of EA may simply be a reaction to the university context (Arnett, 2000, 2012; Cote, 2014, Cote & Bynner, 2008; Hamilton & Hamilton, 2006; Schwartz, 2016). That is, identification with EA may be dependent on being immersed within a university environment that generally encourages self-exploration and delays parenthood and entry into the workplace for several years. Thus, the primary goal of the current study was to explore the university environment as a channelling factor for development among 18 to 29 year olds. Developmental experiences during EA were measured by examining ratings on the IDEA, the criteria for adulthood (developmental task subjective importance and completion), self-reported adult status, and self-chosen personal goals.

The results provided partial support for the hypothesis that non-university students would be less likely to identify typical EA experiences when compared to undergraduate and graduate students. Initially, non-university participants appeared to engage in similar levels of identity exploration, self-focused behaviours, and worry; they were less likely to explore the many possibilities available to them and to report feeling in-between life stages when compared to non-university participants (but not graduate students). However, once age was included in the analyses, being a university student no longer predicted variations in EA experiences. It has been suggested that the pursuit of attaining an undergraduate degree may foster self-exploration and self-focused behaviours while delaying other-focused behaviours (Arnett, 2001). The results of the current study provide mixed support for this proposition – although undergraduates showed similar levels of self-focused behaviours as the other status groups, they were less likely to report other-focused behaviours. This may reflect higher rates of marriage and parenthood among non-undergraduates. Indeed, independent of age, undergraduate students were less likely to report having started a family or settling into a career when compared to both graduate students and non-university participants. These results provide some support for the undergraduate university context acting as a significant channeling factor during the transition to adulthood with undergraduate students being less likely to have completed more “traditional” developmental tasks, such as starting a family and getting married.

It was also hypothesized that criteria related to independence and self-sufficiency would be rated as more important to the transition to adulthood by undergraduates and graduate students when compared to non-university participants. Further, it was expected that undergraduates would report being farther away from the transition to adulthood by having completed fewer developmental tasks (e.g., independence from one’s parents, commitment to a long-term romantic relationship, establishing a career). The results from the current study did not provide support for the hypothesis that undergraduate and graduate students would rate criteria related to independence as important markers of adulthood as no associations were found between status group or age and any of the domains for the subjective criteria for adulthood. That is, participant ratings of how important differing criteria were for the transition to adulthood were similar despite differences in participants’ student status or age. This suggests that, as a whole, young adults tend to identify similar factors as being important in transitioning to adulthood.

In contrast, the results provided partial support for the hypothesis that undergraduate and graduate students would have completed fewer developmental tasks associated with the transition to adulthood when compared to non-university participants. Even after taking age into account, non-university participants reported a higher level of completion with regard to making role transitions, tasks that reflect creating a family, completing post-secondary education, and establishing a long-term career. It is noteworthy that the Independence, Role Transitions, and Family domains predominantly focus on developmental tasks that might be challenging (or even impossible) for a university student to attain. These findings provide evidence that the university context limits or restricts one's ability to complete developmental tasks associated with becoming an adult and, consequently, it may be erroneous to generalize research on developmental task attainment to individuals aged 18 to 29 without first considering their educational status. In other words, increasing age alone does not predict the completion of some developmental tasks.

When considering the association between “choice” (i.e., personal goals) and “channel” (i.e., student status), it descriptively appears as though both undergraduate (94.7%) and graduate students (94.4%) reported more goals associated with completing post-secondary education and attaining a long-term, well-paying career when compared to non-university students (70.1%). However, the low number of university students who did not report achievement-related goals prevented testing the hypothesis. Many of the personal goals identified within the achievement domain related to completing a degree. It is not surprising that university students tended to endorse more goals in this area given their current life context. In other words, an individual's choice to attend university (a personal goal) channels her or his development and selection of future personal goals (completing university). It could also be the case that non-university students have already accomplished achievement-related personal goals in that they may be more likely to have finished their education and have committed to a career.

Differences were also observed between undergraduate students and non-university students for goals involving having property, making money, and having children. Non-university students were more likely than undergraduate students to identify goals associated with having children, buying a home, and saving money/paying off debts – even after controlling for age. These findings suggest that the identification of such goals is more related to context than age. In other words, increasing chronological age alone does not guarantee progression

towards building a family and financial stability. While attending university for an undergraduate education, there is high pressure to focus nearly all of one's attention on studying in combination with limited monetary resources. Both of these factors limit opportunities to pursue parenthood or improve one's financial standing. In contrast, the context outside of university better permits full-time employment with predictable hours and income, opening up the possibility of working towards such goals.

Interestingly, similar thematic patterns were observed between personal goal choice and the completion of developmental tasks. Consider that non-university participants were more likely to reporting wanting to buy a home, pay off debts, and have children when compared to undergraduate and graduate students. Also consider that non-university participants had higher levels of developmental task completion associated with independence from parents, creating a family, and financial security. This pattern seems to provide support for personal goals channeling an individual's developmental progression through the main tasks associated with the transition to adulthood. For example, the non-university environment may be associated with a greater likelihood of having parenthood-related goals and in turn lead an individual to work towards those goals (i.e., completing developmental tasks associated with family). In other words, development is not solely dependent on chronological age. The context that an individual resides within (i.e., university versus non-university) seems to impact both personal goal selection and developmental task attainment.

Finally, it was expected that non-university participants would be more likely to self-identify as an adult when compared to both undergraduate and graduate students. The results did not support this hypothesis. Although a clinically significant association was observed between status group and subjective adulthood status, with both graduate students and non-university participants being more likely to report reaching adulthood when compared to undergraduate students, this association was no longer significant once age was considered. Lowe and colleagues (2013) reported a similar pattern of findings with non-college participants having a higher endorsement of being adult until age was included in the analyses. Thus, there appears to be growing evidence that age has a greater impact on the timing of the transition to adulthood as compared to the context of these transitions (i.e., university and non-university contexts, employment status, marital status). However, the research evidence, including the present study,

has been based on cross-sectional designs and as a result longitudinal data is required in order to better understand how age and context influence development over time during EA.

The current study was also interested in whether EA experiences differ between undergraduate and graduate students. To date, no existing literature has examined variations in development between undergraduates and graduate students thus the analyses were exploratory in nature. Overall, the findings from the current study do not provide substantial evidence for the university context differing for undergraduates and graduate students as very few significant differences were observed between graduate students and their undergraduate counterparts. Even when statistically significant associations were observed, many were no longer present once age was controlled. This suggests that the university context channels development in similar ways for both undergraduate and graduate students and that differences in development among graduate and undergraduate students may be better accounted for by age and maturation rather than by educational context.

Gender and Development during EA. The present study examined variations in development as a function of gender though no specific hypotheses were provided given the inconclusive findings within the existent EA literature (Arnett, 1998; Salmela-Aro, Aunola, & Nurmi, 2007; Salmela-Aro et al., 1997). Overall, no clinically significant associations were observed between gender and any of the measures of development. Therefore, the trends in the data (i.e., statistically significant but not clinically significant findings) are discussed. Aligning with past research on risk taking behaviours, women reported the avoidance of risk taking as a more important marker for adulthood (e.g., “Avoid becoming drunk”, “Drive safely”, “Avoid crimes”) as compared to their men counterparts. Research consistently indicates that men are more likely to engage in risky behaviours when compared to women throughout the lifespan (Byrnes, Miller & Schafer, 1999; Harris et al., 2006; Turner, 2003) and, consequently, may rate the avoidance of such activities as less important to becoming an adult. Research has also identified gender differences in emotional and mental health issues with women more likely to report experiencing such difficulties than men (Afifi, 2007; Brody, 1985; Hoeksema, 1994; WHO, 2002). Thus, it is not unexpected that women reported higher levels of stress, instability, and worry when compared to men.

Women were also observed to rate the developmental tasks of completing post-secondary education, obtaining a career, getting married, and having children as significantly more

important to the transition to adulthood when compared to men. The items within this domain may be considered “classic markers” of adulthood (Blatterer, 2007a) and include: finish education, marry, have at least one child, settle into a long-term career, purchase a house, and become employed full time. Women also tended to report engaging in behaviours associated with settling down, being responsible for others, and making commitments to others at a higher level as compared to men. The results reflect previous research wherein women tended to have more child-related goals when compared to men (Salmela-Aro, Aunola, & Nurmi, 2007). It may be the case that the findings exhibit an evolutionary and culturally influenced drive for childrearing and caregiving that is predominant among women. Women have been primarily caregivers for thousands of years, while men historically have been responsible for protecting and providing (Campbell, 2013). In modern times, although more women continue to enter the workforce outside of the home, caregiving positions (e.g., nanny, nurse, daycare provider) continue to be typically held by women. Thus, women’s desire to marry and have children may have roots based in both culture and biology, which may help explain why they continue to identify parenthood as an important marker of adulthood (Aronson, 2008) despite the growing importance of contemporary individualistic markers (Arnett, 2006, 2001; Blatterer, 2007a; Gaudet, 2007). However, when considered as a whole, the findings from the current study indicate that EA experiences seem to be more similar than different between men and women.

Associations between channelling factors (parenthood, relationship status, employment, and income levels) and development during EA. While scholars have suggested that parenthood, relationship status, employment, and income influence how one progresses through EA (Arnett, 2004), few studies have directly examined these relations. Thus, the current study was interested in examining the channelling factors that have been poorly understood within the EA literature. Overall, few clinically significant differences were observed in development between those who were single versus committed, those who were employed versus unemployed, and those with lower incomes levels versus higher incomes - though some variations in development were found between parents and non-parents. The following sections discuss the main research findings with respect to the relations between parenthood, relationship status, employment, and income and development during EA.

Parenthood. It was hypothesized that parents would identify less with experiences of EA, report more goals associated with family and parenthood (e.g., having a child, being a parent,

getting married) and fewer goals related to self (e.g., growing as a person, identity exploration), consider creating a family as important to the transition to adulthood, have completed more developmental tasks, and be more likely to identify as an adult. Overall, the results supported many of the hypotheses. When compared to non-parents, parents were more likely to report being responsible for and making commitments to others and had higher completion of “traditional” developmental tasks, such as having and supporting at least one child, getting married, finding full-time employment. It makes sense that parents are further along in completing the developmental tasks associated with having children. It is interesting, however, that many of the items within the Family and Role Transitions domains may be considered what Blatterer (2007a) refers to as “classic markers of adulthood” (i.e., full-time employment, marriage, parenthood, independent living). These markers are often considered within the EA literature as less important during the transition to adulthood, yet the current study found that parents are both further along in their achievement of classic markers of adulthood (but not Independence, which has been described as central to EA experiences) *and* more likely to self-identify as an adult when compared to non-parents. In fact, parenthood was the only significant channeling factor associated with self-identification as an adult after controlling for age.

Benson and Furstenberg (2007) also examined the factors speculated to impact self-identification as an adult. The authors used data from the Philadelphia Educational Longitudinal Study (PELS) among young adults at ages 19 and 21. Factors considered included: completing education, establishing an independent residence, obtaining a full-time job, entering into a partnership or marriage, and becoming a parent. The results indicated that not all factors significantly predicted the transition to adulthood. Specifically, only establishing an independent household and parenthood were associated with feeling like an adult. This aligns with the results of the current study where, aside from age, parenthood was the only factor that predicted self-identification as an adult. Thus, for some individuals aged 18 to 29, becoming a parent (i.e., completion of a “classic marker of adulthood”) may still signal entry into adulthood.

Past research on parenthood and EA has been limited by the small numbers of parent participants who are also undergraduate students (the primary sample group within EA research; Reifman & Arnett, 2007). Salmela-Aro, Aunola, and Nurmi (2007) present one of the few studies that provide a better understanding of the relationship between parenthood and choice among university students. The results indicated that as individuals entered parenthood, self-

identified personal goals shifted from achievement-related to family- and child-related. However, because the Salmela-Aro et al. (2007) sample was not limited to 18 to 29 year olds, it is difficult to extrapolate the results to the emerging adult population. Nevertheless, the present study addressed this limitation and supported the previous finding (Salmela-Aro, Aunola, and Nurmi, 2007) with parents having a higher likelihood of identifying parenthood-related goals when compared to non-parents.

It should be noted that the present study struggled to reach an adequate number of parents who were also undergraduate students. As a result, it remains unclear whether undergraduate parents are further along in their transition to adulthood when compared to undergraduate non-parents. Therefore, future work should continue to explore the experiences of parents during the 18 to 29 year period to see if they do, in fact, differ significantly from non-parents using a larger sample so as to increase power and allow for the assessment of interactions. For example, past research has suggested that gender differences in personal goals exist with women's goals shifting from achievement-related goals to more family- and health-related goals after childbirth, while men's goals were stable over time even after becoming a parent. Thus, future studies should further explore the interactions between EA experiences and parenthood, status group, and gender.

Relationship status. The current study hypothesized that individuals in committed relationships would identify less with the period of EA (i.e., IDEA domains), report fewer self-related goals and more family-related and partner-related goals, rate family- and interdependence-related criteria as important markers of adulthood, have achieved more developmental tasks, and be more likely to identify as an adult. Overall, the findings only provide partial support for the hypotheses. Counter to expectation, identification with the period of EA and subjective ratings of the importance of the criteria for adulthood did not differ significantly as a function of relationship status. Therefore, it appears as though experiences of EA and the criteria thought to be important in transitioning to adulthood were similar regardless of relationship status. Further, when considering the achievement of developmental tasks, very few clinically significant differences were observed with the exception of the tasks related to establishing long-term relationships, having children, being capable of greater consideration for other people, and settling into a career, which provides partial support for the hypotheses.

Participants in committed relationships reported being further along in those areas when compared to single individuals.

As hypothesized, participants in a committed relationship reported significantly more parenthood-related goals when compared to single participants. It makes sense that those in committed relationships would be more likely to want children as they have a partner to procreate with. Although the choice to become a single parent is not unheard of, in many cases it makes sense that individuals look for a partner to have children with in order to share child-rearing responsibilities (e.g., emotional and financial obligations, day-to-day care of children). Contrary to expectations, no differences were found with respect to self- and partner-related goals. This finding suggests that single and committed young adults find similar value in focusing on their personal development and working on their romantic relationships, whether it be finding a long-term partner or working on developing relationships that already exist.

The results did not support differential relations between relationship status and self-identification as an adult. Andrew and colleagues' (2007) research sheds some clarity regarding the absence of an association between subjective adult status and relationship status. The authors utilized focus groups to examine the markers of the transition to adulthood among 61 participants who were primarily college students or recent college graduates. The results indicated that participants did not identify long-term relationships as necessary for the transition to adulthood. Furthermore, nearly half of participants felt as though long-term relationships may act as a "crutch" or hinder one's transition to adulthood. They suggested that long-term relationships may pause developmental progress and under certain circumstances may even lead to a regression in development. Those who indicated that relationships might hinder development among young adults suggested that a dependency occurs that discourages self-reliance and that a huge part of being an adult is depending on oneself and being independent. The results from the current study provide further evidence that relationship status does not play a significant role in the transition to adulthood; however, development across all indices was more similar than different among single and committed participants, which does not lend support to the notion that relationships hinder one's development. It should be also noted that those "in a relationship" in the current study included those in varying commitment statuses (not just individuals who were married). Future research should consider varying levels of commitment in order to better understand whether some relationship statuses are more conducive to development than others.

Employment and Income. Because research has not examined development during EA as a function of employment status, hypotheses related to employment were speculative in nature. It was hypothesized that, when compared to participants who are unemployed or worked part-time, participants employed full-time would identify less with EA experiences, report fewer personal goals related to the self (i.e., finding oneself, self-exploration, self-improvement), consider independence as less an important marker in the transition to adulthood, be farther along in their achievement of developmental tasks, and be more likely to identify as an adult. The present data provided little support for the hypotheses. Specifically, differences in development were not observed when considering experiences of EA, the importance and completion of developmental tasks, or self-identified adult status. One clinically significant result emerged when examining self-reported personal goals: participants employed part-time and full-time had higher likelihoods of endorsing finance-related goals (e.g., buy a home, pay off debt) when compared to unemployed participants. This finding is not surprising, given that working towards financial goals requires an individual to be employed and receiving an income. Overall, the present study did not provide evidence to suggest that employment status is an important channeling factor for development though it would be premature to conclude that employment is irrelevant to EA experiences due to a lack of research in this area.

The current study was also interested in variations in development among individuals from varying household incomes. Researchers have suggested that individuals from lower incomes are less able to engage in the developmental tasks characteristic of EA as they are less likely to attend university (Cheung, 2007; Cohen et al., 2003; Junor & Usher, 2004) or engage in self-focused behaviours when compared to individuals who are middle-to-upper class (Reifman, Arnett & Colwell, 2007). The present study hypothesized that when compared to participants from middle-to-high income household, participants from low-income households would identify less with the period of EA, rate independence as a less important marker of adult status, attain more developmental tasks, endorse fewer self-related goals, and be more likely to self-identify as an adult. The results did not provide support for any of the hypotheses, with no differences observed between low versus middle-to-high income participants on any of the measures of development.

At first glance, the fact that varying employment statuses and income levels were not significantly associated with developmental outcomes may be unexpected. However, more

recently there has been an extensive debate in the EA literature regarding diverging developmental pathways among varying social classes that may help shed light on the current findings (Arnett, 2016a, 2016b; du Bois-Reymond, 2016; Furstenberg, 2016; Silva, 2016). Arnett (2016) published a cross-sectional study based on a nationally representative (USA) sample of 710 participants (49% male) between the ages of 18 to 25 years old. Social class was defined as “mother’s educational level” including low (high school diploma or less), medium (some college or vocational school), and high levels (college degree or more). The results revealed no differences between social class and the key features of EA (i.e., identity exploration, instability, self-focus, feeling in-between, and endless possibilities). Based on these findings, Arnett concluded that there were many consistencies in the experience of EA across social classes and thus EA may be a useful guide for understanding development across social class.

Certainly, one of the limits of Arnett’s (2016) study is the operational definition of “social class”. Despite a lack of a unifying definition of social class across research, one must consider a broader array of factors when defining social class than simply mother’s education, including household income and employment (Furstenberg, 2016). Further, Arnett makes note of the multiple pathways within EA (e.g., gender, ethnicity, sexual orientation) stating EA concepts are “socially, culturally, and historically grounded, rather than being biologically based and universal” (p. 234), yet his study neither included an analysis of any of such factors nor attempted to explain the findings in light of social, cultural, or historical issues (du Bois-Reymond, 2016; Furstenberg, 2016). Du Bois-Reymond (2016) further criticizes Arnett for ignoring differences in meaning between social classes. She critiqued a sample item from the study, “At this time in my life, it still seems like anything is possible”. She contends that high endorsement of this statement among those from lower social classes may still reflect different experiences, such as dreams, when compared to middle and upper class participants who are likely describing goals. Indeed, scholars argue that Arnett’s conclusions oversimplify the experiences of emerging adults from lower social classes (du Bois-Reymond, 2016; Furstenberg, 2016; Silva, 2016).

Silva (2016) takes a strong stance against Arnett’s conclusion that EA is a common experience across social class. The author states that young adults from working class and poor backgrounds experience an extreme disadvantage when compared to their mid- to upper-class counterparts. Based on an unstable economy, many uneducated young adults struggle to secure

long-term employment, are frustrated by the social institutions that limit their occupational and financial success and, as a result, are forced into self-reliance (or “self-focused” behaviours). These are long-standing issues that will likely continue well into their adulthood. Thus, while lower class 18 to 29 year olds may have similar goals to those who are middle-class (e.g., stable marriage, secure and rewarding work, financial independence), their ability to meet these goals is compromised. Silva (2016) writes: “for the working class, the mixture of hope, uncertainty, and constraint that marks their early adulthood years are not simply a life stage, but rather a precursor to the cycle of unrelenting instability, persistent hope, and repeated failures to come” (p. 240). In light of the debate, although the results of the current study are consistent with Arnett’s (2016) findings, this does not imply that experiences of EA are qualitatively the same across classes. In order to further our understanding of how income and social class channel development, future research should use qualitative measures to examine how lower class young adults make sense of the unstable and self-focused nature of EA to see if their underlying meaning differs from other social classes. It would also be useful to assess development over time to see if the hope, uncertainty, and self-reliance experienced by young adults from lower social classes persist into later adulthood.

Associations between Support from Co-agents and Development During EA.

An integral process within the LMM model is co-agency (Salmela-Aro, 2009, 2010) in that individual’s relationships help shape or channel their development. Further, supportive social support networks help individuals work towards achieving the various developmental markers thought to be important for the transition to adulthood. In order to examine the co-agency process of the LMM of development, parent and peer encouragement and discouragement for educational decisions were examined. Although speculative in nature, it was expected that parental and peer support for educational decisions (to attend or not attend university) would be associated with identification with EA (lower scores on the IDEA domains), a higher level of developmental task attainment, and an increased likelihood of self-identifying as an adult. It is also important to note that the parental and peer encouragement/discouragement variables were significantly skewed, limiting the ability to assess how varying levels of support for educational decisions impacts development during EA. Descriptively, a majority of participants reported high levels of perceived encouragement while few participants reported high levels of perceived discouragement. Although the current study

was interested in whether parent or peer support independently play a role in development, average levels of parental and peer encouragement/discouragement were calculated in order to increase the variability of the data.

