

An Examination of Emerging Adults' Career Development

by

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Abstract

Emerging adulthood has been posited as a new developmental phase in which the individual has graduated from adolescence but has not yet accomplished milestones traditionally associated with adulthood (e.g., beginning a long-term partnership, having a family, starting a career). Despite increased numbers of young people who are delaying adulthood in one way or another, research on career development during emerging adulthood is lacking. The present study investigated the career decision self-efficacy of those who perceive themselves as emerging adults compared to their same-aged counterparts who feel they have reached adulthood. It also examined whether or not themes of emerging adulthood (e.g., few responsibilities) apply to making career decisions, as well as the extent to which emerging adults and adults differ in their perceptions of adulthood and career (i.e., endorsement of myths and negative beliefs related to adulthood and career). The present study also assessed whether or not those who perceive themselves as adults actually differ in levels of exploration and responsibility, which are said to distinguish between these stages, from those who do not yet feel that they have reached adulthood. Lastly, it examined whether or not emerging adults and adults differ in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA), a measure designed to assess the presence of emerging adult themes in an individual's current period of life.

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Chapter I

Introduction

Emerging adulthood has been proposed as a new stage of development in which individuals are in between adolescence and adulthood. Those falling within this stage typically feel that they have moved beyond adolescence but have not yet achieved many of the milestones typically associated with adulthood (Arnett, 1998). This stage is said to commonly occur between the ages of 18 and 25, though there are variations in both the timing and the extent to which emerging adulthood may be experienced (Arnett, 1998). In the United States, it has been observed that individuals often do not consider themselves to be adults until their late twenties (Arnett, 2000; Lopez, Chervinko, Strom, Kinney, & Bradley, 2005; Molgat, 2007; Tanner & Arnett, 2011). Some have attributed the increasing prevalence of this stage to cultural and economic shifts, such as increasing tendencies to delay marriage, and rising numbers of young adults seeking post-secondary education (Arnett, 2000; Cote, 2000, 2006; Douglass, 2007). However, regardless of the events leading to this rise in delaying adulthood, it appears that a more thorough understanding of those who fall within this developmental stage is needed. Existing research in this area has yet to fully define the construct of emerging adulthood, nor has it adequately examined its relationships to other variables of interest (e.g., career development).

Considering emerging adulthood as a potential new stage requires a preliminary assessment of what it means to be an adolescent or an adult. While younger developmental stages such as childhood and adolescence have been carefully delineated within the psychology literature, adulthood has been less clearly defined (Cote, 2000; Tanner & Arnett, 2011). Historically, researchers have used the completion of role transitions to indicate adulthood, such

as getting married, having children, or moving away from the family of origin (Arnett, 2003; Cohen, Kasen, Chen, Hartmark, & Gordon, 2003; Kins & Beyers, 2010; Molgat, 2007).

However, it can be argued that societal shifts, such as changes in the timing of role transitions (e.g., delaying marriage), have resulted in decreased emphasis on role transitions in young peoples' perceptions of whether or not they have reached adulthood. Therefore, it becomes necessary to examine additional variables that may play a role in individuals' perceptions of whether or not they feel like an adult.

A number of psychological variables have been used to distinguish between emerging adulthood and adulthood: independence, a sense of responsibility, self-exploration, feeling in between adolescence and adulthood, optimism, instability, being self-focused, and perceiving many possibilities in life (Arnett, 1998, 2000, 2001, 2004; Cote, 2000; Lopez et al., 2005; Tanner, 2006). Of these, the variables that seem to arise most consistently in the literature are independence, responsibility, and self-exploration. Each of these variables has also been broken down further: Responsibility includes subcomponents of accepting personal responsibility, making decisions on one's own, and becoming financially independent. Individuals typically associate each of these subcomponents with having reached the stage of adulthood; those who have not are perhaps better conceptualized as emerging adults (Arnett, 1994, 1998, 2001). Additionally, recent research has suggested that there may be some neuropsychological basis to emerging adulthood as well, with development in particular regions of the brain continuing into the mid- to late twenties. In other words, though individuals may be considered adults around age 18, their brains are not fully developed until significantly later (Crews, He, & Hodge, 2006; Dickerson, 2008; Gogtay et al., 2004; Groeschel, Vollmer, King, & Connelly, 2010; Keating, 2004; Stevens, Pearlson, & Calhoun, 2009; Tanner & Arnett, 2011; Winters, 2007).

At present, there is no concrete method of identifying whether an individual is an emerging adult or an adult, largely due to the absence of clear descriptive definitions. Even with this ambiguity, much of the existing research in the area of emerging adulthood has used self-perception to categorize individuals into a developmental stage; the present study used a similar self-descriptive method. In addition, it appears valuable to examine both role transitions and psychological variables in order to capture a complete picture of this developmental stage and how it may differ from its neighboring stages of adolescence and adulthood.

Currently, the opinions of researchers and theorists vary in terms of the extent to which emerging adulthood may be a beneficial stage, and whether or not delaying adulthood may be problematic. On one hand, the emerging adult years may provide opportunities for increased self-exploration. During this time, the individual may have chances to experiment in a number of life areas (e.g., gaining exposure to different fields of employment before entering a stable career; having a number of romantic relationships before getting married; Arnett, 2000, 2007b). Such experimentation is likely to result in more accurate identification of a work environment, type of partner, or lifestyle that fits with the self. In turn, life satisfaction could increase (Arnett, 2000, 2007b; Holland, 1997). It could also be that due to having fewer responsibilities in other areas, emerging adults have more time and resources to focus on their own futures; for instance, emerging adults are more likely than their adult counterparts to engage in activities outside of regular work hours that could lead to additional opportunities (Murphy, Blustein, Bohlig, & Platt, 2010).

On the other end of the spectrum, emerging adulthood could be considered an evasion of adulthood and its associated responsibilities, such as paying for one's own expenses or contributing to a family. At worst, it could be argued that rising generations may begin to delay

adulthood so late into life that individuals could essentially get developmentally “stuck” in a stage in which self-exploration is high but responsibility is relatively low (Cote, 2006).

Consequences of this could be severe, with people being unable to care for themselves (financially or otherwise) despite having aging parents. However, there is currently little evidence that the latter extreme will actually take place (Tanner, 2006).

While individuals may perceive some benefits of emerging adulthood, there is also evidence that the majority of those within this group still believe that later movement to adulthood is desirable. Perhaps contrary to expectations, those in the age range of emerging adulthood held negative associations with partying and developed positive associations with being serious (Lopez et al., 2005, p. 26). Based on this finding, it appears that perhaps even emerging adults themselves are aware of the misconceptions of their developmental stage and would prefer to move forward into adulthood rather than become stuck. Overall, while the possibility exists that some aspects of emerging adulthood could be individually problematic (e.g., delayed acceptance of responsibility), it appears that there are also likely substantial benefits associated with emerging adulthood (e.g., heightened self-exploration leading to life decisions that better fit with the self). Thus, research should aim to take an unbiased perspective rather than assuming that emerging adulthood is solely problematic.

It should be pointed out that there is some dissent against the introduction of emerging adulthood as an identifiable and distinct stage. The primary criticism is that emerging adulthood appears to be socially and culturally based, and therefore inappropriate for conceptualizing the development of diverse groups (Hendry & Kloep, 2007a). Currently, existing research typically includes predominantly middle-class Caucasian American college students as participants. Therefore, knowledge of similarities and differences in emerging adulthood across groups is

limited. Research that has been conducted in this area indicates that there is some variation in both the existence and expression of emerging adulthood across groups; differences have been found based on country of origin, socioeconomic status, educational attainment, and race and ethnicity (Arnett, 1998, 2000; Arnett & Eisenberg, 2007; Kins & Beyers, 2010; Luyckx, Schwartz, Goossens, & Pollock, 2008; Ravert, 2009).

In particular, the theory of emerging adulthood has been criticized for being a product of socioeconomic status, with only those in higher social classes being able to afford (both in terms of time and money) to engage in increased self-exploration and postpone some of the responsibilities commonly associated with adulthood (e.g., maintaining stable employment; Arnett & Eisenberg, 2007; Douglass, 2007; Hendry & Kloep, 2007a). Consistent with these ideas, socioeconomic status has been linked to the number of responsibilities a person takes on, with those ages 18-25 from lower socioeconomic backgrounds taking on a larger number of responsibilities than their wealthier counterparts (Cohen et al., 2003). Those who have less financial resources are also more likely to perceive they have reached adulthood than those from higher socioeconomic backgrounds (Arnett & Tanner, 2011). This also fits with the early vocational theory of Eli Ginzberg, who proposed that urban youth (particularly those from low income families) would reach career maturity faster due to learning to cope with city life and its demands (Ginzberg, Ginsberg, Axelrad, & Herma, 1951).

Additionally, socioeconomic status relates to both country of origin and post-secondary education. Socioeconomic status and country of origin appear interconnected, as emerging adulthood more consistently takes place within industrialized nations with greater financial resources (Arnett, 2000, 2010; Arnett & Eisenberg, 2007). It is likely that trends in national economies, such as the recession in the U.S. in the 2000's, affects the existence or expression of

emerging adulthood (Cote, 2006). Likewise, those with greater financial resources are more likely to attend college, perhaps providing more time for self-exploration while often postponing responsibilities (e.g., paying one's own bills) or delaying role transitions such as marriage or having children (Amato, Booth, Johnson, & Rogers, 2007; Arnett & Tanner, 2011). Moreover, those who are in college are less likely to feel that they have reached adulthood than those who are in the same age range but employed (Luyckx et al., 2008).

There also appears to be some variance in the experience of emerging adulthood across racial and ethnic groups. In particular, the self-perception of emerging adulthood may be more greatly based on role transitions (e.g., marriage, having children) for African Americans, Latinos, and Asian Americans than for Caucasian Americans (Arnett, 2003). It has been suggested that this may be due to differences in values, such as collectivism or individualism (Arnett, 2003).

However, similarities across groups also exist. For example, when asked whether they perceive themselves as emerging adults or adults, individuals across a number of developed nations provide an ambiguous answer. This seems to indicate that across cultures, the transition to adulthood is often not clear cut (Arnett, 2003; Arnett & Tanner, 2011). Likewise, though emerging adulthood may be more common in middle and upper class populations, themes of emerging adulthood still appear regardless of socioeconomic status (Arnett & Tanner, 2011), such as increased self-exploration in the areas of career and love (Arnett, 2004). Additionally, across both racial and ethnic groups and a number of developed nations, individuals identified three common markers that they associated with adulthood: accepting personal responsibility, making one's own decisions, and reaching financial independence (Arnett, 1994, 1998, 2001).

Rather than emerging adulthood being universal across groups, it appears to be a product of social, cultural, historical, political, and economic contexts (Arnett, 2000; Hendry & Kloep,

2007a). However, it can still be argued that emerging adulthood is distinctive, with enough common themes (e.g., high self-exploration and few responsibilities relative to adults) arising among individuals ages 18-25 that it may be useful to classify it as its own developmental stage, separate from adolescence and adulthood (Tanner & Arnett, 2011, p. 15). Though not all individuals in this age range will experience emerging adulthood, and this stage should not be assumed to occur across diverse groups, increased knowledge of themes that are common during these years would likely be beneficial. This may help to provide more effective services (e.g., career counseling) for those who are emerging adults. Further, the existence of cross-cultural variations in emerging adulthood does not necessarily mean that it should be excluded from being considered a distinct developmental stage. Cultural variance also occurs in other developmental stages that have been accepted in the psychology community, such as the expression of adolescence differing across cultures (Arnett & Tanner, 2011). Instead, it may be helpful to judge the concept of emerging adulthood upon its utility; while its variations across groups are critical to be aware of, these may not prevent it from being considered its own distinct stage of development.

As noted previously, research in this area also needs to examine possible links between emerging adulthood and other variables of interest. More specifically, research is needed to improve our understanding of how career development impacts the construct of emerging adulthood (Messersmith, Garrett, Davis-Kean, Malanchuk, & Eccles, 2008; Stringer & Kerpelman, 2010). Within the existing literature, much of it is not specific to the emerging adult population. The assumption is often made that career development processes from adolescence extend into later stages of development (Messersmith et al., 2008). Attention does not appear to have been given to aspects of career development that might be unique to emerging adults.

Given the connection between career and development, with it being difficult to describe individuals' career paths without also discussing a developmental progression (Super, 1992), it appears valuable for further research to put together a more accurate picture of the career development process during the emerging adult years.

It would likely be beneficial for research to assess whether or not the prevailing themes of emerging adulthood (i.e., independence and responsibility, self-exploration) are present during times in which emerging adults and adults are making career decisions. Additionally, a number of other variables related to career development may differ during emerging adulthood and deserve further attention. These include the nature and impact of social relationships during the emerging adult years, career decision self-efficacy, and perceptions of the link between adulthood and career (e.g., whether or not having a career is viewed as a defining characteristic of adulthood).

First, career development has been called a relational process, as it is constantly influenced by one's social context, such as receiving feedback from family and friends (Blustein, 2001; Motulsky, 2010). The number of supportive relationships an individual has becomes critical for their career development and their ability to make good career decisions (Motulsky, 2010). Given this relational connection, it would likely be beneficial to include items on relationships and consider whether or not the relationships of emerging adults and adults may differ. For example, not only do emerging adults typically have lower levels of independence than adults, but they have also been shown to receive support from their parents for longer periods of time (Murphy et al., 2010; Stringer & Kerpleman, 2010), perhaps receiving additional feedback regarding potential career decisions and thus affecting their career development. Both benefits and limitations of continued parental support have been identified. For example, self-

efficacy may increase (Murphy et al., 2010; Stringer & Kerpleman, 2010), but delayed separation between the emerging adult and parents may also occur (with the assumption being that negative outcomes may result; LeMoyne & Buchanan, 2011; Somers & Settle, 2010a, p. 19; Somers & Settle, 2010b).

Career decision self-efficacy, or one's belief that he or she can make good career decisions (Betz, Klein, & Taylor, 1996), is another area in which any differences between emerging adults and adults may have implications for career outcomes (e.g., one's work performance, persistence in career, and ability to make a clear choice; Bandura, 1977, 1997). The importance of this construct is best understood by considering social cognitive learning theory, in which the individual's career behaviors are filtered through beliefs that are based on social learning and other life experiences. If the belief is that particular behaviors or efforts will not result in positive outcomes, the individual is less likely to engage in those behaviors (Bandura, 1977, 1997). For example, if an individual's belief is that they are incapable of making good career decisions, it is likely that less time would be spent engaging in the decision-making process.

Lastly, further information is needed regarding how young people connect the concepts of career and adulthood. While it has been shown that those within the age range of emerging adulthood typically associate the role transition of beginning a stable career to having reached adulthood (Lopez et al., 2005), some aspects of career may be considered of greater importance than others in determining adult status. Additionally, the extent to which career might affect one's feelings about being successful or unsuccessful as an adult is not well understood. Similarly, the endorsement of myths related to adulthood and career may also vary between emerging adults and adults. If myths such as having to commit to one career for the entire

lifespan (Amundson, 1997) were commonly endorsed by emerging adults, these beliefs would likely affect their career behaviors (consistent with social cognitive learning theory) and thus affect their entire career development process.

Summary of Emerging Adulthood as a Construct

Emerging adulthood is a newly proposed stage of development that appears distinct from its neighboring stages of adolescence and adulthood. Though not every individual between the ages of 18 and 25 will experience emerging adulthood, with some differences having been noted across diverse groups, there seem to be a number of commonalities that make the conceptualization of this stage useful. However, due to its relative newness to the lifespan development literature, much remains unknown about emerging adulthood. The process of categorizing individuals into emerging adulthood as opposed to other developmental stages remains unclear. However, some consideration of both role transitions (e.g., marriage, having children) and psychological variables (e.g., self-exploration) appear needed in order to do so. Additionally, speculation remains as to the potential benefits and pitfalls of this stage. The career development of emerging adults also requires further understanding, as it may be the case that emerging adults as a group have experiences and ways of thinking about career that are unique from their adolescent and adult counterparts.

Statement of the Problem and Research Questions

Though emerging adulthood has been posited as a developmental stage that may take place between adolescence and adulthood, extant research is not convincing or informative. The construct needs to be further investigated, along with an examination of its relationship to career development. The present study sought to determine whether or not there are differences between emerging adults and adults of the same age group (19-25) in career decision self-

efficacy, the extent to which emerging adulthood themes are present during the career decision process, and perceptions of adulthood and career (i.e., the extent to which participants view having a career as a defining characteristic of adulthood, and the endorsement of myths and negative beliefs related to adulthood and career).

Additionally, current definitions of adulthood and emerging adulthood in the literature have lacked clarity. Therefore, the present study used self-perception of developmental status to define participants as adults or emerging adults. It also assessed whether or not differences existed in adults' and emerging adults' levels of responsibility and self-exploration, which are said to be dimensions that distinguish between these developmental stages. Potential differences between emerging adults and adults on the Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007a), a measure designed to assess the presence of emerging adulthood themes, were also examined. Specifically, the current study addressed the following research questions:

- Are there differences between emerging adults and adults in levels of responsibility and self-exploration?
- Do emerging adults and adults differ in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA)?
- Are themes of emerging adulthood more prevalent in the career decision process of emerging adults than of their same-aged adult counterparts?
- Is there a difference in career decision self-efficacy between emerging adults and adults of the same age group?
- Is there a difference between emerging adults and adults in the extent to which they view having a career as a defining characteristic of adulthood?

- Do emerging adults endorse a greater number of negative beliefs and myths regarding adulthood and career than adults of the same age group?

These questions were intended to explore some of the specific ways in which the lifespan development of those ages 18-25 may relate to career development processes. They were also designed to collect more information regarding the developmental stage of emerging adulthood and how it differs from adulthood.

Operational Definitions

Career decision self-efficacy was defined by the present study as participants' beliefs regarding whether or not they can be successful in making choices related to their current and future careers, as evidenced by their scores on the Career Decision Self-Efficacy Scale – Short Form (CDSE-SF; Betz, Hammond, & Multon, 2005; Betz & Klein, 1996). Secondly, the existence of emerging adulthood themes during times in which participants are contemplating career decisions was evidenced by scores on the Emerging Adulthood Themes in Career Decisions instrument created by the study investigator for the present study (Cobb, 2013a). This instrument was constructed around the primary themes of emerging adulthood that arise in the literature, which are relatively low levels of independence and responsibility compared to adults, as well as higher levels of self-exploration than adults. The extent to which participants view career as a defining characteristic of adulthood, as well as the endorsement of negative beliefs and myths regarding adulthood, were defined by scores on the 1) connection between adulthood and career, and 2) negative beliefs and myths, subscales of the Perceptions of Adulthood and Career instrument (Cobb, 2013c). This first subscale assessed the extent to which participants believe that having a career is a defining feature of the developmental stage of adulthood. The second subscale included common myths and beliefs around adulthood and career (e.g., that

adults have to settle down into one stable career) and assessed the extent to which these were endorsed by participants. Participants' levels of responsibility and self-exploration were defined by scores on a measure created by the investigator for the present study, in which participants judged how they compare to most adults along these dimensions. The Inventory of the Dimensions of Emerging Adulthood was also used to examine whether or not emerging adults and adults actually differed on this measure as would be expected.

As mentioned previously, the developmental stages of emerging adulthood and adulthood have not been adequately defined within the existing literature. Additionally, there is variability in the timing and extent to which individuals move through emerging adulthood (Arnett, 1998; Cohen et al., 2003), making it difficult to judge whether or not someone falls into a particular stage based on age alone. For the current study, a Self-Perception of Adulthood Questionnaire was created by the investigator to categorize participants as either emerging adults or adults. Thus, developmental stage (emerging adulthood/adulthood) was defined by participants' self-report of whether or not they feel like an adult both in general and within specific life roles. Those who provided responses indicating that they do not yet feel like an adult in the majority of their life roles were categorized as emerging adults, whereas those who indicated that they do feel like an adult in the majority of their life roles were considered adults.

Purpose

The purpose of the current study was to explore the specific career development processes that occur during the period of emerging adulthood, and to increase the understanding of emerging adults as a group. The present study obtained information regarding career decision self-efficacy, the extent to which emerging adulthood themes are present in the process of making career decisions during this period, and how perceptions of adulthood and career may

differ depending on developmental stage. Also examined was the extent to which emerging adults and adults differ in the domains said to distinguish between these two developmental groups (i.e., responsibility, self-exploration), as well as whether or not emerging adults and adults actually differ on a measure of emerging adulthood (The Inventory of the Dimensions of Emerging Adulthood).

The results of the present study add to the existing body of knowledge regarding career development processes in general and provide a fuller picture of career development as it exists across the lifespan. It was also designed to add to psychologists' knowledge about the changing roles or life tasks that occur within particular stages of development. Perhaps most importantly, identifying the thoughts and perceptions that emerging adults have regarding career and their ability to one day successfully begin and maintain a career can inform career counselors' and psychologists' decisions regarding the types of career interventions that may be useful during this time.

The present study also has implications for the field of education, as there may be benefit in more thoroughly integrating the career-related concerns of emerging adults into university programs and services. One prior study found that university attrition is strongly related to variables associated with emerging adulthood, such as mobility and heightened exploration (Wintre, Bowers, Gordner, & Lange, 2006). Results may have implications for universities' programming and use of funding, such as whether or not it would be beneficial to require a career course focused on this issue. Similarly, if career development processes that are potentially unique to emerging adults were better acknowledged and addressed there could be a decrease in time-to-graduation. Thus, colleges and universities may be able to demonstrate better outcomes. Moreover, student loan debt may decrease if practices could be implemented

that focus on the specific needs of emerging adults. In order to best attend to these issues, further research has been needed on emerging adults' career development processes as a whole, as well as how both counselors and those in the field of education can best foster that development.

Summary

Existing research has not adequately described the construct of emerging adulthood and how it might impact career development processes. This dissertation study may provide valuable information to the fields of psychology and education regarding the career development of individuals ages 19-25. Results may have implications for the types of career interventions that may be used in various settings, such as in counseling sessions or classrooms. The following sections further elaborate on the existing developmental theory of emerging adulthood as well as what is currently known about career development that may apply differentially to emerging adults and adults. The study methodology and procedures will also be delineated.

Chapter II

Literature Review

Emerging Adulthood as a New Stage of Development

Recently, scholars have suggested that societal changes in Western culture, such as relatively late marriage (Douglass, 2007) yet still leaving the parents' home around age 18, have contributed to the development of a new phase called "emerging adulthood" (Arnett, 1998, p. 312). During this proposed phase, the individual has appeared to move beyond adolescence (e.g., leaving the family of origin and beginning full-time employment or post-secondary education) but has not yet reached the full independence and responsibility traditionally associated with adulthood. The emerging adulthood stage is described as commonly occurring between the ages of 18 and 25, with some variability in the reaching of adult milestones (Arnett, 1998; Cohen, et al., 2003). Currently, the majority of those in their twenties in the United States will not perceive themselves as having completely reached adulthood until their late twenties, nearly a decade later than those in generations before them (Arnett, 2000; Lopez et al., 2005; Molgat, 2007; Tanner & Arnett, 2011).