Overall, the results provided very little support for our hypotheses. No clinically significant relations were observed between parental and peer encouragement/discouragement for educational decisions and any of the markers of development - with the exception of personal goals associated with education (e.g., to complete a degree, to get good grades) and career (e.g., to obtain a long-term and well-paying job, to find an enjoyable career). Specifically, participants who reported goals associated with education and career perceived higher levels of encouragement for their educational decisions when compared to those who did not endorse such goals. It may be the case that participants who perceive support for their educational decisions from their family and peers may be more likely to identify and work towards goals related to excelling at school and in the workplace. Alternatively, those who are working towards education and career goals may elicit higher levels of support for educational decisions from their family and peers. Indeed, scholars have indicated that the mechanisms driving the relationship between co-agency and development are poorly understood (Massey, Gebhardt, & Garnefski, 2008; Whiston & Keller, 2004). Unfortunately, the cross-sectional nature of the current study only provides a snapshot of the participants' current experiences and does not provide further clarity regarding such mechanisms. As such, longitudinal research is required in order to better understand the causal or potentially reciprocal connection between co-agency and development during EA.

Although perceived parental and peer support were not associated with developmental outcomes, this does not mean that co-agency does not continue to play a large role in shaping one's development. One of the difficulties of assessing the co-agency process of the LMM is how to define social support. Indeed, Cohen et al. (2013) stated that "there are almost as many measures of social support as there are studies". A variety of social support types have been studied within the literature, such as emotional (i.e., empathy, trust, love), instrumental (i.e., providing aid and service), informational (i.e., providing advice and information), and appraisal (i.e., giving feedback) support (Arnett, 2001; McFarlane et al., 1981; Zimet et al., 1998). Other studies examine social support by measuring number of relationships, relationship quality, or a combination of both quality and quantity. As a result, research findings are difficult to compare

across studies. The issue of the measurement of social support within the psychological literature is broader than the focus of the current study. However, one can certainly attest that a clearer conceptual definition of co-agency is required so that researchers applying the LMM model can be more confident in their measurement of social support.

Associations Between Development During EA and Psychosocial Outcomes.

The LMM model postulates that healthy development occurs as one pursues and attains her or his personal goals (Salmela-Aro, 2009, 2010). This prediction aligns with traditional stage-based theories of development wherein completion of the developmental tasks within each period of life provides the foundation for future growth (Salkind, 2004; Tanner, 2006). The final objective of the current study was to test this prediction by examining the association between progression through the developmental tasks of EA and psychological outcomes. It was expected that better progress on achieving developmental tasks and a greater inclination to see oneself as an adult would link to more positive psychological functioning.

Overall, the results provided little support for these hypotheses. The only relation of clinical significance was between experience of worry and stress during EA and psychosocial outcomes. Specifically, participants who endorsed experiencing higher levels of instability during EA also reported lower levels of self-esteem and life satisfaction, and higher levels of anxiety and loneliness. This finding is perhaps not surprising given that experiencing the “confusion”, “high stress levels”, “instability”, “high pressure”, “unpredictability”, and “many worries” characteristic of EA would be associated with symptoms of anxiety (e.g., worry, physiological symptoms). Although the findings lend support for the negativity/instability characteristic of EA being significantly associated with psychosocial correlates, individuals who identified with the remaining characteristics of EA were not experiencing less psychosocial difficulty when compared to those who may have been or were in the process of transitioning from EA to adulthood. This suggests that progression through many of the key issues of EA, such as developing an identity and exploring multiple life paths, may not be key drivers for well-being during young adulthood.

Counter to our hypotheses, developmental task attainment, overall, was not associated with psychosocial outcomes. Of note, a clinically significant relation was observed between completing tasks associated with responsibility and commitment to others and lower levels of loneliness. It is not surprising that participants who establish long-term commitments to others

and developed a greater consideration for others experience lower levels of loneliness. A clinically significant association was also observed between engaging in fewer risk taking behaviours (i.e., avoiding becoming drunk, doing drugs, risky driving behaviours, sexual risk taking). Again, this finding is unsurprising, given the items that comprise the Norm Compliance domain (e.g., “avoid becoming drunk”). Therefore, although few clinically significant associations were found between developmental task attainment and psychosocial functioning, the associations that were observed aligned with predictions.

One of the unique features of the LMM model is the process of choice (Salmela-Aro, 2009, 2010). That is, individuals choose their own developmental paths. It follows that developmental task attainment may influence healthy and positive adjustment only if the task is important to an individual. In the current study, completion within several of the developmental task domains was not associated with psychosocial outcomes. However, it could be the case that the task is unimportant to them thus not salient to their development. In fact, several personal goal categories emerged in the current study that are not typically captured within the criteria for adulthood literature, such as Health (e.g., lose weight, eat healthy, exercise) and Leisure and Learning-related goals (e.g., travel, learn a new language). In order to incorporate the importance of developmental tasks to the individual, future studies using the LMM model should examine personal goals and psychosocial trajectories using a longitudinal design. This would allow researchers to identify the tasks important to the individual, track the individuals’ attainment of the goal over time, and then examine the associations between personal goal attainment and healthy adjustment.

As hypothesized, the transition to adulthood was associated with higher levels of self-esteem. Specifically, individuals who self-identified as an adult obtained higher mean self-esteem scores when compared to those who did not self-report as an adult (both “no” and “in some respects yes, in some respects no”) and participants who indicated “in some respects yes, in some respects no” had higher mean levels of self-esteem when compared to those who did not identify as an adult in any respect. This pattern of findings reflects previous work on the trajectory of self-esteem across the lifespan such that individuals begin with high levels of self-esteem in childhood, experience a decrease during adolescence due to negative self-views and sensitivity to negative feedback from peers, followed by an increase and then stabilization from late adolescence until middle adulthood (Wagner & Trautwein, 2012).

A recent study by Wagner and Trautwein (2012) examined the longitudinal patterns of self-esteem during the transition to adulthood. Data was collected at four time points starting during the participants' senior year of high school and ending at age 24. The results from the study indicated that self-esteem increased as individuals progressed from late adolescence to mid-emerging adulthood; however, relative stability in self-esteem was not observed. Reminiscent of Marcia (1994), Wagner and Trautwein (2012) suggest that the exploration characteristic of EA may lead to increases and decreases in self-esteem overtime depending on whether or not individuals have committed to or continue to explore the many life paths available to them. Given EA's emphasis on self-exploration, it is certainly possible that as individuals move back and forth between both commitment to and exploration of their identity, their self-esteem would also fluctuate. Knowledge of the association between instability and self-esteem during EA may help those working with 18 to 29 year olds (e.g., mental health professionals). For example, helping emerging adults cope with uncertainty and manage their worries may lead to more positive views of the self.

Limitations and Future Directions

There are several limitations of the current study that may be addressed by future research. First, prior to conducting the main analyses, the internal consistency of the measures of development (i.e., IDEA, subjective criteria for adulthood, completion of criteria for adulthood) was assessed. Adequate internal consistency was established for the IDEA domains and aligned consistently with past research (Reifman, Arnett, & Collman, 2003). However, the Independence domain for the subjective importance of the criteria for adulthood had low internal consistency ($\alpha = .49$). The domain was retained in the analyses but the results were interpreted with caution. It is worth noting that five of the six items within the Independence domain are related to dependency on one's parents (e.g., "Financially independent of parents", "No longer living in parents household", "Not deeply tied to parents emotionally", "Decide on personal values independently of parents", and "Establish equal relationship with parents"). These items can be categorized into "emotional" versus "financial" independence, which may help explain why the internal consistency was low. That is, separating emotionally from parents may not be highly correlated with separating financially and vice versa. Future research should consider subdividing the domain into "Financial Independence" and "Emotional Independence" in order to determine if it improves the reliability for this subscale.

There were also significant concerns regarding the reliability of the Biological ($\alpha = .34$) and Chronological ($\alpha = .20$) domains for the completion of developmental tasks. Published research has not yet assessed the internal consistency of these domains. At the item level for the Biological transitions domain, it was not unexpected that reaching full height, having sexual intercourse, and being able to bear children were not inherently related. Likewise, it is not surprising that the Chronological domain items, “Have obtained a driver’s licence”, “Reached age 18”, and “Reached age 21”, may not be highly associated with one another. For instance, if one has reached age 18 but is not yet age 21, there will be no relationship between the two items. Also, it may be the case that those who have reached age 21 would be more likely to have their driver’s licence than those who have reached age 18, thus leading to differential associations between items. Overall, future research should use the Biological and Chronological domains with caution and continue to assess the reliability of these measures.

Second, the main objective was to better understand if developmental experiences differ between university students and non-university students. Unfortunately, due to an error in the survey, the post-secondary experiences of the non-university participants remain unclear – all that can be ascertained is that the participants were not currently enrolled in university. It may be the case that non-university participants were enrolled in some type of post-secondary education or had been in university at some point. If this is the case, then the context across status groups may be more similar than expected, which has the potential to minimize developmental differences. Thus, future research may examine a “pure” non-student sample to shed light on the impacts of post-secondary education on development. Third, the current study utilized a cross-sectional research design which does not provide information regarding developmental trajectories over time. This limitation is particularly salient when applying the LMM as one of the key processes in the model involves compensation (Salmela-Aro, 2009, 2010). Salmela-Aro (2009, 2010) speculates that while individuals shape their development by choosing their personal goal, not all goals are attainable and failure in some areas is to be expected. It is suggested that individuals compensate when failing to achieve personal goals by changing or adjusting their goals and that the ability to compensate or re-adjust goals in light of task unattainability or failure leads to more positive outcomes when compared to those who are unable to re-adjust their goals (Heckhausen, Wrosch, & Schultz, 2010). Previous research on the LMM examining compensation processes have used longitudinal data in order to examine the

dynamic nature of goal re-adjustment in relation to subsequent developmental outcomes (Haase, Heckhausen, & Koller, 2008; Salmela-Aro, Aunola, & Nurmi, 2007; Salmela-Aro & Nurmi, 1997; Shulman & Nurmi, 2010). In the current study, longitudinal data were not available and, as a result, the current study was unable to examine compensation processes. Research questions of interest may include whether evolving personal goals (e.g., wanting to start a family) leads to changing goal pursuits (e.g., searching for a partner) or if the achievement or non-achievement of personal goals (e.g., attaining the personal goal of completing university versus discontinuing university) is associated with varying psychosocial outcomes. Future research comparing university to non-university contexts using the LMM should utilize a longitudinal design in order to better understand the compensation process among a broad spectrum of emerging adults.

Fourth, another limitation of the present study was the low number of male participants (23.2% male versus 76.8% female), which may lead some to question whether this is a study of “emerging womanhood” instead of “emerging adulthood”. The overrepresentation of female participants is a common problem within the psychological literature (Gosling et al., 2004). The oversampling of females had the potential to impact the findings and, as a result, gender was included as a moderator in all analyses to control for gender bias and to increase the generalizability of the findings.

Finally, the current study was able to provide an introductory analysis of the association between context and development during EA. Using quantitative research methods allowed us to take the first steps in understanding how development varies as a function of environment; however, this type of data often does not permit flexibility in responses and does not ask respondents to elaborate on their experiences of development. Therefore, a qualitative analysis may be best suited to understand the unique experiences given the many pathways of development among 18 to 29 year olds. Qualitative data would also allow researchers to understand the meanings young adults assign to their experiences of EA. For instance, future research may ask participants to elaborate when self-identifying as an adult (“yes”, “no”, “in some respects yes, in some respects no”) as it remains unclear how emerging adults understand their own transition to adulthood. In combination, qualitative and quantitative findings allow EA scholars to triangulate research findings to generate a broader understanding of this stage within the lifespan.

Overall contributions to the developmental literature

Despite the popularity of Arnett's description of EA (Arnett, 2012), there has been growing concern that EA has been blindly accepted as a new stage in the lifespan without adequate research regarding its generalizability to most 18 to 29 year olds (du Bois-Reymond, 2016; Furstenberg, 2016; Hendry & Kloep, 2007; Schwartz, 2016.) Specifically, it has been noted that the description of EA is predominantly based upon studies of affluent, middle-class individuals currently enrolled in post-secondary education within western society and, as a consequence, may be less helpful in describing experiences of youth in alternative or unique contexts. Thus, the primary focus of the current study was to better understand how applicable EA is across diverse human experiences.

Traditional stage theories of human development primarily focus on normative experiences and pay less attention to individual deviations from the mean (Bynner, 2005). In contrast, more recent theories of development have largely discarded stage-based models by acknowledging the relation between context and individuals, as well as the non-linear nature of human development across the lifespan (Lerner, Hershberg, Hilliard, & Johnson, 2001). Since the 1970s, an increasing number of developmental scholars have highlighted the importance of context in determining developmental trajectories (Bronfenbrenner, 1979; Heckhausen, Wrosch, & Schultz, 2010; Salmela-Aro, 2009, 2010), which has resulted in relational models wherein development is seen as an active and reciprocal process between the individual and the environment in which she or he resides. Many developmental scientists now agree that in order to understand how individuals develop, the integration of context is of utmost importance (Lerner, Hershberg, Hilliard, & Johnson, 2001).

Arnett has attempted to align EA within contemporary theories of development by acknowledging that his description is "socially, culturally, and historically grounded, rather than being biologically based and universal" (p. 234). Thus, he acknowledges that there is great diversity in EA experiences that are rooted in social, cultural and historical foundations; yet, he has provided no framework for examining such heterogeneity. That is, no current aspects of his theory can account for diversity in experience. This has made it difficult for researchers to systematically examine diverging pathways among 18 to 29 year olds. The current study examined the weaker elements of Arnett's conceptualization of EA by using the LMM as a guiding framework to see if EA does, in fact, fit within more contemporary theories of human

development that place great emphasis on context (Lerner, Hershberg, Hilliard, & Johnson, 2001).

One of the strengths of the current study and perhaps the most interesting contribution to the literature was the inclusion of the LMM to understand unique developmental processes among 18 to 29 year olds. Using the LMM allowed for an examination of diversity in individual experience (i.e., development) in relation to context (i.e., channeling factors, co-agency) in addition to examining the active nature of development (i.e., personal goals). The results of the current study certainly help shed light on the current debate regarding the inclusion of EA as a new life stage but, much like developmental research as a whole, do not provide clear or definitive answers. Specifically, the description of EA does in part seem to fit with modern theories of development in that typical trajectories were observed (i.e., many developmental outcomes were similar across student status and other channeling factors). For example, many of the differences in EA experiences across context (i.e., status groups) were no longer present once age (i.e., maturation) was considered and many of the channeling factors (i.e., income, employment) were largely unrelated to development. Nevertheless, individual variations in experience were still observed based on channeling factors. Consider that non-university participants, individuals in committed relationships, and those employed full-time appear to be further along in their attainment of developmental tasks when compared to university students, single participants, and those employed part-time or unemployed. Further, parenthood predicted whether or not an individual felt as though she or he had transitioned to adulthood. These findings indicate that while common experiences appear to occur among 18 to 29 year olds, variations exist based on how development is being channeled through different contexts.

In conclusion, it continues to be problematic to assume that individuals between the ages of 18 and 29 automatically have “typical” EA experiences. Using a “blanket” approach to individual development without assessing context remains a significant issue. This issue is best addressed by using frameworks to understand the interactions between person and place. However, Arnett has yet to provide such a model, leaving researchers to develop their own ways of testing the description of EA. The LMM was useful in the current study as it allowed for a systematic examination between the individual and the context in which she or he resides. Although the findings lead to more questions than answers, the current study highlights the growing need for evaluating the factors that influence EA experiences. Without doing so, the

description of EA remains just that – a description of common but not universal experiences during the transition to adulthood.

References

- Afifi, M. (2007). Gender differences in mental health. *Singapore medical journal*, 48(5), 385.
Retrieved from
<https://sites.oxy.edu/clint/physio/article/Genderdifferencesinmentalhealth.pdf>
- Alexander, C. S., & Sysko, J. M. (2011, January). A study of the cognitive determinants of generation Y's entitlement mentality. Retrieved from <https://www.thefreelibrary.com/A-study-of-the-cognitive-determinants-of-generation-Y's-entitlement...-a0289620439>
- Andrew, M., Eggerling-Boeck, J., Sandefur, G. D., & Smith, B. (2006). The “inner side” of the transition to adulthood: How young adults see the process of becoming an adult. *Advances in Life Course Research*, 11, 225-251. doi:10.1016/S1040-2608(06)11009-6
- Arnett, J. J. (2014). Presidential address: The emergence of emerging adulthood: A personal history. *Emerging Adulthood*, 2(3), 155-162. doi:10.1177/2167696814541096
- Arnett, J. J., Žukauskienė, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18–29 years: Implications for mental health. *The Lancet Psychiatry*, 1(7), 569-576. Retrieved from <https://www-clinicalkey.com.cyber.usask.ca/#!/browse/toc/1-s2.0-S2215036614X00039/null/journalIssue>
- Arnett, J. J. (2012). New horizons in research on emerging and young adulthood. In A. Booth, S. L. Brown, N. S. Landale, W. D. Manning, & S. M. McHale (Eds.), *Early Adulthood in a Family Context* (pp. 231-244). New York, NY: Springer.
- Arnett, J. J. (2006). The psychology of emerging adulthood: What is known and what remains to be known. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 303-328). Washington, DC: American Psychological Association. doi:<http://dx.doi.org/10.1037/11381-013>
- Arnett, J. J. (2004). A longer road to adulthood. In J. J. Arnett (Eds.), *Emerging adulthood: The winding road from the late teens through the twenties* (pp. 3-26). New York, NY: Oxford University Press. doi:10.1093/acprof:oso/9780199929382.003.0001
- Arnett, J. J. (2002). The psychology of globalization. *American Psychologist*, 57(10), 774-783. doi:10.1037//0003-066X.57.10.774
- Arnett (2001). Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, 8(2), 133-143. doi:10.1023/A:1026450103225

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi:10.1037//0003-066X.55.5.469
- Arnett, J. J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Development*, 1, 154-168. Retrieved from <http://link.springer.com.cyber.usask.ca/article/10.1007/BF02277582>
- Arnett, J. J. (1997). Young people's conceptions of the transition to adulthood. *Youth & Society*, 29, 1-23. doi:10.1177/0044118X97029001001
- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development*, 41, 295-315. Retrieved from <http://link.springer.com.cyber.usask.ca/journal/10804>
- Arnett, J. J., & Galambos, N. L. (2003). Culture and conceptions of adulthood. *New directions for child and adolescent development*, 2003(100), 91-98. doi: 10.1002/cd.77
- Aronson, P. (2008). The markers and meanings of growing up: Contemporary young women's transition from adolescence to adulthood. *Gender & Society*, 22(1), 56-82. doi:10.1177/0891243207311420
- Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological bulletin*, 120(3), 338. doi:10.1037/0033-2909.120.3.338
- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental psychology*, 23(5), 611-626. doi:10.1037/0012-1649.23.5.611
- Baltes, P. B., Staudinger, U. M., & Lindenberger, U. (1999). Lifespan psychology: Theory and application to intellectual functioning. *Annual review of psychology*, 50(1), 471-507. doi:10.1146/annurev.psych.50.1.471
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., & Steer, R. A. (1990). *Manual for the Beck Anxiety Inventory*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893-897. Retrieved from <http://www.apa.org.cyber.usask.ca/pubs/journals/ccp/index.aspx>

- Benson, J., & Furstenberg, F. (2003). Subjective perceptions of adulthood among urban youth: Are demographic transitions still relevant? *The Network on Transitions to Adulthood* (sitio web: <http://www.transad.pop.upenn.edu/>), *Research Network Working Paper*, 3.
- Benson, J. E., & Elder Jr, G. H. (2011). Young adult identities and their pathways: A developmental and life course model. *Developmental psychology*, 47(6), 1646 – 1657. doi: 10.1037/a0023833
- Berzin, S.C., & De Marco, A.C. (2010). Understanding the impact of poverty on critical events in emerging adulthood. *Youth and Society*, 42(2), 278-300. doi:10.1177/0044118X09351909
- Blakemore, J. E. O., Berenbaum, S. A., & Liben, L. S. (2009). *Gender development*. New York, NY: Taylor & Francis.
- Blatterer, H. (2007). Adulthood: The contemporary redefinition of a social category. *Sociological Research Online*, 12(4). doi:10.5153/sro.1563
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage Publications.
- Bradley, G., & Wildman, K. (2002). Psychosocial predictors of emerging adults' risk and reckless behaviors. *Journal of youth and adolescence*, 31(4), 253-265. Retrieved from <http://link.springer.com.cyber.usask.ca/article/10.1023/A%3A1015441300026>
- Brody, L. R. (1985). Gender differences in emotional development: A review of theories and research. *Journal of personality*, 53(2), 102-149. doi: 10.1111/j.1467-6494.1985.tb00361.x
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513–531. doi:10.1037/0003-066X.32.7.513
- Brooks G. J., Duncan G. J., Klebanov P.K., & Sealand N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology*, 99(2), 353–395. Retrieved from <http://www.jstor.org.cyber.usask.ca/journal/amerjsoci>
- Budwig, N., Turiel, E., & Zelazo, P. D. (2017). *New perspectives on human development*. Cambridge, UK: Cambridge University Press

- Bynner, J. (2005). Rethinking the youth phase of the life-course: The case for emerging adulthood? *Journal of Youth Studies*, 8(4), 367-384. doi:10.1080/13676260500431628
- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: a meta-analysis. *Psychological Bulletin*, 125, 367–383. doi:10.1037/0033-2909.125.3.367
- Campbell, A. (2013). *A mind of her own: The evolutionary psychology of women*. Oxford, UK: Oxford University Press.
- Canadian Association of University Teachers (2012). *CAUT Almanac of Post-Secondary Education in Canada*. Ottawa, Ontario: CAUT
- Canadian Council on Learning (2009). *Post-secondary education in Canada: Meeting our needs?* Ottawa, ON: Canadian Council on Learning.
- Cheah, C. S. L. & Nelson, L. J. (2004). The role of acculturation in the emerging adulthood of aboriginal college students. *International Journal of Behavioral Development*, 28, 495-507. doi:10.1080/01650250444000135
- Cheung, S. (2007). *Education decisions of Canadian youth: A synthesis report on access to postsecondary education*. Toronto, ON: The Higher Education Quality Council of Ontario.
- Christofides, L., Cirello, J., and Hoy, M. (2001) Family income and postsecondary education in Canada. *The Canadian Journal of Higher Education*, 31(1), 177-208. Retrieved from <http://cyber.usask.ca/login?url=http://search.proquest.com.cyber.usask.ca/docview/221135407?accountid=14739>
- Clark, W. (2009). Delayed transitions of young adults. Statistics Canada. Retrieved from <http://www.statcan.gc.ca/pub/11-008-x/2007004/10311-eng.htm>.
- Cohen, S., Mermelstein, R., Kamarck, T., & Hoberman, H. M. (1985). Measuring the functional components of social support. In *Social support: Theory, research and applications* 24, 73-94. Springer Netherlands.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in patterns of developmental transmissions in the emerging adulthood period. *Developmental psychology*, 39(4), 657 – 669. doi: 10.1037/0012-1649.39.4.657
- Conroy, K., Sandel, M., & Zuckerman, B. (2010). Poverty grown up: How childhood socioeconomic status impacts adult health. *Journal of Developmental and Behavioral Pediatrics*, 31(2), 154-160. doi:10.1097/DBP.0b013e3181c21a1b
- Côté, J. E. (2014). The dangerous myth of emerging adulthood: An evidence-based critique of a

- flawed developmental theory. *Applied Developmental Science*, 18(4), 177-188. doi: 10.1080/10888691.2014.954451
- Cote, J. & Bynner, J. (2008). Changes in the transition to adulthood in the UK and Canada: The role of structure and agency in emerging adulthood. *Journal of Youth Studies*, 11(3), 251–268. doi:10.1080/13676260801946464
- Cross, S., & Markus, H. (1991). Possible selves across the life span. *Human development*, 34(4), 230-255. doi: 10.1159/000277058
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75. Retrieved from <http://web.b.ebscohost.com.cyber.usask.ca/>
- Dietrich, J., Parker, P., & Salmela-Aro, K. (2012). Phase-adequate engagement at the post-school transition. *Developmental Psychology*, 48(6), 1575-1593. doi:10.1037/a0030188
- Dietrich, J., Kracke, B., & Nurmi, J. E. (2011). Parents' role in adolescents' decision on a college major: A weekly diary study. *Journal of Vocational Behavior*, 79(1), 134-144. doi:10.1016/j.jvb.2010.12.003
- Dietrich, J. & Kracke, B. (2009). Career-specific parental behaviors in adolescents' development. *Journal of Vocational Behavior*, 75(2), 109-119. doi:10.1016/j.jvb.2009.03.005
- Dozois, D. J. A., Dobson, K. S. & Ahnberg, J. L. (1998). A psychometric evaluation of the Beck depression inventory–II. *Psychological Assessment*, 10(2), 83–89. Retrieved from <http://www.apa.org/pubs/journals/pas/>
- Du Bois-Reymond, M (2016). Emerging adulthood theory under scrutiny. *Emerging adulthood*, 4(4), 242-243. doi: 10.1177/2167696815614422
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. *Psychological issues*. ??
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. New York, NY: Norton.
- Erickson, T. (2008). *Plugged in: The generation Y guide to thriving at work*. Harvard Business Review Press. ??
- Frenette, M. (2007). Why are youth from lower-income families less likely to attend university? Evidence from academic abilities, parental influences and financial constraints. Ottawa, ON: Statistics Canada.
- Furman, E. (2005). *Boomerang nation*. New York, NY: Simon & Schuster.

- Furstenberg, F. (2016). Social class and development in early adulthood: Some unsettled issues. *Emerging Adulthood*, 4(4), 236-238. doi: 10.1177/2167696815625142
- Galambos, N. L. & Martínez, M. L. (2007). Poised for emerging adulthood in Latin America: A pleasure for the privileged. *Child Development Perspectives*, 1(2), 109–114. doi:10.1111/j.1750-8606.2007.00024.x
- Gaudet, S. (2007). Emerging adulthood: A new stage in the life course. Government of Canada. Ottawa, ON: Policy Research Initiative.
- Gender and mental health - World Health Organization. (2002, June). Retrieved from whqlibdoc.who.int/gender/2002/a85573.pdf
- Goodnow, J. J. (2002). Adding culture to studies of development: Toward changes in procedure and theory. *Human Development*, 45, 237-245.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59(2), 93. doi:10.1037/0003-066X.59.2.93
- Haase, C. M., Heckhausen, J., & Köller, O. (2008). Goal engagement during the school–work transition: Beneficial for all, particularly for girls. *Journal of Research on Adolescence*, 18(4), 671-698. doi:10.1111/j.1532-7795.2008.00576.x
- Hamilton, S. F., & Hamilton, M. A. (2006). School, work, and emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 440-473). Washington, DC: American Psychological Association.
- Hardwick, D. A. (1984). College students' concept of adulthood. *Psychological Reports*, 54, 967-968. doi:10.2466/pr0.1984.54.3.967
- Harris, C. R., Jenkins, M., & Glaser, D. (2006). Gender differences in risk assessment: why do women take fewer risks than men?. *Judgment and Decision making*, 1(1), 48. doi: 10.1037/e511092014-212
- Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological review*, 117(1), 32-60. doi:10.1037/a0017668
- Henig, R. M. (2010, August 18). What Is It About 20-Somethings? *New York Times Magazine*. Retrieved from <http://www.nytimes.com/section/magazine>
- Hendry, L. B., & Kloep, M. (2007). Conceptualizing emerging adulthood: Inspecting the

- emperor's new clothes?. *Child development perspectives*, 1(2), 74-79. doi: 10.1111/j.1750-8606.2007.00017.x.
- Jacklin, C. N. (1989). Female and male: Issues of gender. *American Psychologist*, 44(2), 127-133. Retrieved from <http://www.apa.org/pubs/journals/amp/index.aspx>
- Joffe, H., & Yardley, L. (2004). Content and thematic analysis. In D. F. Marks & L. Yardley (Eds.), *Research methods for clinical and health psychology* (pp. 56-68). Thousand Oaks, CA: Sage Publications.
- Junor, S., & Usher, A. (2004). *The price of knowledge 2004: Access and student finance in Canada*. Montreal, PQ: Canada Millennium Scholarship Foundation.
- Kirkpatrick Johnson, M., Allen Berg, J., & Sirotzki, T. (2007). Differentiation in self-perceived adulthood: Extending the confluence model of subjective age identity. *Social Psychology Quarterly*, 70(3), 243-261. doi: 10.1177/019027250707000304
- Korenman, S., Miller, J., & Sjaastad, J. (1995). Long-term poverty and child development in the United States: Results from the NLSY. *Children and Youth Services Review*, 17, 127-155. doi:10.1016/0190-7409(95)00006-X
- Kraemer, H.C. (1992). Reporting the size of effects in research studies to facilitate assessment of practical or clinical significance. *Psychoneuroendocrinology*, 17(6), 527-536. Doi: [https://doi.org/10.1016/0306-4530\(92\)90013-W](https://doi.org/10.1016/0306-4530(92)90013-W)
- Krings, F., Bangerter, A., Gomez, V., & Grob, A. (2008). Cohort differences in personal goals and life satisfaction in young adulthood: Evidence for historical shifts in developmental tasks. *Journal of adult development*, 15(2), 93-105. doi:10.1007/s10804-008-9039-6
- Kroger, J. (2002). Introduction: Identity development through adulthood. *Identity: An International Journal of Theory and Research*, 2(1), 1-5. doi:10.1207/S1532706XID0201_01
- Lefkowitz, E. S. (2005). "Things have gotten better": Developmental changes among emerging adults after the transition to university. *Journal of Adolescent Research*, 20, 40-63. doi:10.1177/0743558404271236
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: the effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309-337. doi:10/1037//0033-2902.126.2.309
- Lisha, N. E., Grana, R., Sun, P., Rohrbach, L., Spruijt-Metz, D., Reifman, A., & Sussman, S.

- (2012). Evaluation of the Psychometric Properties of the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) in a Sample of Continuation High School Student. *Evaluation and the Health Professions*, 00(0), 2-23.
doi:10.1177/0163278712452664
- Little, B. R. (1983). Personal Projects A Rationale and Method for Investigation. *Environment and Behavior*, 15(3), 273-309. Retrieved from <http://eab.sagepub.com>
- Lopez, D. F. G., Chervinko, S., Strom, T., Kinney, J., & Bradley, M. (2005). What Does it Mean to be an Adult?: A Qualitative Study of College Students' Perceptions and Coping Processes. *Journal of College and Character*, 6(4), 1-31. doi: 10.2202/1940-1639.1424.
- Maccoby, E. E., & Jacklin, C. N. (1974). *The psychology of sex differences* (Vol. 1). Stanford, California: Stanford University Press.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of personality and social psychology*, 3(5), 551. doi:10.1037/h0023281
- Marcia, J. E. (1994). The empirical study of ego identity. H. A. Bosma (Ed.) *Identity and Development: An Interdisciplinary Approach* (pp. 67-80). Thousand Oaks, California: SAGE Publications, Inc.
- Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity: An International Journal of Theory and Research*, 2(1), 7-28.
doi:10.1207/S1532706XID0201
- Martin, M. J., Blozis, S. A., Boeninger, D. K., Masarik, A. S., & Conger, R. D. (2014). The timing of entry into adult roles and changes in trajectories of problem behaviors during the transition to adulthood. *Developmental Psychology*, 50(11), 2473 – 2484. doi: 10.1037/a0037950
- Massey, E. K., Gebhardt, W. A., & Garnefski, N. (2008). Adolescent goal content and pursuit: A review of the literature from the past 16 years. *Developmental Review*, 28, 421–460.
doi:10.1016/j.dr.2008.03.002
- McCrandle, M. (2006). *New generations at work: Attracting, recruiting, retaining and training Generation Y*. The ABC of XYZ.
- McFarlane, A. H., Neale, K. A., Norman, G. R., Roy, R. G., & Streiner, D. L. (1981). Methodological issues in developing a scale to measure social support. *Schizophrenia Bulletin*, 7(1), 90-100. doi:10.1093/schbul/7.1.90

- Meich, R.A., & Hauser, R.M. (2001). Socioeconomic status and health at midlife: A comparison of educational attainment with occupation-based indicators. *Annals of Epidemiology*, *11*(2), 75-84. doi:10.1016/S1047-2797(00)00079-X
- Messersmith, E. E., & Schulenberg, J. E. (2010). Goal attainment, goal striving, and well-being during the transition to adulthood: A ten-year US national longitudinal study. *New Directions for Child and Adolescent Development*, *2010*(130), 27-40. doi:10.1002/cd.279
- Mitchell, B. A. (2006). *The Boomerang Age: Transitions to adulthood in families*. New Brunswick, N. J. : Transaction Publishers.
- Mitchell, B. A. (2004). Home, but not alone: Socio-cultural and economic aspects of Canadian young adults sharing parental households. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, *28*(2), 115-125. Retrieved from <http://journals.msvu.ca/index.php/atlantis/issue/view/106>
- Mitchell, B. A., Wister, A. V., & Gee, E. M. (2004). The ethnic and family nexus of home-leaving and returning among Canadian young adults. *Canadian Journal of Sociology*, *29*, 543–575. Retrieved from https://muse-jhu.edu.cyber.usask.ca/journals/canadian_journal_of_sociology/
- Mitchell, B.A. & Gee, E.M. (1996). "Boomerang kids" and midlife parental marital satisfaction. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, *45*(4), 442-448. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1741-3729/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1741-3729/issues)
- Molga, M. (2007). Do Transitions and Social Structures Matter? How 'Emerging Adults' Define Themselves as Adults. *Journal of Youth Studies*, *10*(5), 495-516. doi: 10.1080/13676260701580769
- Negru, O. (2008). Personal goals: Structures and processes in adult development. *Cogniție Creier Comportament*, *12*(3), 265-283. Retrieved from <https://www.questia.com/library/p62701/cognitie-creier-comportament>
- Nelson, L.J. & Barry, C.M. (2005). Distinguishing feature of emerging adulthood: the role of self-classification as an adult. *Journal of Adolescent Research*, *20*(2), 242-262. doi:10.1177/0743558404273074
- Nelson, L.J., Badger, S., & Wu, B. (2004). The influence of culture in emerging adulthood:

- Perspectives of Chinese college students. *International Journal of Behavioral Development*, 28, 26-36. doi: 10.1080/01650250344000244
- Nelson, R. M., & DeBacker, T. K. (2008). Achievement motivation in adolescents: The role of peer climate and best friends. *The Journal of Experimental Education*, 76(2), 170-189. Retrieved from <http://www.tandfonline.com/toc/vjxe20/76/2#.VgLyWrRN1II>
- Newman, K. S. (2012). *The accordion family: Boomerang kids, anxious parents, and the private toll of global competition*. Boston: Beacon Press.
- Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological bulletin*, 115(3), 424. doi:10.1037/0033-2909.115.3.424
- Norbeck, J. S. (1981). Social support: a model for clinical research and application. *Advances in Nursing Science*, 3(4), 43-60. doi:10.1097/00012272-198107000-00006
- Norman G.R. & Streiner, D.L. (2000). *Biostatistics: The Bare Essentials*. St. Louis: Mosby.
- Nurmi, J.E. (2004). Socialization and self-development: Channeling, selection, adjustment, and reflection. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (Vol. 2, pp. 85-124). Hoboken, NJ: Wiley.
- O'Connor, M., Sanson, A., Hawkins, M., Letcher, P., Toumbourou, J., Smart, D., et al. (2011). Predictors of positive development in emerging adulthood. *Journal of Youth and Adolescence*, 40, 860-874. doi:10.1007/s10964-010-9593-7
- Parker, P. D., Schoon, I., Tsai, Y. M., Nagy, G., Trautwein, U., & Eccles, J. S. (2012). Achievement, Agency, Gender, and Socioeconomic Background as Predictors of Postschool Choices: A Multicontext Study. *Developmental Psychology*, 48(6), 1629-1642. doi:10.1037/a0029167
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction With Life Scale. *Psychological Assessment*, 5(2), 164-172. doi:10.1037/1040-3590.5.2.164
- Räikkönen, E. (2012). Is timing everything?: a longitudinal perspective on adult transitions, their antecedents, and psychological implications. *Jyväskylä Studies in Education, Psychology and Social Research*.
- Reifman, A., Arnett, J. J., & Colwell, M. J. (2007). Emerging adulthood: Theory, Assessment, and Application. *Journal of Youth Development*, 2(1), 37-48. doi.:10.5195/jyd.2007.359

- Robinson, O. (2015). Emerging Adulthood, Early Adulthood, and Quarter-Life Crisis. *Emerging adulthood in a European context*.
- Roisman, G. I., Masten, A. S., Coatsworth, J. D., & Tellegen, A. (2004). Salient and Emerging Developmental Tasks in the Transition to Adulthood. *Child Development, 75*(1), 123-133. doi:10.1111/j.1467-8624.2004.00658.x
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.
- Russell, D.W. (1996). UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure. *Journal of Personality Assessment, 66*(1), 20-40. doi:10.1207/s15327752jpa6601_2
- Salkind, N.J. (2004). An Introduction to Theories of Human Developments. Retrieved from <http://us.sagepub.com/en-us/nam/an-introduction-to-theories-of-human-development/book220853>
- Salmela-Aro, K., & Nurmi, J. E. (1997). Goal contents, Well-being, and Life Context During Transition to University: A Longitudinal Study. *International Journal of Behavioral Development, 20*(3), 471-491. doi:10.1080/016502597385234
- Salmela-Aro, K., Nurmi, J. E., Saisto, T., & Halmesmäki, E. (2000). Womens and mens personal goals during the transition to parenthood. *Journal of Family Psychology, 14*(2), 171-186. doi:10.1037//0893-3200.14.2.171
- Salmela-Aro, K., Aunola, K., & Nurmi, J. E. (2007). Personal Goals During Emerging Adulthood. *Journal of Adolescent Research, 22*(6), 690-715. doi:10.1177/0743558407303978
- Salmela-Aro, K. (2009). Personal goals and well-being during critical life transitions: The four C's - Channelling, choice, co-agency and compensation. *Advances in Life Course Research, 14*(1-2), 63-73. doi:10.1016/j.alcr.2009.03.003
- Salmela-Aro, K. (2010). Personal goals and well-being: How do young people navigate their lives?. *New Directions for Child and Adolescent Development, 2010*(130), 13-26. doi:10.1002/cd.278
- Salvatore, S & Valsiner, J (2010). Between the general and the unique. *Theory & Psychology, 20*(60), 1-18. doi: 10.1177/0959354310381156
- Santrock, W, J. (2008) Life-span development (11th ed). New York, America: McGraw Hill.
- Sawyer, S.M., Azzopardi, P.S., Wickremarathne, D., & Patton, G.C. (2018). The age of

- adolescence. *Lancet*, 2(3), 223-228. doi: [https://doi.org/10.1016/S2352-4642\(18\)30022-1](https://doi.org/10.1016/S2352-4642(18)30022-1)
- Scarr, S. (1992). Developmental theories for the 1990s: Development and Individual Differences. *Child development*, 63(1), 1-19. doi:10.2307/1130897
- Schoon, I., & Schulenberg, J. (2013). The assumption of adult roles in the UK, the U.S.A., and Finland: Antecedents and associated levels of well-being and health. In H. Helve & K. Evans (Eds.), *Youth, work transitions and wellbeing* (pp. 45-57). London, UK: The Tufnell Press.
- Schulz, R., & Heckhausen, J. (1996). A life span model of successful aging. *American Psychologist*, 51(7), 702-714. doi:10.1037//0003-066x.51.7.702
- Schulenberg, J. E., Bryant, A. L., & O'malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and psychopathology*, 16(4), 1119-1140. doi: 10.1017/S0954579404040167
- Schwartz, S. J. (2016). Turning point for a turning point: Advancing emerging adulthood theory and research. *Emerging Adulthood*, 4(5), 307-317. doi: 10.1177/2167696815624640
- Seiffge-Krenke, I. (1998). Chronic disease and perceived developmental progression in adolescence. *Developmental Psychology*, 34(5), 1073–1084. doi:10.1037//0012-1649.34.5.1073
- Seiffge-Krenke, I., & Gelhaar, T. (2008). Does successful attainment of developmental tasks lead to happiness and success in later developmental tasks? A test of Havighursts (1948) theses. *Journal of adolescence*, 31(1), 33-52. doi:10.1016/j.adolescence.2007.04.002
- Shah, C.P. (2003). Concepts, determinants, and promotion of health. In *Public Health and Preventative Medicine in Canada* (5th ed., pp. 3-37). Toronto, Ontario.
- Shanahan, M. J., Porfeli, E., Mortimer, J. T., & Erickson, L. (2004). Subjective age identity and the transition to adulthood: When does one become an adult? In *On the frontier of adulthood: Theory, research, and public policy* (pp. 225-255). Chicago: University of Chicago Press.
- Shulman, S., & Nurmi, J. E. (2010). Understanding emerging adulthood from a goal-setting perspective. *New Directions for Child and Adolescent Development*, 2010(130), 1-11. doi:10.1002/cd.277
- Silva, J. M. (2016). High hopes and hidden inequalities: How social class shapes pathways to