The vast majority of theory and research in developmental psychology has been devoted to the phases of childhood and adolescence, as these are the times of the lifespan in which growth occurs most rapidly (Cote, 2000; Tanner & Arnett, 2011). Adulthood, though identified as the longest stage of life, has received far less attention, with the assumption often being that development has tremendously slowed or has been completed (Cote, 2000). While relatively clear definitions of childhood and adolescence have been provided by theorists such as Piaget and Freud, those of adulthood are sparse or appear outdated given cultural changes over time (Cote, 2000; Tanner & Arnett, 2011).

Role transitions. In the United States, adulthood has traditionally been defined as being marked by particular role transitions. These include, but are not limited to, moving out of the home of the family of origin, completing education, gaining employment, getting married, or becoming a parent (Arnett, 2003; Cohen et al., 2003; Kins & Beyers, 2010; Molgat, 2007). However, cultural shifts associated with modernization, such as increased individualism and decreased predictability in these role transitions, may now be leading toward the need for constructing a specific and more complex definition of adulthood and its components (Cote, 2000).

The field of sociology in particular has utilized the completion of role transitions as the primary distinction between adulthood and prior stages (e.g., Bynner, 2005). This can be thought of as akin to a checklist of components of adulthood. The significance of role transitions has also been noted within the emerging adulthood literature, such as Kins and Beyers (2010) placing heavy emphasis on living situation and continued cohabitation with the family of origin. It was suggested that research in the area of emerging adulthood should always take living situation into account, as well as participants' motivations for remaining in the same home as their parents (Kins & Beyers, 2010). Certain role transitions may be perceived as particularly central to adulthood; for example, in one analysis of perceptions of adulthood among college students, every participant commented that entering a career is associated with becoming an adult (Lopez et al., 2005).

However, the cultural definition of adulthood appears to be changing, with role transitions becoming decreasingly central (Arnett, 2003; Cote, 2000; Kins & Beyers, 2010; Molgat, 2007). Rather than role transitions defining the stage of adulthood, they now appear to be variables that may or may not co-occur with one's movement to adulthood (Arnett, 2003).

For instance, an individual may perceive the self as becoming an adult after having achieved stable employment but before marriage or having children. Similarly, the concepts of emerging adulthood and living with one's parents can be viewed as distinct; emerging adults may, but do not typically, remain in the same home as the family of origin (Arnett, 2000).

Likewise, the movement toward adulthood is generally said to be becoming less predictable, traditional, or "standardized" over time (Molgat, 2007, p. 496; Tanner & Arnett, 2011), with role transitions becoming increasingly reversible and generally less relevant to societal definitions of adulthood (Cohen et al., 2003). For example, an individual may return to live with their parents after an initial period of time away from home (known as boomerang or yo-yo phenomena; (Biggart & Walther, 2006; Mitchell, 1998; Mitchell, Wister, & Gee, 2004). One might also go back to school after having entered the workforce (Westberg, 2004).

However, it is unclear whether or not these trends are universally occurring; the importance of role transitions in the self-perception of adulthood seems to vary across diverse groups. For example, individuals from racial and ethnic minority groups tend to rate role transitions (e.g., marriage) as more closely related to adulthood than their white counterparts (Arnett, 2003). Overall, there appears to be a need to take role transitions into consideration when conceptualizing emerging adulthood as a developmental stage, while also discerning which additional variables may be relevant in determining whether one is an emerging adult or an adult.

Psychological variables. While it may be easy to point primarily to the postponement of any particular role transition (e.g., delays in marriage) as the catalyst for the increasing prevalence of emerging adulthood (Arnett, 1998), a larger number of variables need to be examined in order to accurately conceptualize the rising prevalence of this stage. The multiple facets of the stages of emerging adulthood and adulthood need to be described, including but not

limited to role transitions such as living situation. In particular, psychological variables, such as a sense of independence and responsibility, as well as self-exploration, have been identified as being distinguishing factors between emerging adulthood and adulthood (Arnett, 1998, 2000, 2001, 2004; Cote, 2000; Lopez et al., 2005). It is likely that role transitions affect these psychological variables, playing a mediating role in one's perception of their adulthood (e.g., perceiving oneself as responsible and independent due to the evidence of having maintained stable employment; Molgat, 2007).

More specifically, Arnett (2004) conceptualized emerging adulthood as including five psychological components: self-exploration, instability, a focus on the self, feeling in between adolescence and adulthood, and perceiving many possibilities. However, in Arnett's (2006) discussion of each of these elements, he seems to tie both instability and perceiving many possibilities to self-exploration, while linking a focus on the self to emerging adults' having little responsibility for others. Lastly, feeling in between adolescence and adulthood may be a product of an interaction between levels of independence/responsibility and self-exploration. Emerging adults theoretically have greater independence/responsibility than adolescents but less than adults, as well as greater self-exploration than adults but perhaps less than adolescents. Thus, it is the view of the current study that the central distinguishing factors between emerging adulthood and neighboring developmental stages are 1) independence and responsibility, and 2) self-exploration, with other proposed factors (e.g., instability) being linked to one or both of these. Other existing theories and research in the area seem to support the centrality of these themes as well (see Keniston, 1970; Lopez et al., 2005; and Tanner, 2006). For instance, Lopez et al. (2005, p. 18) found that starting a career, having and caring for a family, responsibility, independence, and being stable and serious were commonly perceived as being linked to

adulthood by college students, each of which appear closely tied to the larger constructs of independence and responsibility.

Also relevant to this discussion of psychological components is Keniston's (1970) proposed developmental stage of youth, on which Arnett's theory of emerging adulthood was partially based. Keniston (1970) laid much of the groundwork for later theories, such as pointing out that a stage exists in which individuals feel in between adolescence and adulthood, and that this is an optional and psychological stage rather than one that is universal among all individuals in their twenties (Keniston, 1970, pp. 648-649). Though some of these basic pieces of Keniston's theory seem to hold true today, he also identified specific psychological variables that appear strongly connected to the political and historical contexts at the time of his writings, such as experiencing tension between the self and society (e.g., fears of selling out; Keniston, 1970, p. 642), attempts to combat socialization, and a tendency to engage in youthful counter-cultures (Keniston, 1970, p. 640).

While Keniston's (1970) specific psychological variables appeared to require some revision, broader themes of independence and responsibility seemed to emerge in his discussion (e.g., attempts to delay the responsibilities seen in their parents, struggles with experiencing greater freedom while also feeling restricted by social pressures). It could be argued that if individuals do still struggle with a tension between the self and society, that this tension may be categorized under the theme of independence/responsibility, with the individual struggling with social pressures such as entering full-time employment or having children. He also included self-exploration as a central component of youth, which will be further discussed (Keniston, 1970).

The importance of independence/responsibility and self-exploration in distinguishing between emerging adulthood and adulthood appear supported by existing theories and research. However, more work is needed to further delineate the particular components of these developmental stages, the interplay between role transitions and psychological variables, and the development of scales designed to assess whether an individual is currently an emerging adult or an adult. What is currently understood about independence/responsibility and self-exploration and how these variables relate to developmental stage will be discussed in greater depth.

Levels of independence and responsibility appear to be large distinguishing factors between emerging adulthood and adulthood, with emerging adults typically continuing to rely on the family of origin more so than adults (Arnett, 1998; Kins & Beyers, 2010). While these variables may be associated with the aforementioned role transitions, they have been viewed as more psychological in nature, or as qualities of character (Arnett, 1998, p. 296). More specifically, Arnett (1994, 1998, 2001) surveyed Americans on their perceptions of what it means to be an adult and found that the three primary criteria used in conceptualizing adulthood (accepting personal responsibility, making decisions on one's own, and achieving financial independence) were all related to these qualities of independence and responsibility. Role transitions such as marriage and parenting were rated as being of far less importance to the perception of adulthood (Arnett, 2001).

Accepting personal responsibility was perceived by Arnett's (1994, 1998, 2001) participants as the strongest indicator of adulthood. This refers primarily to one's acceptance of the consequences of their actions rather than expecting parents or others to take responsibility. This variable has been described as having an individualistic quality, as survey items were geared toward responsibility for the self rather than taking responsibility for others (e.g.,

children, community; Arnett, 1994, 1998, 2001). This appears consistent with Arnett's (2004, 2006) conceptualization of emerging adults being self-focused, as these individuals have typically not yet committed to a partner, children, a steady employer, or a community in which they plan to live long-term and therefore tend to have fewer external responsibilities. It has also been suggested that individuals within the age range of emerging adulthood may witness relatively high levels of responsibility in their parents or adult counterparts, have mixed feelings about their desire to take on such responsibilities, and thus decide to delay adulthood when possible (e.g., when enrolled in post-secondary education, when socioeconomic status is high enough to postpone a long-term career; Arnett, 2000, 2007b).

Making one's own decisions was also shown to be an indicator of perceived adult status (Arnett, 1998, 2001). The ability to make decisions independently from parents and others, including those involving personal values and beliefs, relates to the developmental theories of Perry (1970) and Kohlberg (Kohlberg & Hersh, 1977). According to Perry's theory of cognitive development among college students, movement is made from making decisions based on the values and beliefs of others (e.g., parents), to appreciating that different morally right perspectives may be held by different people, to discovering one's personal beliefs and values rather than adopting them directly from others (Arnett, 1998; Perry, 1970). Here, one would expect that emerging adults would fall toward the former end of this continuum, with less independence having been gained. Adults would be expected to fall toward the latter end, having relatively high levels of independent decision-making.

Kohlberg's (Kohlberg & Hersh, 1977) stage theory of moral judgment provides a slightly different perspective, though still highlighting the developmental changes occurring during the emerging adult years. Like in Perry's theory, the individual is said to begin with a perspective

primarily rooted in experiences with the parents and other authority figures. With time, an understanding of larger social structures is gained, with moral judgment becoming informed by societal norms and rules (Kohlberg & Hersh, 1977). Though most (less than 10% of samples) do not move beyond this societal perspective, further stages of moral development include integrating the rules of society with morals and ethical principles (Colby, Kohlberg, Gibbs, & Lieberman, 1983; Kohlberg & Hersh, 1977). For example, an individual in a later stage of moral development may recognize that a particular societal rule conflicts with a higher-order ethical principle and respond accordingly.

Research examining moral reasoning across a wide age range has revealed that significant advances often occur during the time period of emerging adulthood and that the more societally-based perspective rarely exists prior to age 18. Though few individuals reach Kohlberg's final stages of integrating societal rules with ethical principles, those who do typically transition to this stage during their mid-twenties (Colby et al., 1983). Together, these findings indicate that the emerging adulthood years are ripe for movement across these moral stages. The fact that independent decision-making has been deemed an important variable in determining whether or not one has reached adulthood (Arnett, 1994, 1998, 2001) is consistent with both Perry (1970) and Kohlberg's (Kohlberg & Hersh, 1977) theories, as these demonstrate a shift away from sharing the values of parents and other influential authority figures to working toward a more complex and individualized decision-making process.

Achieving financial independence is a relatively concrete and measurable variable that individuals identify as being fundamental to perceived adult status (Arnett, 1998, 2001). This simply means that the individual pays their own bills, such as rent, utilities, educational costs, car payments, vacations, and other expenses (Arnett, 1998, 2001). Delays in financial independence

have been particularly implicated in the rise of emerging adulthood in the United States, as parents have begun to support their offspring further into life (Molgat, 2007). Even into their late twenties, as many as 40% of Americans continue to receive some form of financial support from their parents (Schoeni & Ross, 2005).

Some have argued that the current economic recession in the U.S. is at least partially to blame for this rise in financial dependence, as even those emerging adults who have attended college often leave with few opportunities for a stable career (Cote, 2006; Stringer & Kerpleman, 2010). Though obtaining employment and financial independence are not necessarily one in the same, there is clearly a connection between the two. Thus, when job opportunities are limited, financial independence is pushed further into the future and adulthood is likely delayed (Cote, 2006).