- adulthood. *Emerging Adulthood*, 4(4), 239-241. doi: 10.1177/2167696815620965.
- Sink, C. A., & Mvududu, N. H. (2010). Statistical power, sampling, and effect sizes: Three keys to research relevancy. *Counseling Outcome Research and Evaluation*, 1(2), 1-18. doi: 10.1177/2150137810373613
- Statistics Canada, 2011 Census of Population, Statistics Canada catalogue no. 98-312-XCB2011043.
- Statistics Canada, 2006a Census of Population, Statistics Canada catalogue no. 97-559-XCB2006016.
- Statistics Canada, 2006b Census of Population, Statistics Canada catalogue no. 97-560-XCB2006008.
- Statistics Canada, 2006c Census of Population, Statistics Canada catalogue no. 97-560-XCB2006008.
- Statistics Canada, 2006d Census of Population, Statistics Canada catalogue no. 97-560-XCB2006008 (Saskatchewan, Code47).
- Statistics Canada. 2002. *2001 Census: Profile of Canadian families and Households: Diversification Continues*. Census release 22 October, 2002, www.statcan.ca.
- Strathman, A., Gleicher, F., Boninger, D. S., & Edwards, C. S. (1994). The consideration of future consequences: weighing immediate and distant outcomes of behavior. *Journal of personality and social psychology*, 66(4), 742 - 752. doi: 10.452/1994000012.
- Super, C. M. & Harkness, S. (2002). Culture structures the environment for development. *Human Development*, 45, 270 – 274.
- Tanner, J.L. (2006). Re-centering during emerging adulthood: a critical turning point in life span human development. In *Emerging adults in America: Coming of age in the 21st century* (pp. 21-55). American Psychological Association: Washington, DC.
- Tulgan, B. (2009). *Not everyone gets a trophy: How to manage generation Y*. John Wiley & Sons.
- Turner, C., & McClure, R. (2003). Age and gender differences in risk-taking behaviour as an explanation for high incidence of motor vehicle crashes as a driver in young males. *Injury control and safety promotion*, 10(3), 123-130. doi: 10.1076/icsp.10.3.123.14560
- Twenge, J. M. (2013). The evidence for generation me and against generation we. *Emerging Adulthood*, 1(1), 11-16. doi: 10.1177/2167696812466548

- Wagner, J., Lüdtke, O., Jonkmann, K., & Trautwein, U. (2013). Cherish yourself: Longitudinal patterns and conditions of self-esteem change in the transition to young adulthood. *Journal of Personality and Social Psychology, 104*(1), 148.
doi:10.1037/a0029680
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology, 18*(3), 341 – 358.
doi:10.1037//0012-1649.18.3.341
- Wintre, M. G., Knoll, G. M., Pancer, S. M., Pratt, M. W., Polivy, J., Birnie-Lefcovitch, S., & Adams, G. R. (2008). The transition to university: The student-university match (SUM) questionnaire. *Journal of Adolescent Research, 23*(6), 745-769. doi:
10.1177/0743558408325972
- Wolburg, J., & Pokrywczynski, J. (2001). A psychographic analysis of Generation Y college students. *Journal of Advertising Research, 41*(5), 33-52. doi:10.2501/jar-41-5-33-52
- Whiston, S. C., & Keller, B. K. (2004). The Influences of the Family of Origin on Career Development A Review and Analysis. *The Counseling Psychologist, 32*(4), 493-568.
doi:10.1177/0011000004265660
- Young, R. A., Marshall, S. K., Domene, J. F., Graham, M., Logan, C., Zaidman-Zait, A., ... & Lee, C. M. (2008). Transition to adulthood as a parent-youth project: Governance transfer, career promotion, and relational processes. *Journal of Counseling Psychology, 55*(3), 297-307. doi:10.1037/0022-0167.55.3.297
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment, 52*(1), 30-41.
doi:10.1207/s15327752jpa5201_2

Appendix A

Sociodemographic Questionnaire

Instructions: There are no incorrect answers. Take your time reading the instructions and statements. Remember you are free to leave any questions unanswered.

1. Age: _____

2. Sex:

- a. male
- b. female

3. What is your ethnicity?

- a. White, Caucasian,
- b. Aboriginal (e.g., First Nations, Metis)
- c. Latino, Hispanic
- d. Black, African American
- e. Asian
- f. Other (please specify): _____

4. Were you born in Canada/North America?

- a. yes
- b. no

5. Were one or both of your parents born in Canada/North America?

- a. yes
- b. no
- c. uncertain

6. Were one or more of your grandparents born in Canada/North America?

- a. yes
- b. no
- c. uncertain

7. What is your current relationship status:

- a. Single
- b. Married
- c. Common-law
- d. Separated
- e. Divorced
- f. Widowed

8. Do you have any children?

- a. No
- b. Yes

If yes, how many: ____

If yes, what are the ages: _____

If yes, are you the primary caregiver?

- a. Yes
- b. No

9. What is your approximate household income per year?

- a. Less than \$11,000
- b. \$11,000 – \$20,000
- c. \$21,000 – \$30,000
- d. \$31,000 – \$40,000
- e. \$41,000 – \$50,000
- f. \$50,000 and up

10. Are you a university student?

- a. Yes
- b. No

If Yes:

Do you attend the University of Saskatchewan?

- a. Yes
- b. No

Are you an undergraduate or graduate student?

- a. Undergraduate student
- b. Graduate student

What is your year of study in your current program?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5
- f. 6 or more years

How many years have you attended university all together (all degrees, all programs)?

Are you a Part time or Full time student?

- a. Full time
- b. Part time

What is your college program (select one):

- a. Agriculture
- b. Law
- c. Arts & Science
- d. Medicine
- e. Nursing
- f. Dentistry
- g. Pharmacy/Nutrition
- h. Physical Therapy
- i. Commerce
- j. Education
- k. Engineering
- l. Kinesiology
- m. Veterinary Medicine
- n. Other: _____

Are you studying in Canada on an international student visa?

- a. Yes
- b. No

If No:

Have you pursued any type of post-secondary education?

- a. Yes
- b. No

If Yes:

What type of post-secondary training have you experienced?

- a. University
- b. College
- c. Trade School
- d. Vocational Program
- e. Other, please specify _____

How long were you previously or currently in post-secondary training? _____

Have you ever completed any type of post-secondary?

- a. Yes
- b. No

11 . Are you currently employed?

- a. No
- b. Yes

If Yes:

Are you employed full-time or part time?

- a. full-time
- b. part-time

How long do you plan on staying employed at this job?

- a. Less than 6 months
- b. Between 6 months and a year
- c. One to two years
- d. Three to five years
- e. Indefinitely

12. Where do you currently live?

- a. With my parents/guardians (or other relatives)
- b. On campus residence
- c. With roommates
- d. Living with my partner (e.g., boyfriend, girlfriend, spouse)
- e. Living by myself
- f. Other: _____

13. Do you live in the same city as your parents?

- a. Yes
- b. No

If No:

How far do you live from your parents (Kilometers): _____

14. Do you feel as though you live far away from your parents?

- a. Yes
- b. No

Appendix B

Personal Goal Coding Manual

Coding Categories

Category	Coding Value
Achievement	1
Family of Origin	2
Partner	3
Parenthood	4
Friendships	5
Property and Finances	6
Self and Personal Growth	7
Health	8
Leisure, Learning, and Hobbies	9
Routine chores	10
Other	11

Description of Coding Categories

1) Achievement

- This category reflects achievement in the domains of education and career.
- Examples:
 - o To make career options
 - o To complete a specific degree
 - o To complete a course within your degree
 - o To obtain a well-paying job
 - o To obtain a job

- To join a specific profession (doctor, nurse, teacher)
- To find an enjoyable career
- To obtain good grades or do well in school
- To gain entry into an educational program
- To complete a course or thesis
- *Notes*
 - This category does not include learning or education for self-betterment (i.e., learn a new language should belong within the “Leisure, Learning, and Hobbies” category)
 - Deciding what education or career to pursue falls under the “Self and Personal Growth” category

2) Family of Origin

- This category reflects relationships within the individual’s Family of Origin.
- Examples:
 - Spend time with siblings
 - Take care of parents
 - Move to be closer to family
 - Visit family
 - Make family proud

3) Partner

- This category reflects romantic partnerships.
- Examples:
 - Get married
 - To find a boyfriend or girlfriend
 - To find a long-term partner
 - Move in with a partner
 - Plan and have a wedding

4) Parenthood

- This category reflects the goals of parenthood and childbearing.
- Examples:
 - To have a baby

- To be a mom/dad
- To have a family
- Provide for children
- To be a role model for children

5) Friendships

- This category reflects the development and maintenance of non-romantic relationships with others.
- Examples:
 - Meet new friends
 - Spend time with friends
 - Keep in touch with old friends
 - Keep positive or strong relationships

6) Property and Finances

- This category reflects personal assets, finances, and debts.
- Examples:
 - Buy a home or car
 - Pay off debt
 - Become wealthy or make more money (no reference to career)
 - Renovate property
 - Save money
 - Stop living paycheck to paycheck

7) Self

- This category reflects areas of self-betterment and growth.
- Examples:
 - To become a better person or to grow as a person
 - To be happy
 - To become more kind/patient
 - To develop a certain characteristic or quality
 - Figure out who I am
 - Obtain balance in life

- Decide on a career/educational path
- *Note:*
 - This category does not include mental health issues. Mental health issues belong within the “Health” category.

8) Health

- This category ____? health and wellness both mentally and physically.
- Examples:
 - To exercise more
 - To lose/gain weight
 - To eat healthy
 - To take better care of myself
 - To work on my mental health or specific mental disorder
 - To cut back on drug or alcohol use
- *Note:* This category does not contain recreational sports or goals (i.e., run a marathon, do an ironman) when no reference is given to health.

9) Leisure, Learning, and Hobbies

- This category reflects an individual’s desire to engage in recreational and leisure activities. It also includes personal hobbies and areas of learning for learning’s sake (as opposed to achievement-based learning).
- Examples:
 - Take trip to the cabin
 - Go fishing/hunting
 - Travel
 - Learn a new language or how to play a new sport
 - Complete a marathon, ironman, 5k or other athletic goal
 - Volunteer, become involved in the community or on campus
 - Make art

10) Routine chores

- This category reflects accomplishing day-to-day tasks.
- Examples:
 - Pay bills

- Maintain a clean house

11) Other

- If an identified personal goal does not fit within any of the above categories, then place it within the “other” category.

Additional Guidelines

- If a participant includes more than one response/category within a single personal goal, then code the first response/category indicated.
 - Example: I want to get married and have a family.
 - In this case, more than one goal is listed. Code the first goal listed (I want to get married = 3).

Appendix C

The IDEA: Inventory of the Dimensions of Emerging Adulthood

Instructions: First, please think about this time in your life. By “time in your life,” we are referring to the present time, plus the last few years that have gone by, and the next few years to come, as you see them. In short, you should think about a roughly five-year period, with the present time right in the middle.

For each phrase shown below, please indicate the degree to which you agree or disagree that the phrase describes this time in your life. For example, if you “Somewhat Agree” that this is a “time of exploration,” then on the same line as the phrase, you would select “Somewhat Agree” (3).^[1]_[SEP] Be sure to put only one check mark per line.

	Strongly disagree	Somewhat disagree	Somewhat agree	Somewhat disagree
1. time of many possibilities?	1	2	3	4
2. time of exploration?	1	2	3	4
3. time of confusion?	1	2	3	4
4. time of experimentation?	1	2	3	4
5. time of personal freedom?	1	2	3	4
6. time of feeling restricted?	1	2	3	4
7. time of responsibility for yourself?	1	2	3	4
8. time of feeling stressed out?	1	2	3	4
9. time of instability?	1	2	3	4
10. time of optimism?	1	2	3	4
11. time of high pressure?	1	2	3	4
12. time of finding out who you are?	1	2	3	4

13. time of settling down?	1	2	3	4
14. time of responsibility for others?	1	2	3	4
15. time of independence?	1	2	3	4
16. time of open choices?	1	2	3	4
17. time of unpredictability?	1	2	3	4
18. time of commitments to others?	1	2	3	4
19. time of self-sufficiency?	1	2	3	4
20. time of many worries?	1	2	3	4
21. time of trying out new things?	1	2	3	4
22. time of focusing on yourself?	1	2	3	4
23. time of separating from parents?	1	2	3	4
24. time of defining yourself?	1	2	3	4
25. time of planning for the future?	1	2	3	4
26. time of seeking a sense of meaning?	1	2	3	4
27. time of deciding on your own beliefs and values?	1	2	3	4
28. time of learning to think for yourself?	1	2	3	4
29. time of feeling adult in some ways but not others?	1	2	3	4

30. time of gradually becoming an adult? 1 2 3 4

31. time of being not sure whether you have reached full adulthood? 1 2 3 4

Appendix D

Criteria for Adulthood

Independence

- 1) Financially independent of parents
- 2) No longer living in parents' household
- 3) Not deeply tied to parents emotionally
- 4) Decide on personal beliefs and values independently of parents or other influences
- 5) Accept responsibility for the consequences of your actions
- 6) Establish equal relationship with parents

Interdependence

- 7) Committed to long-term love relationships
- 8) Make life-long commitments to others
- 9) Learn always to have good control over your emotions
- 10) Become less self-oriented, develop greater consideration for others

Role transitions

- 11) Finish education
- 12) Married
- 13) Have at least one child
- 14) Settle into a long-term career
- 15) Purchase a house
- 16) Become employed full-time

Norm compliance

- 17) Avoid becoming drunk
- 18) Avoid illegal drugs
- 19) Have no more than one sexual partner
- 20) Drive safely and close to the speed limit
- 21) Avoid use of profanity or vulgar language
- 22) Use contraception if sexually active and not trying to conceive a child
- 23) Avoid drunk driving
- 24) Avoid committing petty crimes such as vandalism and shoplifting

Biological transitions

- 25) Grow to full height
- 26) If a woman, become biologically capable of bearing children; If a man, become biologically capable of fathering children
- 27) Have had sexual intercourse

Chronological transitions

- 28) Have obtained a driver's license
- 29) Reached age 18
- 30) Reached age 21

Family capacities

- 31) become capable of supporting a family financially
- 32) become capable of caring for children
- 33) become capable of running a household
- 34) become capable of keeping family physically safe

Appendix E

Rosenberg's Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. Please indicate your agreement with each statement by circling one of the following choices: strongly disagree, disagree, agree, or strongly agree.

1. On the whole, I am satisfied with myself.
Strongly disagree Disagree Agree Strongly agree
2. At times, I think I am no good at all.
Strongly disagree Disagree Agree Strongly agree
3. I feel that I have a number of good qualities.
Strongly disagree Disagree Agree Strongly agree
4. I am able to do things as well as most other people.
Strongly disagree Disagree Agree Strongly agree
- 5.* I feel I do not have much to be proud of.
Strongly disagree Disagree Agree Strongly agree
- 6.* I certainly feel useless at times.
Strongly disagree Disagree Agree Strongly agree
7. I feel that I'm a person of worth, at least on an equal plane with others.
Strongly disagree Disagree Agree Strongly agree
- 8.* I wish I could have more respect for myself.
Strongly disagree Disagree Agree Strongly agree
- 9.* All in all, I am inclined to feel that I am a failure.
Strongly disagree Disagree Agree Strongly agree
10. I take a positive attitude toward myself.
Strongly disagree Disagree Agree Strongly agree

Appendix F

Beck Anxiety Inventory

Instructions: Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom **during the past month, including today**, by circling the number next to each symptom.

	Not at all	Mildly, but it didn't bother me much	Moderately – it wasn't pleasant at times	Severely – it bothered me a lot
1) Numbness or tingling	0	1	2	3
2) Feeling hot	0	1	2	3
3) Wobbliness in legs	0	1	2	3
4) Unable to relax	0	1	2	3
5) Fear of worst happening	0	1	2	3
6) Dizzy or lightheaded	0	1	2	3
7) Heart pounding/racing	0	1	2	3
8) Unsteady	0	1	2	3
9) Terrified or afraid	0	1	2	3
10) Nervous	0	1	2	3
11) Feeling of choking	0	1	2	3
12) Hands trembling	0	1	2	3
13) Shaky / unsteady	0	1	2	3
14) Fear of losing control	0	1	2	3
15) Difficulty in breathing	0	1	2	3
16) Fear of dying	0	1	2	3
17) Scared	0	1	2	3

18) Indigestion	0	1	2	3
19) Faint / lightheaded	0	1	2	3
20) Face flushed	0	1	2	3
21) Hot / cold sweats	0	1	2	3

Appendix G

Loneliness Scale

Instructions: The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by circling the appropriate number. Here is an example:

How often do you feel happy?

If you never felt happy, you would respond with a “0” if you always feel happy, you would respond with a “4”.

	Never			Always
1. How often do you feel you are “in tune” with the people around you?	1	2	3	4
2. How often do you feel that you lack companionship?	1	2	3	4
3. How often do you feel there is no one to turn to?	1	2	3	4
4. How often do you feel alone?	1	2	3	4
5. How often do you feel part of a group of friends?	1	2	3	4
6. How often do you feel that you have a lot in common with people around you?	1	2	3	4
7. How often do you feel no longer close to anyone?	1	2	3	4
8. How often to you feel that your interests and ideas are not shared by those around you?	1	2	3	4
9. How often do you feel outgoing and friendly?	1	2	3	4

	Never		Always	
10. How often do you feel close to people?	1	2	3	4
11. How often do you feel left out?	1	2	3	4
12. How often do you feel that your relationships are not meaningful?	1	2	3	4
13. How often do you feel that no one really knows you well?	1	2	3	4
14. How often do you feel isolated from others?	1	2	3	4
15. How often do you feel you can find companionship when you want it?	1	2	3	4
16. How often do you feel that there are people who really understand you?	1	2	3	4
17. How often do you feel shy?	1	2	3	4
18. How often do you feel that there are people around you but not with you?	1	2	3	4
19. How often do you feel that there are people you can talk to?	1	2	3	4
20. How often do you feel that there are people you can turn to?	1	2	3	4

Appendix H

The Satisfaction with Life Scale

Below are five statements with which you may agree or disagree. Using the 1 to 7 scale

below, indicate your agreement with each item:

- 1 = strongly disagree
- 2 = disagree
- 3 = slightly disagree
- 4 = neither agree nor disagree
- 5 = slightly agree
- 6 = agree
- 7 = strongly agree

1. In most ways my life is close to ideal.

1 2 3 4 5 6 7

2. The conditions of my life are excellent.

1 2 3 4 5 6 7

3. I am satisfied with my life.

1 2 3 4 5 6 7

4. So far I have gotten the important things I want in life.

1 2 3 4 5 6 7

5. If I could live my life over, I would change almost nothing.

1 2 3 4 5 6 7

Appendix I

Reckless Behavior Scale

The following questions ask about your own behaviour during the past year. Remember that there is no single correct answer, as everyone behaves differently. Try not to leave any blanks.

Please answer with complete honesty by circling one number – *any number from 0-10* – for each question.

An EXAMPLE of how to answer these questions is shown below:

HOW MANY TIMES IN THE PAST YEAR HAVE YOU...

Q. Driven after having consumed three or more drinks in the previous hour?

0	1	2	3	4	5	6	7	8	9	10
0 = none						6 = 11-20 times (i.e. about every 3 or 4 weeks)				
1 = once						7 = 21-30 times (i.e. about fortnightly)				
2 = twice						8 = 31-50 times (i.e. more than fortnightly, less than weekly)				
3 = three times						9 = 51-100 times (i.e. once or twice a week)				
4 = 4 or 5 times						10 = 100+ times (i.e. at least twice a week)				
5 = between 6 & 10 times (i.e. about every 5 to 8 weeks)										

This person has answered '5' indicating that s/he has done this activity 6-10 times in the past year.

HOW MANY TIMES IN THE PAST YEAR HAVE YOU...

1. Drag raced another car or deliberately screeched your tires/performed a burn out.

0 1 2 3 4 5 6 7 8 9 10

2. Had vaginal intercourse with a stranger (ie., someone you have known for less than 24 hours).

0 1 2 3 4 5 6 7 8 9 10

3. Smoked or otherwise used marijuana.

0 1 2 3 4 5 6 7 8 9 10

4. Driven at least 30km/hr over the speed limit.

0 1 2 3 4 5 6 7 8 9 10

5. Drank alcohol until you felt ill (nausea, vomiting).

0 1 2 3 4 5 6 7 8 9 10

6. Used amphetamines (e.g., speed, ice).

0 1 2 3 4 5 6 7 8 9 10

7. When driving, not stopped at a red traffic light.

0 1 2 3 4 5 6 7 8 9 10

8. Used designer party drugs such as angel dust and ecstasy.

0 1 2 3 4 5 6 7 8 9 10

9. Had sexual intercourse with someone who you thought had recently had multiple partners and/or practiced unsafe sex with another partner.