Financial independence may also be perceived as a particularly central component of adulthood within industrialized, capitalistic nations such as the U.S., in which economic individualism is a widely held value (Cote, 2000). As noted previously, social class is also likely to influence the expression of emerging adulthood (Arnett, 2007a; Arnett & Tanner, 2011). It makes sense that those from higher socioeconomic backgrounds would receive more support into the twenties and thus exhibit more characteristics of emerging adulthood.

In addition to relatively low levels of independence and responsibility, the concept of emerging adulthood has been characterized as including high levels self-exploration (Arnett, 2000, 2004, 2006, 2007b; Kins & Beyers, 2010; Lopez et al., 2005). In fact, self-exploration may be conceptualized as one's primary developmental task within this stage, with individuals testing out various preferences and values before committing to any particular identity (Marcotte, 2008; Tanner & Arnett, 2011). Relating this to the variable of independence, emerging adults

have been characterized as having the freedom to experiment in areas of their lives such as work and romantic relationships due to a current lack of commitment to particular life roles (e.g., wife, mother; Arnett, 1998; Kins & Beyers, 2010; Tanner & Arnett, 2011). As one later transitions from emerging adulthood to adulthood, longer-lasting commitments are made, such as to a long-term career, or to a marriage or long-term partnership. If the self-exploration occurring within adolescence and emerging adulthood has been successful, a high level of “fit” will exist between the individual and those commitments (Tanner & Arnett, 2011).

The roots of the concept of self-exploration can be found in Erikson’s developmental theory, in which individuals move from infancy to late adulthood in a series of stages. Each stage contains a primary task, which must be completed to avoid struggles in later stages (Cote, 2000; Erikson, 1950). For example, the primary task of adolescence was labeled identity vs. role confusion, highlighting the centrality of exploring one’s identity during that time. Without having adequately engaged in self-exploration in this period of adolescence, an individual is likely to experience confusion regarding their personal identity during young adulthood. In turn, that confusion may affect the next primary task of intimacy vs. isolation, in which young adults are said to focus on navigating relationships (Erikson, 1950).

Although Erikson jumped from adolescence to young adulthood in his stage theory rather than including emerging adulthood, he did state that opportunities exist for prolonged adolescence. Here, identity exploration that normally occurs during adolescence is continued prior to the transition to adulthood (Arnett, 2000; Erikson, 1959). Further, it can be argued that Erikson’s concepts of moratorium and identity crisis (which include an evaluation of one’s abilities, interests, and experiences) may now be experienced more strongly during emerging adulthood rather than adolescence (Arnett, 2006, 2007b; Ravert, 2009). This shift was

empirically supported by Cote (2006), who found that the most dramatic changes in identity formation now take place in the early to late twenties, rather than during the teen years.

Erikson also highlighted the importance of cultural and historical contexts in his developmental theory and thus may not have been opposed to altering the stages in accordance with societal shifts (Cote, 2006). More specifically, he contended that prolonged adolescence is more culturally sanctioned in some nations than others and that the relatively high socioeconomic status of industrialized nations may afford increased opportunities for self-exploration (Arnett, 2000; Cote, 2000). Since the theory's inception in the 1950's, the U.S. now has a drastically different economy, increased opportunity for higher education, and decreased career opportunities. It is plausible that such cultural shifts have led to changes in individuals' progression through the developmental stages and the timing of primary tasks (e.g., engaging in self-exploration later than Erikson originally postulated; Cote, 2006).

More specifically, self-exploration has been conceptualized as applying to three primary areas of career, love, and worldview, with testing taking place in each (Arnett, 2000, 2006). This testing involves assessing the level of fit between a given option and the personal identity (Tanner & Arnett, 2011). This has also been described as a constant self-probing, in which the individual is continuously discovering their strengths, preferences, and needs, and then testing their "capacity to withstand or use what his society would make of him, ask of him, and allow him" (Keniston, 1970, p. 637). These ideas are akin to Holland's theory of person-environment fit from the career development literature, which highlights the importance of matching the occupational environment with one's personality (Holland, 1997). Self-exploration, including "testing" or experimenting with various career paths (e.g., considering different majors, volunteering or completing an internship), allows for a more accurate assessment of the extent to

which those career paths fit with the self and increases the likelihood of job and life satisfaction (Holland, 1997).

The same basic process can be applied beyond career and to the other two areas of self-exploration: love and worldview. In terms of love and romantic relationships, individuals must rely upon self-exploration to gain an understanding of their preferences, interests, strengths, and needs before being able to accurately assess who might make a good partner for them. Emerging adults tend to experiment in love by beginning to initiate more serious relationships than in their adolescence, more frequently involving relatively long-term commitments, cohabitation, and greater intimacy (Arnett, 2000). Today's young people are also waiting longer to get married than those in previous generations, allowing them to more thoroughly explore which characteristics they may be looking for in a partner before making a final commitment to one person (Tanner & Arnett, 2011). Lastly, self-exploration takes place in determining one's worldview, particularly as the individual gains autonomy from the parents and begins to move toward independent decision-making (Arnett, 2006; Kohlberg & Hersh, 1977; Perry, 1970).

Consistent with the idea of emerging adulthood being a new stage of development, the primary task of identity formation appears to be extending later into life, going beyond adolescence and into the twenties. However, the extent to which emerging adults engage in self-exploration in each of the three identified areas remains unclear; Cote (2006) found that only one third of emerging adults were still in the process of exploring their worldview, though this group was found to be more frequently engaging in self-exploration related to love, and most of all to career. This appears somewhat contradictory to the developmental theories of Perry (1970) and Kohlberg (Kohlberg & Hersh, 1977), which would each suggest that worldviews are still in formation during the emerging adult years. Further research has been needed to clarify how the

process of self-exploration may differ between developmental stages in each of the areas of career, love, and worldview.

Though the stages of adolescence and emerging adulthood are similar in that they both involve the task of self-exploration, emerging adults typically engage in this exploration after some level of independence is reached (e.g., leaving the home of the family of origin; Kins & Beyers, 2010). Here, it is evident that there is some overlap in the process of self-exploration between adolescence and adulthood, as well as in levels of independence and responsibility between emerging adulthood and adulthood. The murkiness of this stage in terms of levels of exploration and independence/responsibility is consistent with the notion that emerging adults feel that they are in between the phases of adolescence and adulthood, often displaying characteristics of both (Reifman et al., 2007a). Further, this seems to point toward the convergence of levels of independence and self-exploration as a key determinant of whether an individual is currently an emerging adult or an adult.

This interplay between independence and self-exploration is also salient in Tanner's (2006, p. 27) conceptualization of emerging adults as engaging in a three-stage process of recentering. Here, it is argued that the individual moves from dependence on the family of origin to independence, self-regulation, and a sense of responsibility for oneself, with personal exploration occurring along the way and acting as a guide. In the first stage, the individual begins by being embedded within the social context of the family of origin as a child and adolescent, with relatively little autonomy. The second stage, emerging adulthood, allows for increased opportunities to explore the self and various roles and commitments (e.g., relationships, career choices) without these being set in stone. This stage coincides with increases in independence, as the family of origin typically moves toward having less of a direct

influence over the individual's choices. In the third and final stage of the recentering process, the individual moves from emerging adulthood to adulthood by decreasing their level of self-exploration, instead solidifying longer-lasting commitments to adult roles (e.g., getting married, having children, entering a long-term career; Tanner, 2006).

In recentering, emerging adulthood is akin to a process of separation and individuation, with the emerging adult distinguishing oneself from the family of origin while still remaining somewhat connected (Tanner, 2006). This process is typically negotiated with parents, who may affect this development based on their responses. This is demonstrated in part by the colloquial term "helicopter parenting," in which parents are said to "hover" over their emerging adult's decisions and minimize separation (LeMoyne & Buchanan, 2011; Somers & Settle, 2010a, p. 19; Somers & Settle, 2010b). In contrast, it has been suggested that less directive parenting styles that communicate less worry over outcomes is more facilitative of a healthy separation and individuation process (Lopez et al., 2005). In sum, it could be said that emerging adulthood is a distinct stage in which the individual is in the process of further exploring their sense of self (as an individual who is influenced by, yet distinct from, their parents) and determining which adult roles fit with that self before making larger commitments and taking on associated responsibilities. Again, the themes of self-exploration and independence/responsibility appear to be central.

Misconceptions and assumptions. Additionally, much like adolescence is often mischaracterized as being a stormy period for every individual, Arnett (2007b) argues that there are misconceptions about those in emerging adulthood as well, such as that all emerging adults are self-centered, lazy, or evasive of the responsibilities that come with adulthood. Instead, it can be argued that emerging adults often view adulthood as a time of the lifespan in which the

window of opportunity is narrowed and that these individuals may perceive benefits of delaying adulthood (Arnett, 2004; Lopez et al., 2005). Further, emerging adults may view adulthood as being a time of stagnation rather than one that is dynamic and ever-changing, making it unappealing for the large proportion of individuals in this age group who value change (Keniston, 1970). Other assumptions related to entering adulthood have included ideas of being trapped by excess responsibilities and losing freedom, entering a period of degeneration rather than growth, and a loss of positive qualities associated with youth in the given culture, perhaps deterring individuals from moving toward this stage (Cote, 2000; Lopez et al., 2005).

Emerging adults may wish to delay adulthood due to the benefits of garnering a variety of experiences before committing to responsibilities such as stable employment and children (Arnett, 2000, 2007b). These benefits may actually be quite large; as noted previously, Holland (1997) and others have argued that the process of self-exploration and testing the fit between the self and various work environments leads to greater levels of satisfaction both within the career and in life in general. It has been shown that outside of emerging adults' regular work hours, they are more likely than other groups to engage in activities that could lead to other career opportunities (Murphy et al., 2010). It may be that individuals in emerging adulthood who are in one career are more likely to experiment with their interests and seek another career that fits better with the self. It could also be that fulfillment in a career is considered more important to those in this stage of development and that they are willing to experience costs in the short-term (e.g., delaying paid employment) to have a more fulfilling long-term career. This idea is consistent with post-secondary education in general, as the idea is that the investment of time and money will pay off after college graduation with a more rewarding (lucrative and/or personally fulfilling) career.

Emerging adults may also possess now or never attitudes and wish to engage in activities such as risky behaviors (e.g., using alcohol or drugs), travelling, having a carefree lifestyle, focusing on their social life, or taking academic or career opportunities that may not arise later (e.g., studying abroad, working an unusual job, completing a summer internship; Arnett, 2005; Bradley & Wildman, 2002; Ravert, 2009, p. 379). In fact, 76% of college students reported engaging in at least one of these behaviors because they anticipated that they would not be able to do so in the future (Ravert, 2009). Additionally, while self-exploration also occurs during adolescence, emerging adults typically have a higher degree of freedom to engage in such activities than is typically afforded to adolescents. Rather than associating these behaviors and attitudes with self-centeredness or avoidance of responsibility, they could be viewed as developmentally-appropriate extensions of a self-exploration process that may actually be beneficial.

In addition to possible benefits of postponing adulthood, there are other variables that may absolve emerging adults from being considered merely self-centered or lazy. First, some have noted that emerging adults' willingness to delay financial gratification by engaging in volunteer work or similar activities before embarking on a career can be viewed as commendable, regardless of whether or not it results in delays in reaching adult milestones (Cote, 2000). Emerging adults also appear to have relatively high levels of optimism for the future (Arnett, 2000, 2007b). To illustrate this point, one poll of Americans ages 18-24 showed that the vast majority (96%) "Agreed with the statement, 'I am very sure that someday I will get where I want to be in life'" (Arnett, 2000, p. 474). Whether this is construed as optimism or naïveté, it perhaps reduces emerging adults' feelings of needing to be responsible at present. Further, it may not be that emerging adults are unwilling to take on additional responsibilities,

but may instead possess the optimistic belief that this is not yet needed. Lastly, there is also some evidence that those in the age range of emerging adulthood perceive adult status as being desirable, or that emerging adults themselves may not want to confirm the misconceptions associated with their developmental stage. For example, Lopez et al. (2005, p. 26) found that negative associations were held with being still into partying and more positive associations were held with being more serious. The former was perceived as having social consequences, such as getting left behind other peers who have reached adulthood or act more responsibly (Lopez et al., 2005).

On the whole, research in this area may wish to steer clear of overly simplistic conceptualizations of emerging adults, such as their being self-centered or lazy, instead accounting for some of the perceived benefits of delaying adulthood and providing a less biased view of those falling within the emerging adulthood phase (Arnett, 2007b). Some negative repercussions of emerging adulthood have been suggested, such as the possibility of individuals becoming developmentally stuck in this stage into their 40's and 50's (or even throughout the entire lifespan), which Cote (2006, p. 94) called "youthhood." However, there is little existing research to suggest that youthhood is actually occurring or is going to occur, or that such extensions of emerging adulthood would even have a detrimental effect on individuals' well-being (Tanner, 2006).

Physical development. When examining developmental stages, there is a need to take a holistic approach and consider both physical and psychological variables. The vast majority of research on physical development focuses on children, adolescents, or the elderly, tending to ignore emerging adult and adult populations. The research that has been done in this area tends to focus on rates of physical activity and other components of a healthy (or unhealthy) lifestyle.

Emerging adulthood in particular has been identified as a time in which lifestyle changes are frequent, as individuals tend to be making adjustments to new home environments, new occupational or academic environments, and changing social relationships, among other transitions (Baranowski et al., 1997; Dowda, Ainsworth, Addy, Saunders, & Riner, 2003). With those transitions, habits associated with a healthy lifestyle appear to decline (Dowda et al., 2003). For example, 71% of 12th grade males and 52% of 12th grade females reported receiving vigorous physical activity at least 3 days weekly. These numbers declined to 20% and 16% for males and females ages 18 to 29, respectively (U.S. Department of Health and Human Services, 1996). Others have noted similar progressions in physical activity both directly following high school (Cullen et al., 1999) and into the twenties (Anderssen et al., 1996; Leslie, Sparling, & Owen, 2001; National Association for Sport and Physical Education, 2007; Van Mechelen, Twisk, Post, Snel, & Kemper, 2000). When looking at physical activity over the lifespan, the largest dips occur between the ages 18 and 25, consistent with the age range of emerging adulthood, as well as between the ages of 30 and 37 (Anderssen et al., 1996). Similarly, those ages 18 to 29 have the highest increase in obesity when compared to other age groups in the U.S. (Mokdad et al., 1999).

Various reasons for this decrease in physical activity have been hypothesized, including having increased responsibilities and thus less time to care for the physical self (Anderssen et al., 1996; Dowda et al., 2003). Supporting this, physical activity has been shown to be negatively correlated with marital status for both women and men, and research has indicated that women with smaller families engage in relatively high levels of activity compared to those with larger ones (Dowda et al., 2003). Other explanations for the lowered activity levels include emerging adults having increased freedom after moving out of the parental home (Miller & Quick, 2010),

as well as having less encouragement or pressure to take part in organized sports (Van Mechelen et al., 2000). It has also been pointed out that young people are spending greater amounts of time engaging in sedentary behaviors as reliance on technology increases. Similarly, the likelihood that these individuals will go into occupations that require them to be sedentary is rising (Fotheringham, Wonnacott, & Owen, 2000). Often, individuals then match their lifestyle outside of work to the one at work, decreasing their overall amount of physical activity (Owen, Leslie, Salmon, & Fotheringham, 2000).

In addition to physical activity levels, emerging adults have been shown to engage in a relatively high number of risky behaviors that may lead to physical consequences (Miller & Quick, 2011; Schwartz et al., 2009). These include underage drinking (Komro & Toomey, 2002), binge drinking (Cullen et al., 1999; Weitzman & Kawachi, 2000), tobacco use (Miller, Burgoon, Grandpre, & Alvero, 2006), risky sexual behaviors (Tapert, Aarons, Sedlar, & Brown, 2001), and risky driving behaviors (e.g., driving under the influence or with someone under the influence; Schwartz et al., 2009). The transition of exiting high school has also been associated with health behaviors that increase cancer risk, including the aforementioned tobacco use, as well as poor diet and decreased sunscreen use (Baranowski et al., 1997).

These behaviors have been said to be associated with the psychological variables of sensation-seeking and psychological reactance, which peak in adolescence but often continue to be found in the emerging adult population. Psychological reactance may be defined as when individuals attempt to recapture the freedoms they feel they have been losing or have been told not to partake in. Essentially, when an emerging adult has been told not to do something, they may react in order to establish a sense of personal freedom. This makes prevention efforts for this group particularly difficult (Miller & Quick, 2010). Sensation seeking, on the other hand, is

a trait in which individuals feel they need a high degree of stimulation (either physically or mentally), and therefore seek stimuli that will provide them with such effects (Zuckerman, 1994). Some young people may actually have a larger biological drive for sensation-seeking (Miller & Quick, 2010), which will be further discussed.

Social and relational variables may also play a role in risk-taking behaviors. For example, it has been found that larger amounts of conflict with parents increases the risk of substance use during the emerging adult years (Aquilino & Supple, 2001). Similarly, a lack of connection with one's parents is linked with alcohol use during college (Fischer, Forthun, Pidcock, & Dowd, 2007), and high ratings of parental acceptance have been associated with lower levels of drug use and risky sexual behaviors (Schwartz et al., 2009). Changes in the social environment, such as instances in which an emerging adult moves from the parents' home to a college dorm, is also relevant. In particular, there is likely to be a dramatic rise in the availability of drugs and alcohol, increasing the likelihood of associated risk-taking behaviors (Baranowski et al., 1997).

Further, emerging adulthood has been identified as a time in which various identities and lifestyle choices are tested out, with some of these being related to health (Leslie et al., 2001). Some have even pointed to physical activity as way for individuals to express themselves and their personal identity, with that identity developing during the adolescent and emerging adult years (National Association for Sport and Physical Education, 2007; Worpole, 1996). Additionally, Stodden, Langendorfer, and Robertson (2009, p. 228) discussed the possibility of there being a proficiency barrier that is most clearly defined in young adults; the idea is that if the individual does not have some base level of motor skills and physical ability, they will likely choose not to engage in physical activities. Whereas, adolescents may be required to participate

in physical activities during their education, emerging adults appear to have greater agency in either continuing or ceasing these behaviors and determining the extent to which these behaviors are a part of their identity.

Further knowledge appears to be needed regarding the health-related habits of the emerging adult population and the precise ways in which these behaviors change around times of transition (Baranowski et al., 1997). Additionally, information should continue to be gathered regarding changes in health behaviors across the lifespan, with a specific emphasis on those that may be unique to emerging adults. For example, behaviors associated with higher cancer risks have been said to increase between the adolescent and emerging adult years (Baranowski et al., 1997). However, the timing and extent to which these behaviors may return to lower levels in adulthood appears less clear. Additionally, it is possible that there are differences between emerging adults and adults in the extent to which physical activity is protective against various health concerns, including those related to “cardio-respiratory function, energy metabolism, skeletal development, and body composition” (Leslie et al., 2001, p. 123). Therefore, the continuous tracking of such behaviors in different age groups may be beneficial (Leslie et al., 2001).

The existing research on human brain development also sheds light on the physical differences between emerging adults and other age groups. The aforementioned works of Perry (1970) and Kohlberg (Kohlberg & Hersh, 1977) on theorized changes in moral decision-making served as a catalyst for later research on brain development during the emerging adult years (Labouvie-Vief, 2006). Generally, the brain appears to still be developing during the middle and late twenties, providing evidence for emerging adulthood being considered a distinct developmental stage. Findings have included relatively late development of the pre-frontal

cortex compared to other brain structures, as well as differential levels of grey and white matter over the course of adolescence and adulthood (Bryck & Fisher, 2012; Dickerson, 2008; Gogtay et al., 2004; Winters, 2007).

The pre-frontal cortex, which is linked to the ability to resist impulses and consider potential consequences, is not fully developed until around age 24 (Dickerson, 2008; Keating, 2004; Kelley, Schochet, & Landry, 2004; Winters, 2007). This may help explain the aforementioned finding that emerging adults often continue to engage in risky behaviors or activities that are perceived as more exciting or novel (Miller & Quick, 2010; Pharo, Sim, Graham, Gross, & Hayne, 2011). Further, the pre-frontal cortex affects one's judgment and emotional regulation; as this structure develops, the individual is more likely to make decisions based on rational thought rather than immediate emotions and impulses (Dickerson, 2008; Keating, 2004; Winters, 2007). For example, one's ability to delay gratification increases (Dickerson, 2008; Winters, 2007). Thus, individuals may continue to develop in these areas during their early and mid-twenties.

There is also evidence that improvements in emotional regulation continue as one moves through adulthood, with older adults showing less variability in mood than younger adults (Rocke, Li, & Smith, 2009). It has been noted that many of these abilities are associated with functioning in long-term romantic relationships. For example, self-regulation would include being able to make accommodations for one's romantic partner, such as apologizing or resisting the urge to make a negative comment (Diamond & Fagundes, 2011). This is particularly relevant given that many emerging adults engage in self-exploration related to love and tend to form longer-lasting romantic relationships than they had in adolescence.

Amounts of grey and white matter in the brain also appear to shift during the years typically associated with emerging adulthood. Grey matter slowly decreases from late adolescence into the early twenties, whereas white matter increases from late adolescence into adulthood (Gogtay et al., 2004; Groeschel et al., 2010). This alteration in the organization of the brain is associated with fewer but faster neural connections, facilitating more rapid decision-making that is again more rational than emotional (Gogtay et al., 2004; Stevens et al., 2009; Tanner & Arnett, 2011). Following this period of pruning, the organization of the brain will then remain relatively stable throughout adult life (Crews et al., 2006).

These processes have been described as being consistent with Perry's (1970) and Kohlberg's (Kohlberg & Hersh, 1977) theories, illustrating the centrality of the emerging adult years in developing decision-making abilities to be used in the remainder of the lifespan. Consequently, some neuroscientists have even argued that emerging adulthood appears to be a critical period of development for one's ability to make rational decisions (Labouvie-Vief, 2006). Overall, the brains of individuals ages 18-24 appear to be both more developed than those of adolescents and less developed than those of adults over age 24, consistent with the notion that emerging adulthood is a stage existing between adolescence and adulthood (Dickerson, 2008; Winters, 2007).

Various components of intelligence also undergo changes over the course of the lifespan, with those in the emerging adult years differing in some capacities from children, adolescents, and older adults. One of the most commonly discussed discrepancies is in the trajectories of fluid and crystallized intelligence. Fluid intelligence, which involves finding relationships and making inferences in tasks that are unaffected by cumulative knowledge, is said to rise until the emerging adult years and then steadily decline (Craik & Bialystok, 2006). This has been

theorized to be related to processing speed, which also seems to peak in the early twenties and then slow with age (Salthouse, 1996, 2003). Crystallized intelligence, on the other hand, involves content learned through one's experiences, such as their education (Craik & Bialystok, 2006). The latter is said to persist longer into the lifespan, with older adults maintaining much of the knowledge gained throughout life (e.g., vocabulary, facts; Crowley, Mayer, & Stuart-Hamilton, 2009; Gow et al., 2011).