0 1 2 3 4 5 6 7 8 9 10

10. Used hallucinogens (e.g., magic mushrooms, LSD).

0 1 2 3 4 5 6 7 8 9 10

11. Drank 5 or more drinks (containing alcohol) in one session.

0 1 2 3 4 5 6 7 8 9 10

12. Engaged in oral sex with someone who you thought had recently had multiple partners and/or practiced unsafe sex with another partner.

0 1 2 3 4 5 6 7 8 9 10

13. Raced or chased another vehicle driven by a person known to you.

0 1 2 3 4 5 6 7 8 9 10

14. Taken part in drinking games to the point of intoxication.

0 1 2 3 4 5 6 7 8 9 10

15. Used cocaine in any form.

0 1 2 3 4 5 6 7 8 9 10

16. Drank until your memory was impaired (i.e., “blacked out”, “fuzzy” memory, cannot remember exactly what took place).

0 1 2 3 4 5 6 7 8 9 10

17. Deliberately tail-gated another vehicle or followed at an unsafe distance.

0 1 2 3 4 5 6 7 8 9 10

18. Had vaginal intercourse without a condom (or are not sure if a condom was used) with someone other than a long-term partner (boyfriend/girlfriend, etc).

0 1 2 3 4 5 6 7 8 9 10

During your lifetime, with how many people have you had sexual intercourse (ie., with vaginal or anal penetration)?

_____ people

Appendix J

Recruitment Materials

PAWS Announcements and Psychology Participant Pool

The current study is interested in better understanding how diverse groups of individuals understand and experience the transition from adolescence to adulthood. We are seeking undergraduate students, graduate students, and non-students between the ages of 18 and 25 to complete an anonymous online survey. This survey will ask participants how they view the transition to adulthood, as well as their own experiences during this transition. This survey takes approximately 20 to 25 minutes to complete.

Participants can choose to enter their name for a draw to win one of eight gift certificates valued at \$100 (x2), \$50 (x2), and \$25 (x4). Participants will have a choice from the following gift certificates: Midtown Plaza, restaurant of their choice, or the University of Saskatchewan Bookstore.

If you are interested in being a participant, please follow the link below to complete the online survey: <http://fluidsurveys.usask.ca/s/movingtoadulthood/>

For more information, please contact Chassidy Puchala: cdp717@mail.usask.ca

Recruitment Poster

Department of Psychology
University of Saskatchewan

PARTICIPANTS NEEDED FOR RESEARCH IN EXPERIENCES DURING THE TRANSITION TO ADULTHOOD

We are looking for volunteers to take part in a study that is interested in better understanding how diverse groups of individuals understand and experience the transition from adolescence to adulthood. We are seeking participants between the **ages of 18 and 25**.

As a participant in this study, you would be asked to complete a 20 to 25 minute online survey.

The study includes three groups of participants (undergraduate students, graduate students, and non-students). In appreciation, each group has an independent draw for one of four gift certificates valued at \$100, \$50 and \$25 (x2). Participants will have a choice from the following gift certificates: Midtown Plaza, restaurant of their choice, or the University of Saskatchewan Bookstore.

If you are interested in being a participant, please follow the link below to complete the online survey: <http://fluidsurveys.usask.ca/s/movingtoadulthood/>

For more information about this study, please contact:

Chassidy Puchala
Department of Psychology
Email: cdp717@mail.usask.ca

**This study has been reviewed by and received approval through the Research Ethics
Office, University of Saskatchewan**

Newspaper Recruitment

Researchers at the University of Saskatchewan are interested in better understanding how diverse groups of individuals experience the transition from adolescence to adulthood. We are seeking participants between the ages of 18 and 25 who have NEVER attended any type of post-secondary education to complete an anonymous online survey. This survey will ask participants how they view the transition to adulthood, as well as their own experiences during this transition. This survey takes approximately 20 to 25 minutes to complete. The study includes three groups of participants (undergraduate students, graduate students, and non-students). Each group has an independent draw for one of four gift certificates valued at \$100, \$50 and \$25(x2). Participants will have a choice from the following gift certificates: Midtown Plaza or a restaurant of their choice.

If you are interested in being a participant, please follow the link below to complete the online survey: <http://fluidsurveys.usask.ca/s/movingtoadulthood/>

For more information, please contact: cdp717@mail.usask.ca

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board.

Facebook Status Recruitment Statement for the Researcher

Hello! I am a graduate student at the University of Saskatchewan currently conducting a research study on how individuals view and experience the transition from adolescence to adulthood. I am looking for volunteers between the ages of 18 to 25 to complete the study. Participation will take between 20 to 25 minutes. The study includes three groups of participants (undergraduate students, graduate students, and non-students). Each group has an independent draw for one of four gift certificates valued at \$100, \$50 and \$25(x2). Participants will have a choice of gift certificate from the following: Midtown Plaza, restaurant of their choice, or the University of Saskatchewan Bookstore.

Please visit <http://fluidsurveys.usask.ca/s/movingtoadulthood/> or contact me at cdp717@mail.usask.ca for more information about the study and how to participate. Thank you!

[Note: Appendix D shows the status to be used by the graduate student researcher (Chassidy Puchala) on her own Facebook account to recruit participants.]

Facebook Status Recruitment Statement for Colleagues, Family, and Friends

Hello! Chassidy Puchala, a graduate student from the University of Saskatchewan, is currently conducting a research study on how individuals view and experience the transition from adolescence to adulthood. She is looking for volunteers between the ages of 18 to 25 to complete the study. Participation will take between 20 to 25 minutes. The study includes three groups of participants (undergraduate students, graduate students, and non-students). Each group has an independent draw for one of four gift certificates valued at \$100, \$50 and \$25(x2). Participants will have a choice of gift certificate from the following: Midtown Plaza, restaurant of their choice, or the University of Saskatchewan Bookstore.

Please visit <http://fluidsurveys.usask.ca/s/movingtoadulthood/> or contact Chassidy at cdp717@mail.usask.ca for more information about the study and how to participate. Thank you!

[Note: Colleagues and other interested individuals (family, friends) will be provided information about the study by researcher via email and, if it is of interest, they may post the status shown in Appendix E on their own Facebook accounts to help recruit participants.]

Appendix K

Consent Form

You are invited to participate in a research study entitled “*The Experience of moving from adolescence to adulthood*”.

Please read this form carefully, and feel free to email the researchers with any questions you might have about the study.

Researchers:

Chassidy Puchala, Department of Psychology, cdp717@mail.usask.ca

Dr. Patti McDougall, Department of Psychology, 306-966-6203, patti.mcdougall@usask.ca

Objectives and Procedure: The objectives of this study are to (1) gain a better understanding of young people’s experiences during the transition to adulthood, and (2) examine the possible association between developmental experiences during the transition to adulthood and psychosocial well-being. Participants will be asked to complete an online survey consisting of demographic questions, including questions about gender, age, ethnicity, education, and socioeconomic status. This online survey also consists of questionnaires assessing a variety of social-emotional experiences, such as loneliness and life satisfaction, as well as questionnaires asking about personal perspectives and experiences regarding the transition adulthood. The online survey will take approximately 20 to 25 minutes to complete. Results based on the grouped data will be reported in the researcher’s dissertation project, academic journals and conference presentations.

Risks: There are no anticipated risks to participants. However, it is possible that you may experience some discomfort or distress in responding to certain questions. You do not have to answer any questions that you do not want to answer. If you experience negative emotions in completing this survey and need to speak to someone, you may contact the University of Saskatchewan’s Student Counselling Services (306-966-4920) if you are a university student, or Adult Mental Health Services (306-655-4100) if you are not a university student. Contact information for researchers and counselling services will be provided again at the end of the study.

Anonymity: Your data are completely anonymous and no personally identifying information will be linked to your data. All data will be reported in grouped form. The data will be stored securely in electronic form at the University of Saskatchewan for a minimum of five years after completion of the study. When the data is no longer required, it will be destroyed beyond recovery.

Right to Withdraw: Participants are free to leave any questions in the survey unanswered. You may withdraw from the study for any reason, at any time, without penalty of any sort and without loss of research credit for the session. If you withdraw from the study, you will be given the option of not saving your data and any data that you have contributed will be destroyed beyond recovery. At that point you will also be directed to a debriefing form. However, as the

data collected is anonymous, once you have completed the survey and chosen to save your data, there is no way for the researcher to locate and delete your data.

Compensation: No formal compensation will be provided to participants. However, all participants can choose to be entered in for a draw. The study includes three groups of participants (undergraduate students, graduate students, and non-students). Each group has an independent draw for one of four gift certificates valued at \$100, \$50 and \$25(x2). Participants will have a choice from the following gift certificates: Midtown Plaza, restaurant of their choice, or the University of Saskatchewan Bookstore.

Questions: If at any time during participation you have any questions or concerns regarding the study, please feel free to email or phone the researchers. You are also free to contact the researchers at the numbers or email addresses provided above if you have questions at a later time. This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent to Participate: I have read and understand the description of the research study provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I agree to participate in the study described above, understanding that I may withdraw my consent to participate at any time.

Please print off a copy of this consent form for your records prior to proceeding to complete the survey.

Pressing the “continue” button will confirm that you have read the consent form and consent to participate.

Appendix L

Debriefing Form

The experience of moving from adolescence to adulthood

Thank you for your participation in our study. The purpose of this investigation is to better understand the experiences of students and non-students who are in the period of “emerging adulthood”. The term “emerging adulthood” was proposed by Arnett and includes young people between the ages of 18 to 25 (Arnett, 2006, 2000). Emerging adulthood is described as a time of intense identity exploration, instability, self-focused behaviour, feeling “in-between”, and having a large array of possibilities to choose from. Arnett indicates that experiences during emerging adulthood vary substantially from individual to individual, though the specific factors or contexts that foster such experiences are unclear (Arnett, 2006; Bynner, 2005; Cote & Bynner, 2008).

The purpose of this study is to explore development among a broad range of emerging adults from varying contexts, including both undergraduate and graduate students in addition to those individuals who have not attended any type of post-secondary education. The study will also explore additional factors that may help us understand how development differs between individuals during emerging adulthood, such as parenthood, marriage, and income. Of additional interest is the relationship between individual development and social and emotional outcomes, such as experiences of depression, anxiety, loneliness, life satisfaction, and risk taking behaviours.

Few studies have focused on non-university students or graduate students within EA. Thus, the information gathered will aid in our understanding of the developmental experiences among these little researched groups. The results are intended to help individuals working with emerging adults become aware of the unique needs of this population and, as a result, facilitate adaptive and positive development during the transition to adulthood. The results of this study will be included as part of the researcher’s dissertation project, as well as presented in academic journals and conference presentations.

If you have any questions about the study or anything else you experienced in the study please feel free to email the researchers (cdp717@mail.usask.ca or Patti.McDougall@usask.ca). If any questions come to mind at a later date, please feel free to contact us. As well, you may contact the Office of Research Services at (306) 966-4053 if you have any questions regarding your rights as a participant. If you experience negative emotions in completing this survey and need to speak to someone, you may contact the University of Saskatchewan’s Student Counselling Services (306-966-4920) if you are a university student, or Adult Mental Health Services (306-655-4100) if you are not a university student.

Thank you again for your help in conducting this study!

Appendix M

Skewness and Kurtosis of Quantitative Measures

Measure	Z-score of Skewness			Z-score of Kurtosis		
	Undergradu ate	Gradua te	Non- Universi ty	Undergradu ate	Gradua te	Non- Universi ty
IDEA						
Identity Exploration	-4.05	-1.92	-2.23	-0.97	-0.33	-0.19
Experimentation/Possibilities	-4.40	-1.11	-1.28	-2.24	-1.28	-1.12
Negativity/Instability	-4.19	-2.10	-1.78	-0.96	-0.36	-1.47
Other-Focused	3.20	-1.23	-0.57	-0.59	-1.06	-2.47
Self-Focused	-2.27	-1.70	-2.37	-1.26	0.02	0.35
Feeling In-Between	-6.10	-2.34	-4.08	0.22	0.65	-0.10
Criteria for adulthood						
Independence	-1.28	-0.33	-0.09	0.07	0.05	-1.79
Interdependence	0.98	0.12	0.26	-2.81	-1.66	-1.44
Role Transitions	0.82	1.18	0.89	-3.63	-1.20	-2.24
Norm Compliance	-3.12	-0.10	-2.37	-1.79	-1.86	-0.28
Biological Transitions	5.12	0.57	2.81	-1.65	-1.81	-1.52
Chronological Transitions	-1.64	-0.04	-0.43	-3.61	-1.41	-3.13
Family Capacities	-4.18	-1.25	-2.86	-2.85	-1.32	-1.04
Completion of Developmental Tasks						
Independence	3.59	0.71	-1.64	-0.61	-0.25	-1.63
Interdependence	3.26	0.81	-0.39	-2.43	-0.80	-2.63
Role Transitions	22.68	4.97	0.85	32.09	1.82	-2.67
Norm Compliance	-1.91	-1.15	-2.81	-3.16	-1.71	0.22
Family Capacities	7.61	1.85	-0.80	0.31	-0.95	-3.35
Rosenberg Self-Esteem Scale	-2.60	-0.89	0.22	0.50	0.60	-0.84
Beck Anxiety Inventory	7.77	4.29	4.89	1.73	2.75	1.36
UCLA Loneliness Scale	1.38	0.66	2.12	-3.16	-0.53	-1.42
Satisfaction with Life Scale	-4.68	-2.00	-3.01	-2.48	-1.22	-1.18
Risk and Reckless						

Behavior Questionnaire

Substance Use	30.06	12.61	14.06	39.68	19.31	14.38
Sexual Behaviour	22.01	12.45	10.99	27.04	24.79	12.62
Driving	12.62	6.55	6.82	8.08	7.90	4.92

Homogeneity of Variance for Quantitative Measures

Measure	Levene Statistic	<i>p</i>
IDEA		
Identity Exploration	.44	.64*
Experimentation/Possibilities	2.38	.09*
Negativity/Instability	4.04	.02
Other-Focused	7.78	.01
Self-Focused	1.03	.36*
Feeling In-Between	11.09	.01
Criteria for adulthood		
Independence	1.94	.14*
Interdependence	.54	.58*
Role Transitions	.50	.61*
Norm Compliance	3.39	.03
Biological Transitions	3.61	.03
Chronological Transitions	5.98	.01
Family Capacities	1.30	.27*
Completion of Developmental Tasks		
Independence	.81	.45*
Interdependence	2.27	.10*
Role Transitions	68.88	.01
Norm Compliance	1.14	.32*
Family Capacities	19.39	.01
Rosenberg Self-Esteem Scale	.19	.83*
Beck Anxiety Inventory	.91	.40*
UCLA Loneliness Scale	2.23	.11*
Satisfaction with Life Scale	.12	.89*
Risk and Reckless Behavior Questionnaire		
Substance Use	1.77	.17*
Sexual Behaviour	3.27	.04
Driving	4.71	.01

Note. * denotes a violation of homogeneity of variance.

Appendix N

Means and Adjusted Means for the domains of the IDEA (Status Group, Gender, and Age)

Means and Adjusted Means for the Identity Exploration Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 504)		Graduate students (n = 74)		Non-university participants (n = 149)		Total (N = 727)	
	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)
Male (n=170)	3.26 (.46)	3.24 (.05)	3.27 (.45)	3.37 (.13)	3.13 (.49)	3.22 (.08)	3.23 (.47)	3.27 (.04)
Female (n = 557)	3.34 (.46)	3.33 (.03)	3.34 (.49)	3.40 (.11)	3.20 (.52)	3.27 (.05)	3.31 (.48)	3.34 (.02)
Total	3.32 (.46)	3.28 (.03)	3.31 (.46)	3.38 (.10)	3.18 (.51)	3.24 (.05)	3.29 (.48)	3.23 (.03)

* Mean adjusted for age at the following value: Age = 21.49.

Means and Adjusted Means for the Experimentation/Possibilities Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 501)		Graduate students (n = 72)		Non-university participants (n = 149)		Total (N = 722)	
	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)	Mean (SD)	Adjusted Mean* (SD)
Male (n = 167)	3.38 (.46)	3.34 (.05)	3.32 (.45)	3.44 (.10)	3.09 (.52)	3.18 (.08)	3.31 (.49)	3.32 (.04)
Female (n = 555)	3.38 (.46)	3.33 (.03)	3.26 (.46)	3.39 (.07)	3.15 (.54)	3.25 (.05)	3.32 (.49)	3.32 (.03)
Total	3.38 (.46)	3.33 (.03)	3.28 (.46)	3.40 (.06)	3.14 (.49)	3.23 (.04)	3.32 (.49)	3.32 (.03)

Note. * Mean adjusted for age at the following values: Age = 21.50.

Means and Adjusted Means for the Negativity/Instability Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 506)		Graduate students (n = 74)		Non-university participants (n = 150)		Total (N = 730)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 562)	3.11 (.51)	3.10 (.03)	3.06 (.47)	3.06 (.12)	2.93 (.61)	2.99 (.06)	3.07 (.53)	3.05 (.03)
Male (n=168)	2.95 (.50)	2.94 (.06)	2.81 (.69)	2.78 (.15)	2.82 (.55)	2.86 (.10)	2.90 (.54)	2.89 (.05)
Total	3.08 (.51)	3.01 (.03)	2.99 (.56)	3.00 (.07)	2.90 (.60)	2.90 (.05)	3.03 (.54)	2.95 (.04)

* Mean adjusted for age at the following values: Age = 21.46.

Means and Adjusted Means for the Other Focused Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 508)		Graduate students (n = 74)		Non-university participants (n = 152)		Total (N = 734)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 564)	2.34 (.67)	2.43 (.04)	2.48 (.71)	2.34 (.16)	2.91 (.78)	2.79 (.08)	2.47 (.73)	2.49 (.04)
Male (n=170)	2.21 (.67)	2.29 (.07)	2.48 (.78)	2.34 (.19)	2.51 (.79)	2.40 (.12)	2.31 (.72)	2.31 (.06)
Total	2.31 (.67)	2.34 (.04)	2.48 (.73)	2.24 (.09)	2.81 (.80)	2.62 (.06)	2.43 (.73)	2.40 (.04)

* Mean adjusted for age at the following values: Age = 21.48.

Means and Adjusted Means for the Self Focused Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 503)		Graduate students (n = 73)		Non-university participants (n = 151)		Total (N = 727)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 558)	3.32 (.41)	3.31 (.02)	3.38 (.36)	3.31 (.10)	3.22 (.46)	3.23 (.05)	3.31 (.42)	3.30 (.03)
Male (n=160)	3.29 (.43)	3.29 (.04)	3.22 (.47)	3.14 (.12)	3.15 (.44)	3.15 (.08)	3.25 (.44)	3.25 (.04)
Total	3.31 (.41)	3.30 (.02)	3.33 (.40)	3.33 (.05)	3.21 (.46)	3.20 (.04)	3.29 (.42)	3.27 (.03)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Feeling In-Between Domain of the IDEA as a function of Status Group, Gender, and Age

	Undergraduate students (n = 502)		Graduate students (n = 74)		Non-university participants (n = 152)		Total (N = 728)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 559)	3.35 (.57)	3.31 (.04)	3.14 (.70)	3.34 (.14)	2.95 (.81)	3.13 (.07)	3.25 (.66)	3.25 (.04)
Male (n=169)	3.11 (.60)	3.06 (.06)	3.01 (.53)	3.26 (.18)	3.02 (.84)	3.22 (.11)	3.08 (.65)	3.09 (.05)
Total	3.30 (.58)	3.19 (.03)	3.10 (.65)	3.26 (.08)	2.97 (.81)	3.06 (.06)	3.21 (.66)	3.17 (.04)

* Mean adjusted for age at the following values: Age = 21.48.

Appendix O

Means and Adjusted Means for the subjective criteria for adulthood domains (Status Group, Gender and Age)

Means and Adjusted Means for the Independence domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 73)		Non-university participants (n = 145)		Total (N = 728)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Independence domain								
Female (n = 551)	3.06 (.40)	3.06 (.02)	3.10 (.38)	2.93 (.10)	3.18 (.45)	3.13 (.05)	3.09 (.41)	3.09 (.03)
Male (n=161)	3.02 (.42)	3.00 (.05)	2.93 (.53)	2.83 (.12)	3.12 (.45)	3.11 (.08)	3.03 (.44)	3.03 (.04)
Total (N = 728)	3.05 (.40)	3.04 (.02)	3.05 (.43)	3.00 (.05)	3.17 (.45)	3.13 (.04)	3.07 (.42)	3.06 (.03)

* Mean adjusted for age at the following values: Age = 21.46.