Additionally, prospective memory, which is essentially remembering one's intentions or that something needs to be done, appears to be higher in younger adults and adolescents than in children or older adults. As a simple example, younger adults (ages 19-26) are more likely than older adults (ages 55-65) to be able to go into an adjacent room to get a pair of scissors, and then recall what they intended to use them for (Zimmermann & Meier, 2006). Working memory is also said to be at its best during young adulthood, steadily declining thereafter (Craik & Bialystok, 2006; Park & Payer, 2006). One possible reason for this may be increased interference with age, such as distractions during a digit span task resulting in a decreased ability to recall numbers (Park & Payer, 2006). This relates to the concept of "cognitive control," which includes the "ability to inhibit attention to irrelevant stimuli... to hold information in working memory, and to reflect on integrated higher order rules" (Craik & Bialystok, 2006, p. 134). Cognitive control is said to take a similar developmental path, peaking during the late teens and early 20's (Craik & Bialystok, 2006). Such findings illustrate that those ages 18 to 25 may be unique even from those in their late-twenties in some cognitive domains.

Lastly, recent literature in neuropsychology acknowledges that rather than the traditional view of the brain affecting behavior, it instead appears to be a reciprocal process in which both the brain and behavior affect one another (Stiles, 2009). It is possible that the brains of those

who are currently emerging adults differ in some ways from those in generations before them. For example, there is some evidence that increased use of technology (which current emerging adults use more than their predecessors) alters neural circuitry, allowing the individual to become more adept in filtering and processing information (Hershatter & Epstein, 2010). Here, it appears that contextual variables (e.g., access to technology) remain important even when considering the role of the biological system in development (Stiles, 2009).

Cultural Issues and the Universality of Emerging Adulthood

One of the primary criticisms of emerging adulthood as a proposed “new” stage of development is that it is not universal across groups and is instead a product of particular social, historical, political, and economic contexts (Hendry & Kloep, 2007a). The proposed developmental phase of emerging adulthood may vary based on one’s country, socioeconomic status, educational attainment, race, and ethnicity, among other variables, which each deserve further exploration (Arnett, 1998, 2000; Arnett & Eisenberg, 2007; Kins & Beyers, 2010; Luyckx et al., 2008; Ravert, 2009). Additionally, a key problem with the existing research on emerging adulthood is the homogeneity of participants. Much of the past research has examined Caucasian American college students enrolled at 4-year universities, limiting the ability to generalize findings about emerging adulthood to diverse groups. What is currently known about emerging adulthood across groups, what remains to be understood, and the question of whether or not emerging adulthood is a useful addition to theories of lifespan development will be discussed.

Emerging adulthood across nations. The international research that has been conducted on emerging adulthood shows that this proposed phase of development varies across the globe (Arnett & Eisenberg, 2007). For example, Europeans in their 20’s often attend college,

travel, and spend large amounts of time socializing and meeting new people, which are activities that clearly fit with the stage of emerging adulthood (Arnett & Eisenberg, 2007; Douglass, 2007). Similar patterns are evidenced within wealthier parts of Latin America (Arnett & Eisenberg, 2007). In contrast, emerging adulthood has reportedly been rare in China (Arnett & Eisenberg, 2007; Nelson & Chen, 2007). Moreover, the expression of the emerging adulthood stage may differ across nations. For example, Argentinian young adults typically have stronger family ties than those in the United States, resulting in differences in levels of independence and the separation and individuation process (Arnett & Eisenberg, 2007). However, there seem to be some commonalities across nations as well. In particular, the three commonly identified markers of perceived adulthood (accepting personal responsibility, making decisions on one's own, and achieving financial independence; Arnett, 1994, 1998, 2001) have been consistently reported in a number of developed countries. Similarly, across developed nations, individuals tended to respond to the question of whether or not they perceive themselves to be adults with in some ways yes, in some ways no, indicating that the transition to adulthood is often unclear regardless of nationality (Arnett, 2003; Arnett & Tanner, 2011).

Emerging adulthood across socioeconomic groups. Additionally, the stage of emerging adulthood may not generalize across socioeconomic groups. Some argue that this proposed stage is actually a manifestation of differences in social class, with emerging adulthood being a luxury (Hendry & Kloep, 2007a). This idea fits with Erikson's original conceptualization of prolonged adolescence as being more common in cultures of relatively high socioeconomic status, allowing more opportunities and time for self-exploration before having to commit to adult roles (Erikson, 1959). Others agree that social class plays a role in emerging adulthood but argue that it influences the expression of emerging adulthood more than it does the

existence of emerging adulthood (Arnett, 2007a; Arnett & Tanner, 2011). In other words, those taking this perspective believe that while there may be differences in emerging adulthood based on socioeconomic status, the stage is not restricted only to middle and upper class populations, with the themes of emerging adulthood still arising among the lower class (Arnett & Tanner, 2011). Regardless of which of these perspectives is taken, it can be argued that even the most well-intentioned scholars often have a bias of understanding emerging adulthood only from the perspective of the middle and upper classes. Those from lower social classes, who have been deemed the forgotten half, are often ignored (Arnett, 2000, p. 476). It would be beneficial for further research in this area to take the forgotten half into consideration, building an understanding of potential similarities and differences in emerging adulthood that exist across socioeconomic groups.

The research that does exist in this area suggests that the largest differences in emerging adulthood across socioeconomic groups appear to be related to the perception of adulthood. First, those from lower socioeconomic backgrounds are more likely to perceive that they have reached adulthood than their counterparts from wealthier families of origin (Arnett & Tanner, 2011). Perhaps connected to this, those from the lower class tend to take on a larger number of responsibilities, particularly financial ones (Cohen et al., 2003). Additionally, individuals from lower class backgrounds are more likely to identify items related to family or complying with social norms as being markers of adulthood than are those from middle or upper classes. Here, it seems that those from lower socioeconomic backgrounds take a less individualistic perspective than their wealthier counterparts (Arnett & Tanner, 2011).

Some similarities across socioeconomic groups have also been observed. For instance, self-exploration and testing of possible adult roles, particularly in the areas of career and love,

have been found to occur in comparable levels in emerging adults regardless of class (Arnett, 2004). However, it should be noted that this appears somewhat contrary to the aforementioned ideas of Erikson (1959), who believed that self-exploration would tend to increase with socioeconomic status. Additionally, optimism is a characteristic typically found within emerging adults that has been consistently found across socioeconomic groups. In fact, there is evidence that individuals of lower socioeconomic status actually tend to be more optimistic about the future than their middle-class counterparts (Arnett, 1997, 2004, 2007a; Arnett & Tanner, 2011).

Emerging adulthood across educational attainment. Related to socioeconomic status, differences in emerging adulthood may also be found based on educational attainment and current enrollment. For instance, individuals between the ages of 18 and 25 who are employed are more likely to perceive that they have reached adulthood than those who are in college (Luyckx et al., 2008). It has been pointed out that attending a four-year college or university essentially places individuals in a state of semiautonomy, in which they are separated from the family of origin but often live in a college atmosphere that vastly differs from the real world and its associated independence (Goldscheider & Davanzo, 1986, p. 187). This perhaps results in increases in feeling in between adolescence and adulthood, while also delaying some of the responsibilities faced by their same-aged counterparts who have entered careers. Additionally, financial independence, which is a commonly-endorsed marker of adulthood (Arnett, 1998, 2001), tends to be delayed for those who enter post-secondary education. Likewise, those in college typically postpone role transitions such as marriage an average of two years later than those who do not attend college (Amato et al., 2007; Arnett & Tanner, 2011). However, while these variables clearly have some relation to whether individuals perceive themselves as emerging adults or adults, Cohen et al. (2003) found that much of the variation in development

during emerging adulthood (e.g., differing levels of independence) was surprisingly unaccounted for by educational attainment. The role of education in emerging adulthood, such as the extent to which emerging adulthood may be experienced by those who become employed directly after high school rather than seeking post-secondary education, is not yet clearly understood.

It should also be noted that the effects of socioeconomic status and international differences on emerging adulthood appear somewhat convoluted, with emerging adulthood more commonly occurring in wealthier, industrialized nations (Arnett, 2000, 2010; Arnett & Eisenberg, 2007). Generally, industrialized nations are more likely to allow individuation and self-exploration to take place for extended amounts of time (e.g., beyond adolescence). Both within Europe and Latin America, emerging adulthood is experienced more fully in countries of higher socioeconomic status (Arnett & Eisenberg, 2007; Douglass, 2007). As such, not only may socioeconomic status influence the tendency for individuals to experience emerging adulthood, but cultural norms in different countries that relate to their national economy may be associated with differences in the tendency of citizens to display characteristics of emerging adulthood. As noted previously, some have argued that the economic recession within the United States in the 2000's has played some role in the expression of emerging adulthood among Americans (e.g., Cote, 2006).

Emerging adulthood across culturally diverse groups in the U.S. When culturally diverse groups within the United States have been included in the study of emerging adulthood, both similarities and differences have been found in the perceptions of what it means to reach adulthood and whether or not individuals feel they have become adults. Just as the three markers of perceived adulthood (accepting personal responsibility, making decisions on one's own, and achieving financial independence; Arnett, 1994, 1998, 2001) were consistently identified across

a number of developed countries, these have also been reported across racial and ethnic groups. However, African Americans, Latinos, and Asian Americans were more likely than Caucasian Americans to indicate that an additional requirement of adulthood was to be able to support a family. Additionally, members of racial and ethnic minority groups were more likely to associate role transitions such as marriage with the obtainment of adulthood (Arnett, 2003). These differences were suggested to be the result of more collectivistic values often held by individuals within minority groups, compared to the individualistic values typically possessed by Caucasian Americans (Arnett, 2003).

Utility of emerging adulthood as a stage. It should be emphasized that Arnett does not claim that emerging adulthood is a universal stage and has clearly stated, “Is emerging adulthood a period of life that is restricted to certain cultures and certain times? The answer to this question appears to be yes” (Arnett, 2000, p. 477-478). It is instead argued that emerging adulthood is a distinctive stage in which common themes often arise for those within this age group, such as high levels of self-exploration and few responsibilities relative to their adult counterparts (Tanner & Arnett, 2011, p. 15). Such commonalities appear to occur consistently enough to make the conceptualization of emerging adulthood useful. For instance, particularly in developed nations, 20-somethings as a group are different in many respects from 30-somethings, perhaps having differing roles and levels of independence (Arnett, 2007a). This likely makes it helpful to have separate developmental conceptualizations of the two.

Not every individual within the age range of 18-25 will experience emerging adulthood themes and may have already completed a number of role transitions associated with adulthood. In fact, some of the variability between individuals during this age range may be a product of the nature of the stage itself (Arnett, 2006; Lopez et al., 2005). With emerging adults having few

responsibilities and high levels of self-exploration, this age group may perceive greater possibilities and thus take more diverse pathways than those in other developmental stages (Arnett, 2006). It is currently unclear how much of the variance in emerging adulthood may occur along the demographic variables discussed, such as socioeconomic status. Again, universality cannot be assumed, with great caution being required before applying these conceptualizations to diverse groups. It remains imperative to understand the similarities and differences in emerging adulthood over a wide range of groups both within and outside of the U.S., while also considering other contextual factors, such as the historical confound of the economic environment.

Moreover, though it is known that some cross-cultural variation in emerging adulthood does exist, this fact alone does not mean that emerging adulthood is not worthy of being considered its own developmental stage. It has been pointed out that cultural variance also exists within other developmental stages, such as adolescence. Though adolescence is believed to exist in most cultures, its expression varies, such as differences in the length and timing of adolescence, as well as in the particular psychological variables present during that time (Arnett & Tanner, 2011). Clearly, not all developmental stages that have been accepted by the scientific community are entirely universal across groups, negating some of the criticism of emerging adulthood. However, there is certainly a need for gaining further understanding of the extent and nature of the cross-cultural variations of all developmental stages, including emerging adulthood.