Means and Adjusted Means for the Role Transition domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

Role Transition domain	Undergraduate students (n = 494)		Graduate students (n = 74)		Non-university participants (n = 145)		Total (N = 713)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 551)	2.60 (.78)	2.54 (.05)	2.54 (.80)	2.25 (.18)	2.50 (.80)	2.49 (.09)	2.57 (.78)	2.58 (.05)
Male (n=162)	2.32 (.78)	2.25 (.09)	2.22 (.95)	1.98 (.23)	2.57 (.98)	2.58 (.15)	2.36 (.85)	2.37 (.07)
Total (N = 713)	2.54 (.79)	2.46 (.04)	2.44 (.85)	2.46 (.10)	2.52 (.84)	2.51 (.08)	2.52 (.80)	2.47 (.05)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Family domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 73)		Non-university participants (n = 145)		Total (N = 728)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 551)	3.01 (.84)	3.02 (.05)	2.82 (.88)	2.63 (.19)	3.15 (.76)	3.10 (.10)	3.02 (.83)	2.98 (.05)
Male (n=161)	2.92 (.82)	2.92 (.09)	2.78 (.92)	2.65 (.12)	3.33 (.70)	3.32 (.16)	2.99 (.83)	3.96 (.07)
Total	3.00 (.84)	3.00 (.05)	2.81 (.89)	2.76 (.24)	3.19 (.75)	3.15 (.09)	3.02 (.83)	2.97 (.05)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Interdependence domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 74)		Non-university participants (n = 144)		Total (N = 712)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 550)	2.68 (.68)	2.67 (.04)	2.79 (.69)	2.69 (.16)	2.73 (.67)	2.75 (.08)	2.70 (.68)	2.75 (.04)
Male (n=162)	2.60 (.64)	2.60 (.07)	2.79 (.83)	2.67 (.20)	2.81 (.81)	2.81 (.13)	2.67 (.71)	2.71 (.06)
Total (N = 712)	2.66 (.67)	2.65 (.04)	2.79 (.73)	2.80 (.09)	2.75 (.70)	2.75 (.06)	2.69 (.68)	2.73 (.04)

* Mean adjusted for age at the following values: Age = 21.47

Means and Adjusted Means for the Normative domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 74)		Non-university participants (n = 144)		Total (N = 712)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 550)	2.76 (.67)	2.74 (.04)	2.68 (.83)	2.42 (.16)	2.86 (.68)	2.81 (.08)	2.77 (.69)	2.80 (.04)
Male (n=162)	2.56 (.70)	2.49 (.08)	2.86 (.81)	2.76 (.20)	2.67 (.86)	2.73 (.13)	2.63 (.76)	2.65 (.06)
Total (N = 712)	2.72 (.68)	2.67 (.04)	2.74 (.82)	2.72 (.09)	2.81 (.73)	2.78 (.07)	2.74 (.70)	2.73 (.04)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Biological domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 74)		Non-university participants (n = 144)		Total (N = 712)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 550)	2.00 (.80)	1.96 (.05)	2.13 (.91)	1.95 (.19)	1.97 (.84)	1.94 (.10)	2.00 (.82)	2.08 (.05)
Male (n=162)	1.96 (.81)	1.92 (.09)	2.36 (.92)	2.17 (.24)	2.32 (.99)	2.28 (.16)	2.10 (.88)	2.16 (.07)
Total (N = 712)	1.99 (.80)	2.00 (.05)	2.20 (.91)	2.25 (.10)	2.05 (.89)	2.10 (.08)	2.02 (.83)	2.12 (.05)

* Mean adjusted for age at the following values: Age = 21.46.

Means and Adjusted Means for the Chronological domain of the Subjective Importance of the Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 494)		Graduate students (n = 73)		Non-university participants (n = 145)		Total (N = 712)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 551)	2.64 (.86)	2.59 (.05)	2.43 (.90)	2.13 (.20)	2.60 (.99)	2.67 (.10)	2.62 (.89)	2.65 (.05)
Male (n=161)	2.36 (.89)	2.30 (.10)	2.56 (.72)	2.28 (.25)	2.58 (1.08)	2.64 (.18)	2.43 (.92)	2.46 (.08)
Total	2.59 (.87)	2.49 (.05)	2.47 (.85)	2.54 (.12)	2.60 (1.01)	2.62 (.08)	2.58 (.90)	2.55 (.05)

* Mean adjusted for age at the following values: Age = 21.46.

Appendix P

Results tables for Interdependence, Normative, Biological and Chronological domains of the Subjective Importance of the Criteria for Adulthood (Status group, gender, age)

Interdependence domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Status Group	1.87	2	.94	2.00	.14
Gender	.18	1	.18	.38	.54
Error	331.48	708	.47		
<i>Model 2</i>					
Status Group	1.45	2	.72	1.550	.21
Gender	.18	1	.17	.381	.54
Age	.03	1	.03	.063	.80
Error	331.45	707	.47		
<i>Model 3</i>					
Status Group	.41	2	.20	.44	.65
Gender	.05	1	.05	.11	.75
Age	.18	1	.18	.39	.53
Status Group*Gender	.28	2	.14	.30	.74
Status Group*Age	.51	2	.26	.54	.58
Gender*Age	.05	1	.05	.11	.74
Error	330.30	702	.47		

Normative domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Status Group	1.08	2	.54	1.09	.34
Gender	2.70	1	2.70	5.47	.02
Error	348.81	708	.49		
<i>Model 2</i>					
Status Group	1.03	2	.51	1.04	.35
Gender	2.70	1	2.70	5.47	.02
Age	.06	1	.06	.11	.74
Error	348.76	707	.50		
<i>Model 3</i>					
Status Group	2.15	2	1.07	2.21	.11
Gender	1.27	1	1.27	2.60	.11
Age	.03	1	.03	.06	.81
Status Group*Gender	3.42	2	1.71	3.50	.03
Status Group*Age	2.77	2	1.39	2.84	.06
Gender*Age	1.46	1	1.46	2.99	.08
Error	342.79	702	.49		

Table 24

Biological domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Status Group	2.68	2	1.34	1.93	.15
Gender	.82	1	.82	1.18	.28
Error	491.66	708	.69		
<i>Model 2</i>					
Status Group	2.99	2	1.50	2.16	.12
Gender	.81	1	.81	1.17	.28
Age	.42	1	.42	.61	.44
Error	491.24	707	.70		
<i>Model 3</i>					
Status Group	2.98	2	1.49	2.16	.12
Gender	.01	1	.01	.02	.89
Age	.23	1	.23	.34	.56
Status Group*Gender	2.14	2	1.07	1.55	.21
Status Group*Age	4.21	2	2.11	3.06	.05
Gender*Age	.01	1	.01	.02	.90
Error	483.60	702	.69		

Chronological domain of the Subjective Importance of the Criteria for Adulthood as a Function of Status Group, Gender, and Age

	SS	df	MS	F	p
<i>Model 1</i>					
Status Group	.74	2	.37	.46	.63
Gender	4.13	1	4.13	5.13	.02
Error	568.29	708	.80		
<i>Model 2</i>					
Status Group	1.45	2	.72	.91	.41
Gender	4.21	1	4.21	5.28	.02
Age	4.50	1	4.50	5.65	.02
Error	563.78	707	.80		
<i>Model 3</i>					
Status Group	5.77	2	2.89	3.65	.03
Gender	.01	1	.01	.01	.93
Age	.01	1	.01	.02	.90
Status Group*Gender	2.16	2	1.05	1.33	.26
Status Group*Age	6.39	2	3.19	4.04	.02
Gender*Age	8.90	1	8.89	.000	.99
Error	554.45	702	.79		

Appendix Q

Means and Adjusted Means for the Completion of the Criteria for Adulthood (Status Group, Gender, and Age)

Means and Adjusted Means for the Independence domain of the Achieved Criteria for Adulthood as a function of Status Group, Gender and Age

	Undergraduate students (n = 484)		Graduate students (n = 74)		Non-university participants (n = 141)		Total (N = 699)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Independence domain								
Female (n = 540)	1.99 (.37)	2.05 (.02)	2.18 (.33)	1.93 (.08)	2.36 (.38)	2.24 (.04)	2.08 (.40)	2.10 (.02)
Male (n=159)	2.04 (.40)	2.09 (.04)	2.23 (.44)	2.05 (.10)	2.35 (.40)	2.26 (.07)	2.14 (.42)	2.14 (.03)
Total (N = 699)	2.00 (.38)	2.07 (.02)	2.20 (.36)	2.04 (.05)	2.36 (.39)	2.24 (.04)	2.09 (.40)	3.06 (.03)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Interdependence domain of the Achieved Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 484)		Graduate students (n = 74)		Non-university participants (n = 141)		Total (N = 699)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Interdependence domain								
Female (n = 540)	1.92 (.48)	1.98 (.03)	2.05 (.46)	1.90 (.11)	2.17 (.49)	2.10 (.05)	1.98 (.49)	2.01 (.03)
Male (n=159)	1.82 (.46)	1.85 (.05)	2.14 (.55)	2.06 (.14)	2.07 (.60)	2.06 (.09)	1.92 (.52)	1.93 (.04)
Total (N = 699)	1.90 (.47)	1.92 (.03)	2.08 (.49)	1.95 (.06)	2.14 (.52)	2.04 (.05)	1.97 (.49)	1.97 (.03)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Role Transition domain of Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 466)		Graduate students (n = 74)		Non-university participants (n = 141)		Total (N = 466)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Female (n = 527)	1.18 (.34)	1.24 (.02)	1.39 (.48)	1.15 (.09)	1.97 (.60)	1.74 (.05)	1.36 (.52)	1.38 (.04)
Male (n=154)	1.17 (.32)	1.22 (.05)	1.65 (.78)	1.44 (.11)	1.94 (.70)	1.72 (.08)	1.41 (.60)	1.46 (.05)
Total (N = 466)	1.18 (.34)	1.27 (.03)	1.47 (.60)	1.30 (.09)	1.96 (.62)	1.72 (.05)	1.37 (.54)	1.42 (.03)

* Mean adjusted for age at the following values: Age = 21.51.

Means and Adjusted Means for the Normative domain of the Achieved Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 483)		Graduate students (n = 74)		Non-university participants (n = 141)		Total (N = 698)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Normative domain								
Female (n = 539)	2.34 (.41)	2.37 (.02)	2.36 (.46)	2.23 (.10)	2.38 (.43)	2.34 (.05)	2.35 (.42)	2.34 (.03)
Male (n=159)	2.21 (.43)	2.23 (.05)	2.40 (.48)	2.41 (.12)	2.25 (.43)	2.24 (.08)	2.25 (.44)	2.24 (.04)
Total (N = 698)	2.31 (.41)	2.30 (.02)	2.37 (.41)	2.31 (.05)	2.35 (.43)	2.29 (.04)	2.32 (.42)	2.30 (.03)

* Mean adjusted for age at the following values: Age = 21.47.

Means and Adjusted Means for the Family domain of the Achieved Criteria for Adulthood as a function of Status Group, Gender, and Age

	Undergraduate students (n = 484)		Graduate students (n = 74)		Non-university participants (n = 141)		Total (N = 699)	
	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)	Mean (SD)	Adjusted Mean* (SE)
Family domain								
Female (n = 540)	1.56 (.54)	1.67 (.03)	1.83 (.55)	1.56 (.13)	2.13 (.70)	1.94 (.06)	1.70 (.62)	1.73 (.03)
Male (n=159)	1.58 (.54)	1.68 (.06)	2.05 (.56)	1.79 (.16)	2.07 (.80)	1.87 (.11)	1.75 (.64)	1.76 (.05)
Total (N = 699)	1.56 (.54)	1.67 (.03)	1.90 (.56)	1.62 (.07)	2.12 (.72)	1.93 (.05)	1.71 (.63)	1.87 (.03)

* Mean adjusted for age at the following values: Age = 21.47.

Appendix R

Results Tables for Family, Partner, Self and Leisure Personal Goal categories (Status group, Sex, Age)

Multivariate Models for the Family of Origin Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					.39
Graduate Students (Undergraduate = 0)	1.00	.50	.38	2.65	.99
Non-University Participants (Undergraduate = 0)	.54	.45	.22	1.31	.17
Gender (male = 0)	.71	.40	.33	1.56	.40
<i>Model 2</i>					
Status Group					.46
Graduate Students (Undergraduate = 0)	1.06	.57	.35	3.24	.92
Non-University Participants (Undergraduate = 0)	.57	.50	.21	1.51	.26
Gender (male = 0)	.71	.40	.33	1.57	.40
Age	.99	.07	.87	1.12	.85

Multivariate models for the Partner Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					.38
Graduate Students (Undergraduate = 0)	1.35	.32	.73	2.5	.34
Non-University Participants (Undergraduate = 0)	1.33	.24	.84	2.11	.23
Gender (male = 0)	1.13	.23	.72	1.77	.60
<i>Model 2</i>					
Status Group					.88
Graduate Students (Undergraduate = 0)	1.13	.36	.56	2.27	.74
Non-University Participants (Undergraduate = 0)	1.14	.27	.67	1.96	.63
Gender (male = 0)	1.13	.23	.72	1.3	.61
Age	1.04	.04	.97	1.126	.27

Multivariate Models for the Self Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					.82
Graduate Students (Undergraduate = 0)	1.00	.32	.54	1.87	.10
Non-University Participants (Undergraduate = 0)	1.15	.23	.74	1.80	.54
Gender (male = 0)	1.04	.22	.67	1.60	.86
<i>Model 2</i>					
Status Group					.60
Graduate Students (Undergraduate = 0)	1.17	.36	.58	2.37	.64
Non-University Participants (Undergraduate = 0)	1.30	.26	.78	2.16	.31
Gender (male = 0)	1.04	.22	.67	1.61	.87
Age	.97	.04	.90	1.04	.34

Multivariate Models for the Leisure Personal Goal Category

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Status Group					.87
Graduate Students (Undergraduate = 0)	1.03	.31	.56	1.89	.94
Non-University Participants (Undergraduate = 0)	1.12	.23	.72	1.75	.60
Gender (male = 0)	1.01	.22	.65	1.55	.98
<i>Model 2</i>					
Status Group					.84
Graduate Students (Undergraduate = 0)	1.07	.35	.54	2.13	.84
Non-University Participants (Undergraduate = 0)	1.16	.26	.70	1.93	.56
Gender (male = 0)	1.01	.22	.65	1.55	.98
Age	.99	.04	.92	1.06	.78

Appendix S

Means and Adjusted Means for the domains of the IDEA (Relationship Status, Parenthood, Employment Status, and Income)

Means and Adjusted Means for the Identity Exploration Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 581)	3.31(.47)	3.39(.06)
Committed relationship (n = 127)	3.20(.49)	3.33(.07)
Parenthood		
Parent (n = 30)	3.37(.43)	3.46(.10)
Non-parent (n = 678)	3.29(.48)	3.25(.04)
Employment Status		
Unemployed (n = 293)	3.35(.45)	3.40(.06)
Part-time employment (n = 285)	3.29(.46)	3.35(.06)
Full-time Employment (n = 130)	3.17(.54)	3.32(.08)
Income		
0 to \$20, 000 (n = 328)	3.34(.47)	3.38(.06)
\$21, 000 to \$40, 000 (n = 106)	3.29(.48)	3.38(.07)
\$41, 000+ (n = 274)	3.29(.48)	3.32(.06)

* Mean adjusted for age at the following values: Age = 21.51.

Means and Adjusted Means for the Self-Focused Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 581)	3.31(.42)	3.24(.07)
Committed relationship (n = 127)	3.23(.42)	3.18(.09)
Parenthood		
Parent (n = 31)	3.19(.44)	3.17(.12)
Non-parent (n = 677)	3.30(.42)	3.26(.05)
Employment Status		
Unemployed (n = 292)	3.31(.41)	3.18(.07)
Part-time employment (n = 285)	3.29(.44)	3.14(.08)
Full-time Employment (n = 131)	3.29(.42)	3.31(.09)
Income		
0 to \$20, 000 (n = 327)	3.32(.44)	3.19(.08)
\$21, 000 to \$40, 000 (n = 105)	3.27(.39)	3.21(.09)
\$41, 000+ (n = 276)	3.28(.42)	3.24(.07)

* Mean adjusted for age at the following values: Age = 21.21.

Means and Adjusted Means for the Feeling In-Between Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 583)	3.25(.63)	2.95(.10)
Committed relationship (n = 126)	2.98(.78)	2.69(.14)
Parenthood		
Parent (n = 30)	2.79(.96)	2.64(.19)
Non-parent (n = 679)	3.23(.64)	3.01(.07)
Employment Status		
Unemployed (n = 291)	3.27(.59)	2.80(.11)
Part-time employment (n = 286)	3.26(.65)	2.81(.12)
Full-time Employment (n = 132)	2.95(.76)	2.85(.13)
Income		
0 to \$20, 000 (n = 328)	3.29(.60)	2.92(.11)
\$21, 000 to \$40, 000 (n = 105)	3.09(.68)	2.76(.13)
\$41, 000+ (n = 276)	3.14(.71)	2.79(.11)

* Mean adjusted for age at the following values: Age = 21.50.

Means and Adjusted Means for the Experimentation/Possibilities Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 577)	3.37(.47) ^a	3.36(.06) ^a
Committed relationship (n = 127)	3.08(.48) ^b	3.21(.06) ^b
Parenthood		
Parent (n = 31)	3.12(.46)	3.31(.10)
Non-parent (n = 673)	3.33(.48)	3.26(.04)
Employment Status		
Unemployed (n = 291)	3.38(.45)	3.29(.06)
Part-time employment (n = 283)	3.33(.48)	3.28(.06)
Full-time Employment (n = 130)	3.15(.54)	3.29(.08)
Income		
0 to \$20, 000 (n = 325)	3.37(.46)	3.30(.06)
\$21, 000 to \$40, 000 (n = 106)	3.30(.49)	3.28(.07)
\$41, 000+ (n = 273)	3.26(.51)	3.28(.06)

* Mean adjusted for age at the following values: Age = 21.53.

Note: different letters denotes significant differences between means.

Means and Adjusted Means for the Negativity/Instability Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 583)	3.06(.53)	2.92(.09)
Committed relationship (n = 128)	2.90(.58)	3.05(.12)
Parenthood		
Parent (n = 31)	2.91(.57)	2.98(.15)
Non-parent (n = 680)	3.04(.54)	2.99(.06)
Employment Status		
Unemployed (n = 293)	3.06(.52) ^a	3.01(.09) ^a
Part-time employment (n = 288)	3.11(.53) ^a	3.12(.10) ^a
Full-time Employment (n = 130)	2.79(.55) ^b	2.82(.11) ^b
Income		
0 to \$20, 000 (n = 329)	3.10(.53)	3.10(.10)
\$21, 000 to \$40, 000 (n = 105)	2.97(.54)	2.98(.11)
\$41, 000+ (n = 277)	2.97(.55)	2.88(.09)

* Mean adjusted for age at the following values: Age = 21.48.

Means and Adjusted Means for the Other-Focused Domain of the IDEA as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 587)	2.30(.67)	2.73(.10)
Committed relationship (n = 128)	3.07(.69)	3.23(.14)
Parenthood		
Parent (n = 31)	3.48(.52)	3.38(.19)
Non-parent (n = 684)	2.39(.70)	2.58(.07)
Employment Status		
Unemployed (n = 295)	2.30(.71)	2.84(.11)
Part-time employment (n = 288)	2.42(.70)	2.98(.12)
Full-time Employment (n = 132)	2.76(.76)	3.12(.14)
Income		
0 to \$20, 000 (n = 331)	2.41(.62)	3.12(.12)
\$21, 000 to \$40, 000 (n = 106)	2.53(.75)	3.09(.13)
\$41, 000+ (n = 278)	2.43(.78)	2.73(.11)

* Mean adjusted for age at the following values: Age = 21.50.

Appendix T

Results tables for the IDEA domains (Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age)

Identity Exploration Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.72	1	.72	3.21	.07
Parenthood	.78	1	.78	3.51	.06
Employment Status	.73	2	.37	1.66	.20
Income	.58	2	.29	1.30	.27
Status Group	.49	2	.25	1.11	.33
Gender	.83	1	.83	3.74	.05
Error	155.82	698	.22		
<i>Model 2</i>					
Relationship Status	.27	1	.27	1.22	.27
Parenthood	.99	1	.99	4.43	.04
Employment Status	.48	2	.24	1.08	.34
Income	.47	2	.23	1.05	.35
Status Group	.85	2	.43	1.91	.15
Gender	.73	1	.73	3.27	.07
Age	.86	1	.86	3.88	.05
Error	154.96	697	.22		
<i>Model 3</i>					
Relationship Status	.18	1	.18	.83	.36
Parenthood	.10	1	.10	.46	.50
Employment Status	.61	2	.31	1.40	.25
Income	.70	2	.35	1.60	.20
Status Group	.14	2	.07	.31	.73
Gender	.02	1	.02	.10	.76
Age	.01	1	.01	.06	.81
Relationship Status*Status Group	.16	2	.08	.37	.70
Relationship Status*Gender	.02	1	.02	.09	.77
Relationship Status*Age	.17	1	.17	.76	.39
Parenthood*Age	.20	1	.20	.92	.34
Employment Status*Status Group	.99	4	.25	1.13	.34
Employment Status*Gender	1.10	2	.55	2.50	.08
Employment Status*Age	.55	2	.28	1.25	.29
Income*Status Group	.77	4	.19	.88	.48
Income*Gender	.55	2	.27	1.24	.29
Income*Age	.94	2	.47	2.13	.12
Error	148.58	676	.22		

Self-Focused Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.48	1	.48	2.73	.10
Parenthood	.00	1	.00	.01	.93
Employment Status	1.43	2	.72	4.10	.02
Income	.13	2	.06	.36	.70
Status Group	1.97	2	.99	5.65	<.01
Gender	.64	1	.64	3.64	.06
Error	121.77	698	.17		
<i>Model 2</i>					
Relationship Status	.46	1	.46	2.60	.11
Parenthood	.00	1	.00	.01	.95
Employment Status	1.40	2	.70	3.99	.02
Income	.13	2	.06	.37	.69
Status Group	1.97	2	.99	5.64	<.01
Gender	.64	1	.64	3.66	.06
Age	.00	1	.00	.02	.89
Error	121.77	697	.18		
<i>Model 3</i>					
Relationship Status	.01	1	.01	.03	.86
Parenthood	.25	1	.25	1.45	.23
Employment Status	.69	2	.35	1.97	.14
Income	.10	2	.05	.29	.75
Status Group	1.77	2	.89	5.04	<.01
Gender	.09	1	.09	.49	.48
Age	.24	1	.24	1.38	.24
Relationship Status*Status Group	.29	2	.15	.84	.43
Relationship Status*Gender	.01	1	.01	.08	.78
Relationship Status*Age	.00	1	.00	.00	.95
Parenthood*Age	.27	1	.27	1.55	.21
Employment Status*Status Group	.48	4	.12	.68	.61
Employment Status*Gender	.09	2	.04	.24	.78
Employment Status*Age	.56	2	.28	1.61	.20
Income*Status Group	.21	4	.05	.30	.88
Income*Gender	.32	2	.16	.92	.40
Income*Age	.11	2	.06	.31	.73
Error	118.58	676	.18		

Feeling In-Between Domain of the IDEA as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	1.55	1	1.55	3.79	.05
Parenthood	2.45	1	2.45	5.99	.02
Employment Status	1.08	2	.54	1.33	.27
Income	1.00	2	.50	1.22	.30
Status Group	1.85	2	.93	2.27	.10
Gender	3.68	1	3.68	9.00	<.01
Error	285.81	699	.41		
<i>Model 2</i>					
Relationship Status	.08	1	.08	.21	.65
Parenthood	1.42	1	1.42	3.57	.06
Employment Status	.46	2	.23	.58	.56
Income	.75	2	.38	.95	.39
Status Group	.29	2	.15	.37	.69
Gender	3.00	1	3.00	7.55	<.01
Age	8.65	1	8.65	21.79	<.001
Error	277.16	698	.40		
<i>Model 3</i>					
Relationship Status	3.26	1	3.26	8.52	.11
Parenthood	.34	1	.34	.89	.35
Employment Status	1.50	2	.75	1.95	.14
Income	2.72	2	1.36	3.55	.03
Status Group	.42	2	.21	.55	.58
Gender	2.84	1	2.84	7.40	.01
Age	.03	1	.03	.08	.77
Relationship Status*Status Group	1.15	2	.57	1.50	.22
Relationship Status*Gender	.60	1	.60	1.56	.21
Relationship Status*Age	3.21	1	3.21	8.38	.11
Parenthood*Age	.17	1	.17	.45	.50
Employment Status*Status Group	3.59	4	.90	2.34	.05
Employment Status*Gender	1.46	2	.73	1.90	.15
Employment Status*Age	1.58	2	.79	2.07	.13
Income*Status Group	2.78	4	.70	1.82	.12
Income*Gender	.37	2	.19	.49	.61
Income*Age	3.15	2	1.57	4.11	.02
Error	259.32	677	.38		

Appendix U

Means and Adjusted Means for the Subjective Importance of the Criteria for Adulthood domains (Relationship Status, Parenthood, Employment Status, and Income)

Means and Adjusted Means for the Independence Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 567)	3.05(.42)	2.99(.07)
Committed relationship (n = 127)	3.19(.40)	3.08(.09)
Parenthood		
Parent (n = 30)	3.26(.44)	2.99(.12)
Non-parent (n = 664)	3.07(.42)	3.07(.05)
Employment Status		
Unemployed (n = 288)	3.05(.42)	3.08(.07)
Part-time employment (n = 277)	3.06(.41)	2.93(.08)
Full-time Employment (n = 129)	3.15(.44)	3.09(.09)
Income		
0 to \$20, 000 (n = 318)	3.06(.41)	3.07(.08)
\$21, 000 to \$40, 000 (n = 103)	3.07(.49)	2.99(.09)
\$41, 000+ (n = 273)	3.09(.40)	3.04(.07)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Interdependence Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 567)	2.67(.68)	2.72(.11)
Committed relationship (n = 127)	2.80(.71)	2.94(.15)
Parenthood		
Parent (n = 31)	2.83(.66)	2.87(.20)
Non-parent (n = 663)	2.69(.69)	2.79(.08)
Employment Status		
Unemployed (n = 288)	2.72(.70)	2.81(.12)
Part-time employment (n = 278)	2.65(.66)	2.72(.13)
Full-time Employment (n = 128)	2.74(.71)	2.96(.15)
Income		
0 to \$20, 000 (n = 317)	2.66(.69)	2.92(.13)
\$21, 000 to \$40, 000 (n = 103)	2.76(.75)	2.81(.14)
\$41, 000+ (n = 274)	2.70(.66)	2.77(.12)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Role Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 568)	2.51(.80)	2.28(.13)
Committed relationship (n = 127)	2.57(.82)	2.40(.18)
Parenthood		
Parent (n = 31)	2.43(.74)	2.26(.23)
Non-parent (n = 664)	2.53(.81)	2.43(.09)
Employment Status		
Unemployed (n = 288)	2.54(.79)	2.38(.14)
Part-time employment (n = 278)	2.52(.80)	2.32(.15)
Full-time Employment (n = 129)	2.48(.84)	2.33(.17)
Income		
0 to \$20, 000 (n = 318)	2.52(.79)	2.42(.15)
\$21, 000 to \$40, 000 (n = 103)	2.51(.85)	2.28(.17)
\$41, 000+ (n = 274)	2.54(.80)	2.34(.14)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Normative Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 567)	2.75(.70)	2.81(.12)
Committed relationship (n = 127)	2.71(.71)	2.52(.15)
Parenthood		
Parent (n = 31)	2.90(.61)	2.75(.20)
Non-parent (n = 663)	2.73(.71)	2.58(.08)
Employment Status		
Unemployed (n = 288)	2.77(.68)	2.66(.12)
Part-time employment (n = 278)	2.71(.71)	2.65(.13)
Full-time Employment (n = 128)	2.74(.73)	2.68(.15)
Income		
0 to \$20, 000 (n = 317)	2.77(.71)	2.78(.13)
\$21, 000 to \$40, 000 (n = 103)	2.84(.71)	2.69(.15)
\$41, 000+ (n = 274)	2.68(.69)	2.52(.12)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Biological Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 568)	2.03(.82)	1.93(.14)
Committed relationship (n = 126)	2.05(.88)	1.88(.18)
Parenthood		
Parent (n = 31)	1.87(.97)	1.84(.24)
Non-parent (n = 663)	2.04(.83)	1.97(.09)
Employment Status		
Unemployed (n = 288)	2.08(.86)	1.92(.15)
Part-time employment (n = 278)	1.97(.80)	1.90(.16)
Full-time Employment (n = 128)	2.06(.84)	1.90(.18)
Income		
0 to \$20, 000 (n = 318)	2.04(.84)	2.00(.15)
\$21, 000 to \$40, 000 (n = 103)	2.01(.85)	1.86(.18)
\$41, 000+ (n = 273)	2.03(.83)	1.86(.15)

* Mean adjusted for age at the following values: Age = 21.49.

Means and Adjusted Means for the Chronological Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 567)	2.58(.89)	2.49(.15)
Committed relationship (n = 127)	2.55(.95)	2.39(.20)
Parenthood		
Parent (n = 31)	2.41(.92)	2.40(.26)
Non-parent (n = 663)	2.58(.90)	2.48(.10)
Employment Status		
Unemployed (n = 288)	2.60(.93)	2.33(.16)
Part-time employment (n = 278)	2.57(.85)	2.46(.17)
Full-time Employment (n = 128)	2.55(.95)	2.53(.16)
Income		
0 to \$20, 000 (n = 317)	2.56(.88)	2.44(.17)
\$21, 000 to \$40, 000 (n = 103)	2.56(.91)	2.33(.19)
\$41, 000+ (n = 274)	2.61(.92)	2.55(.16)

* Mean adjusted for age at the following values: Age = 21.48.

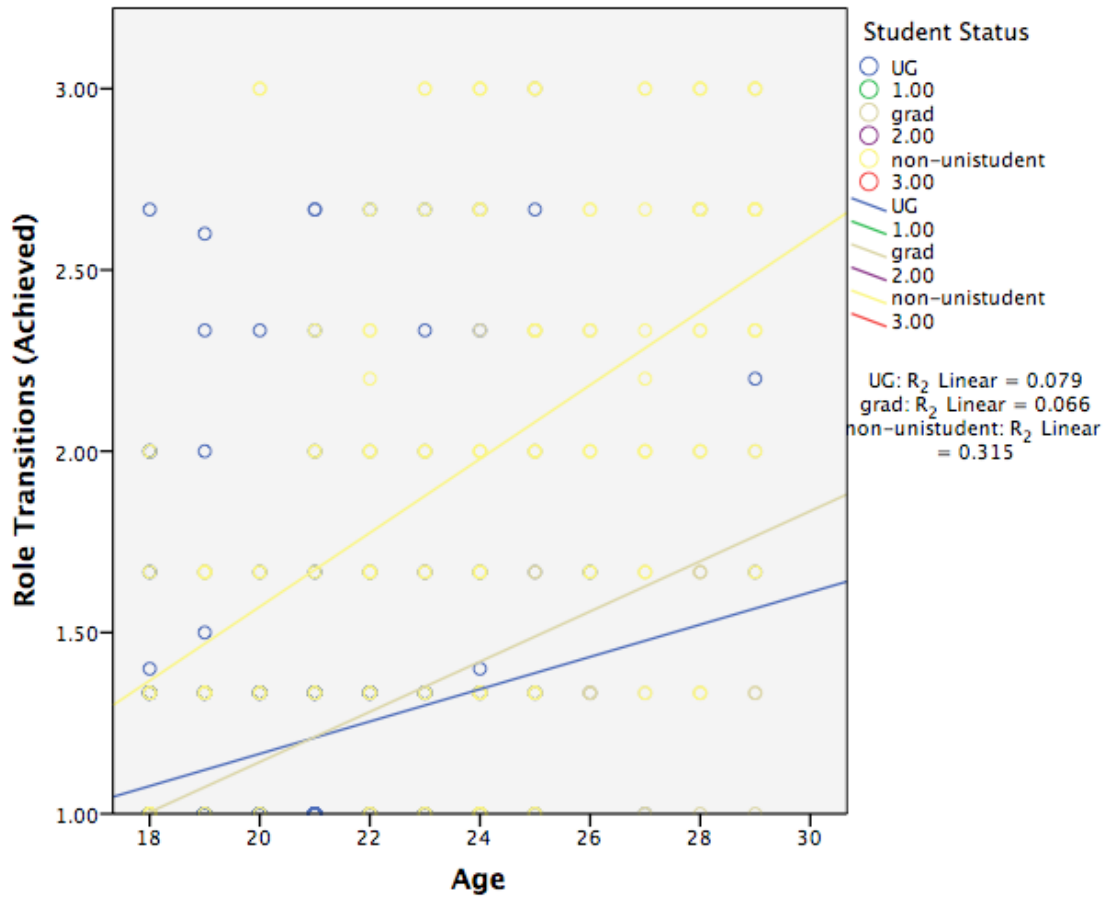
Means and Adjusted Means for the Family Capacities Domain of the Subjective Importance of the Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 567)	2.98(.84)	3.10(.14)
Committed relationship (n = 126)	3.15(.80)	3.13(.18)
Parenthood		
Parent (n = 31)	3.43(.75)	3.27(.24)
Non-parent (n = 662)	3.00(.83)	2.96(.09)
Employment Status		
Unemployed (n = 288)	3.00(.84)	3.10(.15)
Part-time employment (n = 278)	3.02(.81)	3.18(.16)
Full-time Employment (n = 127)	3.03(.87)	3.07(.18)
Income		
0 to \$20, 000 (n = 316)	3.00(.86)	3.15(.15)
\$21, 000 to \$40, 000 (n = 103)	3.07(.83)	3.13(.17)
\$41, 000+ (n = 274)	3.02(.79)	3.06(.15)

* Mean adjusted for age at the following values: Age = 21.50.

Appendix V

Interaction between Student Status, Age and Mean Scores on the Role Transitions Domain for the Achieved Criteria for Adulthood



Appendix W

**Results Tables for the Subjective Importance of the Criteria for Adulthood Domains
(relationship status, parenthood, employment status, income, status group, gender, and
age)**

*Independence Domain of the Subjective Importance of the Criteria for Adulthood as a Function
of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age*

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	1.10	1	1.10	6.39	.01
Parenthood	.08	1	.08	.47	.50
Employment Status	.01	2	.01	.03	.97
Income	.06	2	.03	.18	.83
Status Group	.37	2	.19	1.08	.34
Sex	.29	1	.29	1.66	.20
Error	117.85	684	.17		
<i>Model 2</i>					
Relationship Status	.80	1	.80	4.63	.03
Parenthood	.06	1	.06	.33	.57
Employment Status	.01	2	.00	.02	.98
Income	.08	2	.04	.22	.80
Status Group	.37	2	.19	1.07	.35
Sex	.31	1	.31	1.77	.18
Age	.11	1	.11	.61	.43
Error	117.74	683	.17		
<i>Model 3</i>					
Relationship Status	.24	1	.24	1.39	.24
Parenthood	.24	1	.24	1.42	.24
Employment Status	1.59	2	.79	4.68	.01
Income	.24	2	.12	.70	.50
Status Group	.35	2	.18	1.05	.35
Sex	.03	1	.03	.17	.68
Age	.56	1	.56	3.31	.07
Relationship Status*Status Group	.21	2	.11	.62	.54
Relationship Status*Sex	.09	1	.09	.51	.48
Relationship Status*Age	.41	1	.41	2.42	.12
Parenthood*Age	.26	1	.26	1.54	.22
Employment Status*Status Group	1.28	4	.32	1.89	.11
Employment Status*Sex	.67	2	.33	1.97	.14
Employment Status*Age	1.29	2	.64	3.81	.02
Income*Status Group	.32	4	.08	.47	.76
Income*Sex	.36	2	.18	1.07	.34

Income*Age	.34	2	.17	1.01	.37
Error	112.08	662	.17		

Interdependence Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Sex, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.61	1	.61	1.29	.26
Parenthood	.15	1	.15	.31	.58
Employment Status	1.06	2	.53	1.13	.32
Income	.66	2	.33	.71	.49
Status Group	1.49	2	.74	1.58	.21
Sex	.29	1	.29	.63	.43
Error	321.29	684	.47		
<i>Model 2</i>					
Relationship Status	.79	1	.79	1.68	.20
Parenthood	.19	1	.19	.41	.52
Employment Status	.96	2	.48	1.02	.36
Income	.70	2	.35	.74	.48
Status Group	1.68	2	.84	1.79	.17
Gender	.27	1	.27	.57	.45
Age	.22	1	.22	.47	.49
Error	321.07	683	.47		
<i>Model 3</i>					
Relationship Status	.25	1	.25	.54	.46
Parenthood	.00	1	.00	.00	.24
Employment Status	.46	2	.23	.49	.61
Income	.01	2	.01	.01	.99
Status Group	.87	2	.43	.93	.40
Gender	.07	1	.07	.14	.71
Age	.07	1	.07	.14	.71
Relationship Status*Status Group	.77	2	.39	.82	.44
Relationship Status*Gender	.32	1	.32	.67	.41
Relationship Status*Age	.12	1	.12	.26	.61
Parenthood*Age	.00	1	.00	.01	.93
Employment Status*Status Group	1.11	4	.28	.59	.67
Employment Status*Gender	4.13	2	2.06	4.40	.01
Employment Status*Age	.23	2	.11	.24	.79
Income*Status Group	2.72	4	.68	1.45	.22
Income*Gender	.44	2	.22	.46	.63
Income*Age	.00	2	.00	.00	.91
Error	310.49	662	.47		

Role Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.32	1	.32	.50	.48
Parenthood	.70	1	.70	1.08	.30
Employment Status	.35	2	.17	.27	.77
Income	.07	2	.04	.05	.95
Status Group	.48	2	.24	.37	.69
Gender	5.52	1	5.52	8.53	<.01
Error	443.20	685	.65		
<i>Model 2</i>					
Relationship Status	.89	1	.89	1.37	.24
Parenthood	.46	1	.46	.71	.40
Employment Status	.13	2	.07	.10	.90
Income	.13	2	.07	.10	.90
Status Group	.33	2	.16	.25	.78
Gender	5.20	1	5.20	8.05	<.01
Age	1.62	1	1.62	2.50	.11
Error	441.58	684	.65		
<i>Model 3</i>					
Relationship Status	.04	1	.04	.06	.81
Parenthood	.16	1	.16	.25	.62
Employment Status	4.30	2	2.15	3.37	.04
Income	1.63	2	.82	1.28	.28
Status Group	.05	2	.03	.04	.96
Gender	2.78	1	2.78	4.35	.04
Age	.17	1	.17	.27	.61
Relationship Status*Status Group	.21	2	.11	.16	.85
Relationship Status*Gender	.36	1	.36	.56	.46
Relationship Status*Age	.01	1	.01	.02	.90
Parenthood*Age	.12	1	.12	.19	.67
Employment Status*Status Group	3.69	4	.92	1.45	.22
Employment Status*Gender	4.21	2	2.10	3.30	.04
Employment Status*Age	4.54	2	2.27	3.56	.03
Income*Status Group	1.63	4	.41	.64	.63
Income*Gender	1.43	2	.71	1.12	.33
Income*Age	2.12	2	1.06	1.66	.19
Error	422.92	663	.64		

Normative Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.62	1	.62	1.26	.26
Parenthood	.64	1	.64	1.31	.25
Employment Status	1.06	2	.53	1.08	.34
Income	2.13	2	1.06	2.18	.11
Status Group	1.77	2	.88	1.80	.17
Gender	3.01	1	3.01	6.16	.01
Error	334.61	684	.49		
<i>Model 2</i>					
Relationship Status	.75	1	.75	1.54	.22
Parenthood	.56	1	.56	1.14	.29
Employment Status	1.16	2	.58	1.18	.31
Income	2.18	2	1.09	2.23	.11
Status Group	1.34	2	.67	1.37	.26
Gender	3.07	1	3.07	6.27	.01
Age	.15	1	.15	.30	.58
Error	334.46	683	.49		
<i>Model 3</i>					
Relationship Status	.80	1	.80	1.65	.20
Parenthood	.21	1	.21	.43	.51
Employment Status	.78	2	.39	.80	.45
Income	1.05	2	.53	1.08	.34
Status Group	1.85	2	.92	1.90	.15
Gender	1.61	1	1.61	3.31	.07
Age	.11	1	.11	.24	.63
Relationship Status*Status Group	3.94	2	1.97	4.06	.02
Relationship Status*Gender	.28	1	.28	.58	.45
Relationship Status*Age	.54	1	.54	1.10	.29
Parenthood*Age	.17	1	.17	.35	.56
Employment Status*Status Group	.48	4	.12	.25	.91
Employment Status*Gender	.61	2	.31	.63	.53
Employment Status*Age	.84	2	.42	.87	.42
Income*Status Group	3.58	4	.90	1.84	.12
Income*Gender	.36	2	.18	.37	.69
Income*Age	1.04	2	.52	1.07	.34
Error	321.44	662	.49		