Types of Developmental Theories: Where Emerging Adulthood Fits

The majority of human development theories can be categorized in one of a few larger frameworks. Organismic theories tend to view development as being universal, and typically argue for a series of stages that individuals tend to move through in a predictable manner

(Lerner, 2002; Stanton, 2002; Overton & Reese, 1973). Mechanistic theories pay greater attention to the role of the environment, though generally contend that development occurs predictably across individuals if given the same environmental stimulus (Overton & Reese, 1973; Reese & Overton, 1970). Thus, both rely upon “absolute laws, or constancies” to understand and predict development (Lerner, Skinner, & Sorell, 1980, p. 226). Contextual theories, on the other hand, argue that development is a product of interactions between individuals and their ever-changing environments, with universality or absolute laws being impossible (Lerner, 2002; Lerner, Skinner, & Sorell, 1980). Each of these schools of thought will be briefly discussed, as well as the placement of emerging adulthood within these frameworks.

Organismic theories of development. Organismic theories typically delineate specific stages that all humans are said to move through. Progression through stages is considered unidirectional, as the individual only moves forward rather than regressing. Similarly, these theories emphasize the passing of each consecutive stage, with none being skipped. Ages are often used as markers to describe typical stage progressions (Stanton, 2002). Strict or more traditional organismic theories would argue that this process is universal, with development being internally and biologically driven rather than based on environmental forces, such as cultural differences. In other words, development is viewed as a natural process, with all individuals essentially being wired to change in particular ways over time (Lerner, 2002; Stanton, 2002; Overton & Reese, 1973; Reese & Overton, 1970).

Examples of organismic theories include the aforementioned theory of moral development proposed by Kohlberg (Kohlberg & Hersh, 1977), as well as Piaget’s theory of cognitive development (Piaget & Inhelder, 1969), Freud’s (1923) psychosexual theory of

development, and Erikson's stages of psychosocial development (Erikson, 1950). More specifically, Erikson proposed a series of stages moving from infancy to older adulthood, each of which entails specific conflicts that must be resolved before the individual can move forward. For instance, he describes "identity vs. identity confusion" as being a stage in which adolescents explore their personal identity. If this task is not completed, the individual will not be able to move forward to "intimacy vs. isolation," in which more serious romantic relationships are formed, or to "generativity vs. stagnation," in which the individual finds meaningful ways to engage with others (e.g., raising a family, contributing to a community; Erikson, 1950). Though this particular stage theory emphasizes environmental factors, there remains an assumption that individuals naturally progress through a series of stages, rather than their movement being a product of the environment.

Mechanistic theories of development. Mechanistic theories, on the other hand, generally emphasize the role of the environment. In this view, the individual is passive and develops according to their environmental context. This is akin to the concept of "tabula rasa" – the idea that the mind is a blank slate, and that what occurs in one's environment makes imprints (Reese & Overton, 1970). Such theories do not involve stages because there is not said to be a natural course of development; rather, the individual is shaped by environmental factors that could shift at any time. Additionally, mechanistic theorists typically view all of behavior and development to be directly observable, with opportunities available to study such changes in a laboratory (Lerner, 2002).

As an example, an individual's behavior can be viewed as a product of classical or operant conditioning, with opportunities for the stimulus or reward to change (Lerner, 2002). In Skinner's (1953) theory of operant conditioning, the individual engages in a behavior and then

receives a stimulus, the desirability of which affects the likelihood that the behavior will be performed again. Similarly, Bandura's social cognitive learning theory (discussed later in this manuscript), posits that behaviors are filtered through beliefs, which have been formed based on experiences with one's environment. For example, if an adolescent girl grew up in an environment in which she was not expected to do well in math or science, she may form low self-efficacy in these areas and may be less likely to pursue a career in one of these fields (Bandura, 1977, 1997).

Contextual theories of development. Contextual theories have been offered as a counterpoint to the traditional organismic and mechanistic theories by placing emphasis on the interactions between the individual (e.g., biology, personal characteristics) and their environment (e.g., historical and cultural contexts, family, community). Contextual theorists believe that development does not occur in a vacuum, and that there is too much variability across groups to propose universal laws for how individuals progress throughout their lifetime (Lerner, 2002; Lerner, Skinner, & Sorell, 1980). Additionally, while the individual and their environment interact, the individual can also change the environment or context itself. This was a novel concept that differentiated contextual theories from organismic and mechanistic ones (Lerner, 2002).

Vygotsky's theory of cognitive development is one example that falls within this framework. While it is similar to Bandura's (1977, 1997) social learning theory in that they both place emphasis on the role of environmental stimuli in development (Gredler, 2009), Vygotsky adds a contextual element by arguing that the way individuals think is culturally-defined in and of itself. In this view, individuals have learned both how to think and what thinking is from their culture. Likewise, Vygotsky's theory contends that cognitive development is ever-changing

because culture and language evolve over time (Gredler, 2009; Meacham, 2001). This is an example of a reciprocal process in which the environment affects individuals while individuals also affect their environment. In sum, while mechanistic theories such as Bandura's social learning theory argue that such processes occur across cultures or other groups, Vygotsky and other contextual theorists would counter that one's environment is constantly interacting with the individual and affecting development. Relating these ideas to the current focus of emerging adulthood, relevant contextual factors may include economic changes, labor market trends, delays in marriage and other role transitions, generational effects, and increased technology (which may affect social relationships in various ways).

Emerging adulthood as a developmental theory. Emerging adulthood has been described as a stage occurring within a particular age range (Hendry & Kloep, 2007a; Hendry & Kloep, 2007b), which is typically a characteristic associated with organismic theories. Thus, emerging adulthood has received some of the same criticisms as organismic theories in general. First, a number of critics argue that development is not truly unidirectional, as organismic theories often posit (Fawson, 2009). In particular, Hendry & Kloep (2007a) argue that Arnett acts as though once you reach adulthood, there is no returning to previous stages. These authors point out that there are certainly times in which an individual moves back home with their family of origin after having lived on their own, and challenge Arnett to consider where those people would fall within the stage progression (Hendry & Kloep, 2007a). However, it should be noted that the stage of emerging adulthood is not defined solely by role transitions such as these, with psychological characteristics perhaps being more important (Arnett, 1998, 2000, 2001, 2004; Cote, 2000; Lopez et al., 2005; Tanner, 2006).

Perhaps the largest criticism, however, is that stage theories are problematic because they often fail to take contextual factors, such as culture, gender, and socioeconomic status, into consideration (Fawson, 2009; Hendry & Kloep, 2007b). Further, not only can stage theories discount the role of culture, but they may even be inherently biased in that they are based on the specific culture in which they were developed. Here, the possibility exists for taking a Westernized view of what it means to be an adolescent, emerging adult, or adult, and inappropriately applying it to non-Western cultures (Fawson, 2009). Some have gone as far as to say that the theory of emerging adulthood is extremely limited, applying only to those of a certain age, era, and very specific socio-cultural background, and that the theory will soon be outdated due to its dependence on current contextual variables (Hendry & Kloep, 2010). Again, such criticisms are not unique to emerging adulthood, but have also been applied to other stage theories. As Hendry & Kloep (2010) stated, “All age-bound stage theories, from Freud to Erikson, have been criticized for being ethnocentric and having social class and gender biases” (p. 76).

However, the theory of emerging adulthood differs from most organismic theories in some important ways. Unlike most of these theories, Arnett (1998, 2006) contends that the progression through stages varies; rather than all individuals moving from adolescence to emerging adulthood to adulthood, some are said to skip emerging adulthood all together. Related to this, Arnett (2000) specifically states that emerging adulthood is not a universal stage, instead being influenced by socio-cultural forces. In some ways, this appears more consistent with a contextual framework than an organismic one.

Lerner (2002) articulated that there have been some cases in which organismic theories and contextual ones have been blended. In fact, he contends that “organicism and contextualism

are, philosophically, often intimately, related” (Lerner, 2002, p. 62). Moreover, current proponents of organismic theories tend to be more likely than their predecessors to consider the impact of sociocultural variables on development (Raeff, 2011). In such developmental models, an individual’s nature (e.g., biological factors) “will have different implications for developmental outcomes in the milieu of different contextual conditions” (Lerner, 2002, p. 64). Though the differences between a contextual theory and one that is a mixture of organismic and contextual are subtle, a primary distinction seems to be the role of timing. For theories that are both organismic and contextual, context matters in that it influences the expression of certain characteristics that are more likely to occur within a specific window of time (Lerner, 2002). In the case of emerging adulthood, this window is proposed to be between the ages of 18 and 25 (Arnett, 1998), with characteristics such as heightened self-exploration perhaps being likely to occur when certain contextual factors allow (e.g., when socioeconomic status is high enough that there are opportunities for career-related self-exploration before committing to longer-term employment; Arnett & Eisenberg, 2007; Douglass, 2007; Hendry & Kloep, 2007a).

Hendry & Kloep (2007b) argue that a good theory should be generalizable rather than dependent on the era or other socio-cultural contexts of the time, while criticizing Arnett’s theory of emerging adulthood on this dimension. However, it appears that some evidence of emerging adulthood has occurred regardless of the era. For example, Keniston (1970) also argued for the addition of an “optional” stage occurring between adolescence and adulthood (Keniston, 1970, pp. 648-649). Likewise, some of the literature on generational effects emphasizes that when each new generation hits young adulthood, they are viewed as exhibiting some of the same negative characteristics (Deal, Altman, & Rogelberg, 2010). This seems to communicate that

some characteristics may be shared by those in this age group rather as being unique to each new generation.

It has appeared somewhat unclear as to which of the three basic types of developmental theories (organismic, mechanistic, contextual) the theory of emerging adulthood belongs. While emerging adulthood is similar to organismic theories in that it argues for the addition of an age-based stage, it also shares features of contextual theories in that the stage is not considered universal and is admittedly a product of contextual factors such as cultural background and socioeconomic status (Arnett, 2000). Though these two types of theories are typically viewed as distinct, it has been argued that there is some opportunity for them to be merged. In these instances, development may be viewed as time-sensitive, with a general progression through stages naturally taking place while contextual factors may affect the expression of that developmental sequence (Lerner, 2002).

Career Development and Emerging Adulthood

If emerging adulthood is a time of continued identity development and exploration, the question arises of how the process of career development may have changed now that emerging adulthood is becoming a more common stage for individuals within Western cultures (Arnett, 2000, 2010; Arnett & Eisenberg, 2007). It has been noted that the career development aspect of emerging adulthood has received little attention in the literature (Messersmith et al., 2008; Stringer & Kerpelman, 2010). This lack of research is particularly relevant given the aforementioned finding that of the role transitions traditionally associated with adulthood, career entry appears to be one of the most salient in perceptions of adult status (Lopez et al., 2005). The limited research that does exist on the topic suggests that there are a number of influences on individuals' career-related decisions throughout childhood and adolescence and that these same

influences extend into emerging adulthood. It has been suggested that the minor difference between these career development processes and those that may take place during emerging adulthood is that these influences likely become more specific over time (e.g., the emerging adult discerning a parent's perception of a particular career rather than of a broad field; Messersmith et al., 2008). However, further research is needed to evaluate whether or not additional differences exist, particularly between emerging adults and adults. Theories of career development and their potential relationships with emerging adulthood will be discussed in greater depth.

Career as a developmental process. From a lifespan perspective, such as Super's (1992) life-span, life-space theory, career choice is viewed as a developmental process that occurs over the course of the entire lifespan rather than as being a one-time event. It is generally agreed upon that early life experiences inform this entire process, as individuals learn about careers from parents and others from a young age (Levine & Hoffner, 2006; Whiston & Keller, 2004). Children are given opportunities to try out various careers through role-playing, receive ongoing feedback from their social network (e.g., family, teachers, classmates), and then begin to discern whether or not a particular occupation fits with their self-concept (Fredricks et al., 2002). The information gained then continues to affect one's career-related self-concept and career decisions throughout the lifespan (Super, 1992).