Biological Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.05	1	.05	.08	.78
Parenthood	1.05	1	1.05	1.52	.22
Employment Status	1.19	2	.60	.86	.43
Income	.38	2	.19	.27	.76
Status Group	3.22	2	1.61	2.32	.10
Gender	.22	1	.22	.32	.57
Error	474.70	684	.69		
<i>Model 2</i>					
Relationship Status	.11	1	.11	.16	.69
Parenthood	.95	1	.95	1.37	.24
Employment Status	1.08	2	.54	.78	.46
Income	.37	2	.19	.27	.76
Status Group	3.08	2	1.54	2.22	.11
Gender	.24	1	.24	.35	.56
Age	.13	1	.13	.19	.66
Error	474.56	683	.70		
<i>Model 3</i>					
Relationship Status	.69	1	.69	1.00	.32
Parenthood	.02	1	.02	.02	.88
Employment Status	3.09	2	1.55	2.24	.11
Income	1.14	2	.57	.82	.44
Status Group	1.01	2	.51	.73	.48
Gender	.59	1	.59	.85	.36
Age	.04	1	.04	.06	.81
Relationship Status*Status Group	.30	2	.15	.22	.81
Relationship Status*Gender	.07	1	.07	.11	.74
Relationship Status*Age	.81	1	.81	1.17	.28
Parenthood*Age	.00	1	.00	.01	.94
Employment Status*Status Group	4.69	4	1.17	1.70	.15
Employment Status*Gender	1.83	2	.92	1.33	.27
Employment Status*Age	3.36	2	1.68	2.44	.09
Income*Status Group	2.18	4	.54	.79	.53
Income*Gender	.09	2	.05	.07	.94
Income*Age	.90	2	.45	.65	.52
Error	456.24	662	.69		

Chronological Transitions Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	.07	1	.07	.09	.77
Parenthood	1.70	1	1.70	2.11	.15
Employment Status	.67	2	.34	.42	.66
Income	.98	2	.49	.61	.54
Status Group	1.34	2	.67	.83	.44
Gender	5.44	1	5.44	6.73	.01
Error	552.25	684	.81		
<i>Model 2</i>					
Relationship Status	.17	1	.17	.21	.65
Parenthood	1.09	1	1.09	1.36	.24
Employment Status	.23	2	.12	.14	.87
Income	1.35	2	.68	.84	.43
Status Group	1.41	2	.70	.88	.42
Gender	4.95	1	4.95	6.17	.01
Age	4.37	1	4.37	5.44	.02
Error	547.88	683	.80		
<i>Model 3</i>					
Relationship Status	.13	1	.13	.16	.69
Parenthood	.44	1	.44	.54	.46
Employment Status	.91	2	.46	.56	.57
Income	3.88	2	1.94	2.39	.09
Status Group	1.05	2	.53	.65	.52
Gender	2.00	1	2.00	2.47	.12
Age	1.78	1	1.78	2.20	.14
Relationship Status*Status Group	1.09	2	.54	.67	.51
Relationship Status*Gender	.15	1	.15	.18	.67
Relationship Status*Age	.09	1	.09	.12	.73
Parenthood*Age	.68	1	.68	.84	.36
Employment Status*Status Group	2.27	4	.57	.70	.59
Employment Status*Gender	2.25	2	1.12	1.39	.25
Employment Status*Age	.83	2	.42	.51	.60
Income*Status Group	1.66	4	.42	.51	.73
Income*Gender	.05	2	.03	.03	.97
Income*Age	3.82	2	1.91	2.35	.10
Error	536.45	662	.81		

Family Capacities Domain of the Subjective Importance of the Criteria for Adulthood as a Function of Relationship Status, Parenthood, Employment Status, Income, Status Group, Gender, and Age

	SS	df	MS	F	<i>p</i>
<i>Model 1</i>					
Relationship Status	1.30	1	1.30	1.92	.17
Parenthood	1.40	1	1.40	2.06	.15
Employment Status	2.09	2	1.04	1.54	.22
Income	.81	2	.40	.60	.55
Status Group	6.65	2	3.32	4.90	.01
Gender	.00	1	.00	.00	.95
Error	463.55	683	.68		
<i>Model 2</i>					
Relationship Status	.81	1	.81	1.20	.27
Parenthood	1.23	1	1.23	1.81	.18
Employment Status	2.27	2	1.13	1.67	.19
Income	.84	2	.42	.62	.54
Status Group	6.95	2	3.47	5.11	<.01
Gender	.00	1	.00	.00	.98
Age	.31	1	.31	.46	.50
Error	463.24	682	.68		
<i>Model 3</i>					
Relationship Status	.53	1	.53	.78	.38
Parenthood	.31	1	.31	.45	.50
Employment Status	.44	2	.22	.32	.73
Income	1.31	2	.66	.96	.38
Status Group	5.44	2	2.72	3.98	.02
Gender	.65	1	.65	.95	.33
Age	.02	1	.02	.02	.88
Relationship Status*Status Group	.61	2	.31	.45	.64
Relationship Status*Gender	.28	1	.28	.41	.52
Relationship Status*Age	.76	1	.76	1.11	.29
Parenthood*Age	.17	1	.17	.26	.61
Employment Status*Status Group	1.32	4	.33	.48	.75
Employment Status*Gender	.69	2	.35	.51	.60
Employment Status*Age	.66	2	.33	.48	.62
Income*Status Group	1.22	4	.31	.45	.78
Income*Gender	1.69	2	.84	1.24	.29
Income*Age	1.62	2	.81	1.19	.31
Error	451.50	661	.68		

Appendix X

**Means and Adjusted Means for the Achievement of the Criteria for Adulthood Domains
(Relationship Status, Parenthood, Employment Status, and Income)**

*Means and Adjusted Means for the Independence Domain the Achieved Criteria for Adulthood
as a function of Relationship Status, Parenthood, Employment Status, and Income*

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 557)	2.03(.38)	2.22(.06)
Committed relationship (n = 124)	2.41(.36)	2.39(.08)
Parenthood		
Parent (n = 31)	2.50(.30)	2.41(.10)
Non-parent (n = 650)	2.07(.40)	2.19(.04)
Employment Status		
Unemployed (n = 280)	2.03(.39)	2.26(.06)
Part-time employment (n = 274)	2.04(.39)	2.23(.07)
Full-time Employment (n = 127)	2.37(.36)	2.42(.08)
Income		
0 to \$20, 000 (n = 308)	2.05(.38)	2.32(.06)
\$21, 000 to \$40, 000 (n = 101)	2.20(.44)	2.34(.07)
\$41, 000+ (n = 272)	2.11(.42)	2.25(.06)

* Mean adjusted for age at the following values: Age = 21.50.

Table X

Means and Adjusted Means for the Interdependence Domain the Achieved Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 557)	1.87(.45)	2.13(.07)
Committed relationship (n = 124)	2.44(.39)	2.51(.10)
Parenthood		
Parent (n = 31)	2.42(.40)	2.48(.13)
Non-parent (n = 650)	1.95(.49)	2.15(.05)
Employment Status		
Unemployed (n = 280)	1.88(.48)	2.27(.08)
Part-time employment (n = 274)	1.98(.49)	2.30(.08)
Full-time Employment (n = 127)	2.13(.51)	2.39(.09)
Income		
0 to \$20, 000 (n = 308)	1.94(.46)	2.32(.08)
\$21, 000 to \$40, 000 (n = 101)	2.02(.52)	2.36(.09)
\$41, 000+ (n = 272)	1.98(.52)	2.26(.08)

* Mean adjusted for age at the following values: Age = 21.50.

Means and Adjusted Means for the Role Transitions Domain the Achieved Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 540)	1.26(.44)	1.72(.06)
Committed relationship (n = 123)	1.90(.65)	1.84(.08)
Parenthood		
Parent (n = 31)	2.38(.49)	2.10(.11)
Non-parent (n = 632)	1.33(.50)	1.46(.04)
Employment Status		
Unemployed (n = 274)	1.18(.38)	1.64(.07)
Part-time employment (n = 265)	1.28(.45)	1.67(.07)
Full-time Employment (n = 124)	1.99(.59)	2.02(.08)
Income		
0 to \$20, 000 (n = 299)	1.23(.42)	1.80(.07)
\$21, 000 to \$40, 000 (n = 97)	1.45(.53)	1.75(.08)
\$41, 000+ (n = 267)	1.52(.63)	1.78(.07)

* Mean adjusted for age at the following values: Age = 21.54.

Means and Adjusted Means for the Normative Transitions Domain the Achieved Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 556)	2.30(.43)	2.35(.07)
Committed relationship (n = 124)	2.43(.38)	2.38(.09)
Parenthood		
Parent (n = 31)	2.51(.40)	2.41(.12)
Non-parent (n = 649)	2.31(.42)	2.32(.05)
Employment Status		
Unemployed (n = 280)	2.31(.43)	2.32(.07)
Part-time employment (n = 273)	2.33(.42)	2.38(.08)
Full-time Employment (n = 127)	2.35(.40)	2.39(.09)
Income		
0 to \$20, 000 (n = 307)	2.32(.44)	2.42(.08)
\$21, 000 to \$40, 000 (n = 101)	2.39(.45)	2.39(.09)
\$41, 000+ (n = 272)	2.30(.40)	2.29(.07)

* Mean adjusted for age at the following values: Age = 21.50.

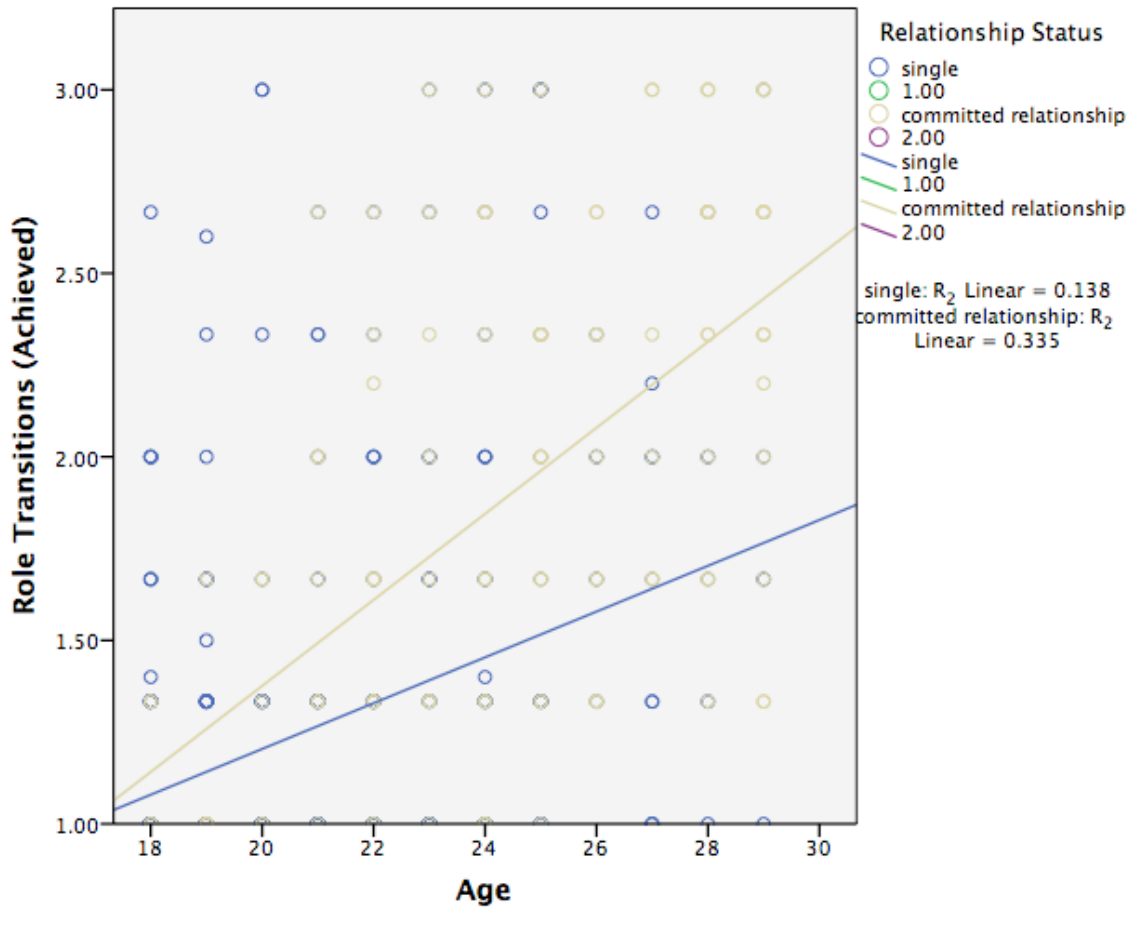
Means and Adjusted Means for the Family Capacities Domain the Achieved Criteria for Adulthood as a function of Relationship Status, Parenthood, Employment Status, and Income

	Mean (SD)	Adjusted Mean (SE)*
Relationship Status		
Single (n = 557)	1.60(.56)	2.19(.08)
Committed relationship (n = 124)	2.26(.63)	2.42(.11)
Parenthood		
Parent (n = 31)	2.86(.28)	2.78(.15)
Non-parent (n = 650)	1.66(.59)	1.83(.06)
Employment Status		
Unemployed (n = 280)	1.54(.54)	2.18(.09)
Part-time employment (n = 274)	1.71(.60)	2.33(.10)
Full-time Employment (n = 127)	2.10(.70)	2.40(.09)
Income		
0 to \$20, 000 (n = 308)	1.60(.58)	2.31(.09)
\$21, 000 to \$40, 000 (n = 101)	1.71(.62)	2.29(.11)
\$41, 000+ (n = 272)	1.84(.66)	2.31(.09)

* Mean adjusted for age at the following values: Age = 21.50.

Appendix Y

Interaction between Relationship Status, Age and Mean Scores on the Role Transitions Domain for the Achieved Criteria for Adulthood



Appendix Z

Multivariate Models for the Achievement Personal Goal Category as a function of channeling factors

Factor	OR	SE	CI for OR		p-value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	1.31	.35	.67	2.58	.44
Parenthood (Non-parent = 0)	.48	.50	.18	1.25	.13
Income					.21
\$21,000-\$40,000 (0-\$20,000 = 0)	.71	.42	.31	1.60	.40
\$41,000+ (0-\$20,000 = 0)	.55	.34	.29	1.07	.08
Employment status					.12
Part-time (Unemployed = 0)	.99	.37	.48	2.03	.98
Full-time (Unemployed = 0)	.45	.46	.18	1.09	.08
Status Group					<.01
Graduate Students (Undergraduate = 0)	.97	.57	.32	2.96	.96
Non-University Participants (Undergraduate = 0)	.26	.40	.12	.56	<.01
Gender (male = 0)	1.23	.33	.64	2.34	.54
<i>Model 2</i>					
Relationship status (Single = 0)	1.42	.37	.69	2.90	.34
Parenthood (Non-parent = 0)	.49	.50	.19	1.31	.16
Income					.26
\$21,000-\$40,000 (0-\$20,000 = 0)	.71	.42	.31	1.62	.42
\$41,000+ (0-\$20,000 = 0)	.57	.34	.29	1.11	.10
Employment status					.15
Part-time (Unemployed = 0)	1.10	.37	.49	2.07	.98
Full-time (Unemployed = 0)	.47	.46	.19	1.16	.10
Status Group					<.01
Graduate Students (Undergraduate = 0)	1.11	.60	.34	3.58	.87
Non-University Participants (Undergraduate = 0)	.27	.41	.12	.61	<.01
Gender (male = 0)	1.24	.33	.65	2.36	.52
Age	.97	.05	.87	1.07	.50

Multivariate Models for the Family of Origin Personal Goal Category as a function of channeling factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	.77	.47	.31	1.94	.58
Employment status					.21
Part-time (Unemployed = 0)	.54	.35	.27	1.07	.08
Full-time (Unemployed = 0)	.74	.61	.22	2.43	.62
Status Group					.67
Graduate Students (Undergraduate = 0)	1.17	.51	.43	3.17	.76
Non-University Participants (Undergraduate = 0)	.64	.59	.20	2.03	.45
Gender (male = 0)	.66	.41	.30	1.47	.31
<i>Model 2</i>					
Relationship status (Single = 0)	.72	.50	.27	1.92	.52
Employment status					.20
Part-time (Unemployed = 0)	.53	.35	.27	1.06	.07
Full-time (Unemployed = 0)	.71	.62	.21	2.38	.57
Status Group					.67
Graduate Students (Undergraduate = 0)	1.05	.57	.34	3.23	.93
Non-University Participants (Undergraduate = 0)	.60	.61	.18	2.00	.41
Gender (male = 0)	.65	.41	.29	1.45	.30
Age	1.03	.07	.90	1.18	.68

Multivariate Models for the Partner Personal Goal Category as a function of channeling factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	1.43	.26	.86	2.39	.17
Income					.97
\$21,000-\$40,000 (0-\$20,000 = 0)	.95	.31	.52	1.75	.87
\$41,000+ (0-\$20,000 = 0)	1.03	.24	.65	1.63	.91
Employment status					.29
Part-time (Unemployed = 0)	.80	.24	.50	1.27	.34
Full-time (Unemployed = 0)	1.34	.37	.65	2.75	.43
Status Group					.66
Graduate Students (Undergraduate = 0)	1.29	.33	.68	2.45	.43
Non-University Participants (Undergraduate = 0)	.92	.34	.47	1.79	.80
Gender (male = 0)	1.18	.24	.74	1.88	.48
<i>Model 2</i>					
Relationship status (Single = 0)	1.37	.28	.79	2.37	.26
Income					.97
\$21,000-\$40,000 (0-\$20,000 = 0)	.95	.31	.52	1.74	.86
\$41,000+ (0-\$20,000 = 0)	1.02	.24	.64	1.62	.94
Employment status					.30
Part-time (Unemployed = 0)	.79	.24	.50	1.26	.32
Full-time (Unemployed = 0)	1.31	.37	.63	2.72	.47
Status Group					.75
Graduate Students (Undergraduate = 0)	1.20	.37	.59	2.46	.61
Non-University Participants (Undergraduate = 0)	.88	.35	.44	1.76	.72
Gender (male = 0)	1.18	.24	.74	1.87	.50
Age	1.02	.04	.94	1.11	.66

Multivariate Models for the Self Personal Goal Category as a function of channeling factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	.82	.29	.47	1.43	.48
Parenthood (Non-parent = 0)	.68	.55	.23	1.98	.48
Income					.47
\$21,000-\$40,000 (0-\$20,000 = 0)	1.38	.28	.79	2.39	.26
\$41,000+ (0-\$20,000 = 0)	1.22	.22	.79	1.89	.37
Employment status					.28
Part-time (Unemployed = 0)	.89	.22	.58	1.36	.60
Full-time (Unemployed = 0)	.55	.38	.26	1.15	.11
Status Group					.21
Graduate Students (Undergraduate = 0)	1.13	.33	.60	2.15	.71
Non-University Participants (Undergraduate = 0)	1.77	.32	.94	3.34	.08
Gender (male = 0)	.98	.23	.63	1.55	.95
<i>Model 2</i>					
Relationship status (Single = 0)	.85	.30	.47	1.53	.59
Parenthood (Non-parent = 0)	.69	.55	.24	2.04	.51
Income					.46
\$21,000-\$40,000 (0-\$20,000 = 0)	1.38	.28	.79	2.40	.25
\$41,000+ (0-\$20,000 = 0)	1.23	.22	.79	1.90	.36
Employment status					.33
Part-time (Unemployed = 0)	.90	.22	.59	1.38	.62
Full-time (Unemployed = 0)	.56	.38	.27	1.20	.14
Status Group					.19
Graduate Students (Undergraduate = 0)	1.21	.37	.59	2.48	.60
Non-University Participants (Undergraduate = 0)	1.82	.33	.95	3.49	.07
Gender (male = 0)	.99	.23	.63	1.56	.97
Age	.98	.04	.90	1.07	.67

Multivariate Models for the Health Personal Goal Category as a function of channeling factors

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
<i>Model 1</i>					
Relationship status (Single = 0)	1.32	.25	.81	2.13	.27
Parenthood (Non-parent = 0)	1.11	.44	.47	2.64	.81
Income					.12
\$21,000-\$40,000 (0-\$20,000 = 0)	1.55	.27	.91	2.64	.11
\$41,000+ (0-\$20,000 = 0)	1.48	.21	.98	2.23	.06
Employment status					.36
Part-time (Unemployed = 0)	.75	.21	.50	1.12	.16
Full-time (Unemployed = 0)	.93	.34	.48	1.83	.84
Status Group					.78
Graduate Students (Undergraduate = 0)	.79	.33	.42	1.51	.48
Non-University Participants (Undergraduate = 0)	.96	.32	.52	1.78	.90
Gender (male = 0)	.51	.25	.32	.83	.01
<i>Model 2</i>					
Relationship status (Single = 0)	1.19	.26	.72	1.98	.50
Parenthood (Non-parent = 0)	1.04	.44	.44	2.49	.93
Income					.14
\$21,000-\$40,000 (0-\$20,000 = 0)	1.54	.27	.90	2.62	.12
\$41,000+ (0-\$20,000 = 0)	1.45	.21	.96	2.20	.08
Employment status					.31
Part-time (Unemployed = 0)	.73	.21	.48	1.10	.13
Full-time (Unemployed = 0)	.87	.35	.44	1.73	.69
Status Group					.52
Graduate Students (Undergraduate = 0)	.66	.36	.33	1.34	.25
Non-University Participants (Undergraduate = 0)	.88	.33	.46	1.66	.69
Gender (male = 0)	.50	.25	.31	.81	.01
Age	1.05	.04	.97	1.13	.23