Over the course of their development, individuals are continuing to gather information that will lead them to make conclusions about the extent to which they "fit" within particular work settings and then narrow their perceived career possibilities (Betz, 2008; Holland, 1959, 1997; Walsh & Eggerth, 2005). The concept of "person-environment fit" was initiated by Parsons in 1909 and was later revised by Holland in 1959. These theorists highlighted that one's entry into a stable and satisfying career depends on the level of congruence between the

individual's personality and their work environment (Holland, 1997). This process has also been conceptualized as two distinct forms of self-exploration: "diversive" and "specific" (Porfeli & Skorikov, 2010, p. 46). Here, diversive exploration is said to involve gaining further understanding of the self and various work environments, while specific exploration involves an examination of how these two are aligned (e.g., which specific work environments match the self). It has been suggested that these distinct types of exploration are both necessary, with each being insufficient in isolation (e.g., attempting to align the self with a work environment when there is a lack of accurate information about that environment; Porfeli & Skorikov, 2010).

Super (1992, p. 61) viewed career-related processes as occurring along a developmental continuum of career maturity, indicating a readiness to make career decisions. This maturity is said to move through five stages, including growth (ages 0-14), exploration (ages 15-24), establishment (ages 25-44), maintenance (ages 45-64), and disengagement (ages 65+), though stages may be interrupted by life events such as child-raising or changing geographic locations (Super, 1992). Super's (1992) stage of exploration is particularly noteworthy here in that it includes individuals between the ages of 15 and 24, encompassing both adolescence and much of emerging adulthood. In this stage, individuals begin to implement career choices using both knowledge about the self and knowledge about particular occupational fields and are given opportunities to more directly test out different careers and roles. Though not an absolute prerequisite, this stage lays the foundation for the individual's movement to career establishment (Jepsen & Dickson, 2003; Super, Savickas, & Super, 1996).

Given the existing literature on the rising stage of emerging adulthood (Arnett, 2000, 2010; Arnett & Eisenberg, 2007), it appears worth examining whether or not Super's stage of exploration is changing in any way as increasing numbers of individuals can be categorized as

emerging adults. For example, it seems plausible that the exploration stage is beginning to extend further into the lifespan, delaying career choices and the subsequent reaching of the establishment stage. This question seems particularly relevant given the emphasis on developmental stages and tasks within the lifespan-lifespace theory. This theory does offer flexibility in that it recognizes that variations will occur from the typical stage progression (e.g., individuals could potentially continue to engage in exploration into their 30's even though it is posited to typically end by age 24; Jepsen & Dickson, 2003). Likewise, it is recognized within the lifespan approach that stages of career development are more connected than they are distinct from one another, with events occurring in earlier stages affecting those in later ones (Hartung, Porfeli, & Vondracek, 2005). However, with rising numbers of individuals being categorized as emerging adults, it may be beneficial to have a more specific developmental conceptualization of this group, as well as an understanding of how the stage of emerging adulthood may fit into the larger whole of the career development process.

In addition to Super's viewing of career as a continual developmental process, he also argued that an understanding of an individual's multiple life roles is essential in understanding their career development (Super, 1980). For example, Super's "Life Career Rainbow" has been used as a tool to help individuals to recognize the large number of roles they are currently engaging in or hope to engage in (e.g., student, citizen, worker, parent, spouse) and the amount of time typically spent in each role. Such an integrated picture of an individual, in which career is viewed as an extension of the self, allows for a more thorough understanding of the person's goals and priorities (Okocha, 2001; Super, 1980). This theory appears to attest to the importance of considering role transitions (e.g., marriage, having children) as variables that are connected to, though not directly indicative of, emerging adulthood and adulthood. It also highlights the need

for measures of self-perceived adulthood to include questions regarding whether or not the individual feels like an adult within various roles and contexts. Questions arise such as whether or not the roles, goals, and priorities of those within emerging adulthood are similar to those of their same-aged counterparts who do not fall within the stage of emerging adulthood and what this may suggest about the career development of those within each of these stages.

Career as a relational process. Based on the described sequence and the early role of receiving feedback from others, it is clear that career decisions take place within a social context throughout one's development, making it a relational process (Blustein, 2001; Motulsky, 2010). Parental support and attachment, particularly from mothers, has been most commonly identified as an influential factor for career decisions across a range of groups, including high school students and women who are considering mid-life career transitions (Germeijs & Verschueren, 2009; Helwig, 2008; Motulsky, 2010). This relational quality was also captured well by the conceptualization of Young et al. (2001) of adolescent career development being a family project, as one's ideas about career are shaped by a family lineage and shared goals.

Relationships outside of the family also appear to play a large role in career development and decisions, particularly when the relationship is characterized by high perceived significance, high levels of involvement, and a high degree of connectedness. In addition to parents and family, partners and friends often meet these criteria (Motulsky, 2010). For many, work colleagues, supervisors, and former teachers are also influential (Helwig, 2008; Motulsky, 2010). Even more importantly, the number of relationships characterized by support and connectedness is critical in career development and decisions. If an individual receives negative feedback related to career from one or two people, the support provided by their more positive connections can compensate, perhaps keeping the individual from foreclosing on a particular career path

(Motulsky, 2010). In short, career development is not a solitary endeavor, instead occurring within one's social context. A range of types of relationships, as well as larger social forces (e.g., the allocation of power as it relates to gender, race, ethnicity, socioeconomic status, disability, sexual orientation, etc.) inevitably affect this developmental process (Motulsky, 2010). Further examples of this socialization process will be provided.

Given this relational approach, it makes sense for research in this area to include an examination of potential differences in relational support between emerging adults and adults. In particular, emerging adults' having less independence from their family of origin than their adult counterparts, as well as perhaps not having met role transitions such as getting married or having children, may result in differential levels of support and connectedness. Additionally, recent studies have revealed a relationship between continued parental support and the career development of emerging adults (Murphy et al., 2010; Stringer & Kerpleman, 2010). In this way, individuals falling within emerging adulthood may be influenced by their parents for a greater period of time than those from previous generations (Stringer & Kerpleman, 2010).

Potential benefits of continued parental support have been noted. Mothers in particular may provide unconditional support of emerging adults' career development that is associated with a smooth transition from college to career (Murphy et al., 2010). Among college students, such support has been shown to boost confidence in one's ability to make career decisions (Stringer & Kerpleman, 2010). Additionally, parental support may provide emerging adults with the time and money needed to engage in activities that could lead to new career opportunities, such as taking an unpaid internship or attending college (Murphy et al., 2010). Overall, when parental support extends into emerging adulthood, it may have the potential to provide increased opportunities for career self-efficacy and exploration beyond the period of adolescence (Murphy

et al., 2010; Stringer & Kerpleman, 2010). However, the aforementioned research on “helicopter parenting” suggests that some types of parental support may be less healthy, delaying the separation of the emerging adult from their parent (LeMoyne & Buchanan, 2011; Somers & Settle, 2010a, p. 19; Somers & Settle, 2010b). Continued research on how relationships in emerging adulthood affect career development would provide further insight into how much and what types of support are most beneficial.

Consistent with the relational approach, which considers social and cultural contexts, gender role socialization is central in any discussion of career development. Here, boys and girls are often socialized to enter into gender-congruent work roles (Gottfredson, 1981; McWhirter, Torres, & Rasheed, 1998; Shapiro, Ingols, & Blake-Beard, 2008). Gottfredson (1981) contends that children typically learn which occupations are deemed gender-appropriate around ages 6-8. At that point, children (particularly girls) often restrict themselves from selecting career options that they may otherwise have displayed interest and capability in, a process referred to as circumscription. The role of gender in particular becomes so deeply ingrained in one’s beliefs about career that when compromise is necessary, such as having to alter a career choice out of necessity (e.g., poor job market, low academic performance), people tend to compromise on their interests before they compromise on gender-congruence (Gottfredson, 1981). Circumscription is also said to take place from ages 9-13 when individuals typically develop an awareness of their social class and then foreclose on potential career opportunities that are deemed inconsistent with their class (Gottfredson, 1981). Such socialization processes are cultivated by the media as well, as one study pointed out a connection between watching television characters in their work environments and one’s own ideas regarding career and the self (Hoffner, Levine, & Toohey, 2008).

Social cognitive learning theory and self-efficacy. Social cognitive learning theory also illustrates how individuals may foreclose on particular career trajectories, as career-related decisions and behaviors are filtered through one's beliefs. This theory posits that individuals have learning experiences (either directly, vicariously, through social messages, or through physiological messages such as the body's response to stress) in which they develop beliefs and expectations regarding which outcomes will likely follow certain behaviors (Bandura, 1977, 1997). Subsequent decisions and behaviors are then based on those beliefs. One particular type of belief is self-efficacy, in which the individual assesses whether or not they feel they are capable of accomplishing some particular task. If self-efficacy is low and the expectation is that any effort exerted will not likely pay off, the individual will typically not engage in the behavior unless their determination or desire is especially strong (Bandura, 1977).

This relates to the work of Gottfredson (1981) in that gender stereotypes are learned, often affect one's self-efficacy and other beliefs (e.g., a girl believing her efforts in mathematics will not likely lead to success), and in turn affect career decisions and behaviors (Betz, 2008). Similarly, individuals with lower socioeconomic backgrounds tend to have high hopes for their futures but relatively low career expectations (Pisarik & Shoffner, 2009). This hopefulness is perhaps a reflection of social messages such as the "American dream" (Pisarik & Shoffner, 2009), while the low outcome expectations are consistent with Gottfredson's (1981) notion of circumscription (e.g., realizing one's social class and then foreclosing on particular career options that are deemed incongruent). Based on social cognitive learning theory, these low expectations will affect individuals' career-related behaviors and thus make it even more difficult to rise in socioeconomic status.

Further, Bandura (1977, 1997) argued that levels of self-efficacy affect an individual's work in three primary ways. First, low self-efficacy may result in avoidance of making career choices, while those with higher self-efficacy may be more likely to establish a clear choice. He also posited that self-efficacy relates to performance levels at work, as well as the individual's level of persistence. Again, if self-efficacy is low, one is likely to believe that any effort exerted will not result in positive outcomes, reducing the likelihood that the person will make a choice, aim to perform well, or maintain persistence (Bandura, 1977, 1997).

Empirical support for these ideas is strong, with self-efficacy having been consistently linked with the ability to make career choices and showing strong relationships with both outcome expectations and prior environmental learning experiences (Betz, 2007; Lent et al., 2003). Consistent with the idea that career development is relational in nature, there is evidence that self-efficacy is associated with social support, with higher levels of social support leading to more positive learning experiences (Quimby & O'Brien, 2004). Self-efficacy has also been shown to be predictive of positive outcomes, such as self-efficacy in college courses relating to grade point average (GPA) at the end of the semester (Betz, 2007; Gore, Leuwerke, & Turley, 2006). Similarly, self-efficacy in regulating one's own learning has been linked to both later high school GPA and graduation rates (Caprara et al., 2008). Based on the empirical support for the predictive nature of self-efficacy, it appears that it would be worthwhile to assess potential differences in career decision self-efficacy among emerging adults and adults. Lastly, self-efficacy and identity status (e.g., having made commitments to lifestyle, career, romantic relationships, and political affiliations) have been linked within the literature (Nauta & Kahn, 2007). Given that one of the themes of emerging adulthood seems to be exploration of one's

identity, this suggests that differences may also be found between emerging adults and adults in self-efficacy.

Perceptions of career. Again, as pointed out by Lopez et al. (2005), young people tend to closely associate the role transition of beginning a career to having reached the stage of adulthood. However, further details, such as which aspects of career may be perceived as most related to adulthood or the extent to which career-related variables affect feelings of being successful or unsuccessful as an adult, remain unclear. Given some of the previously mentioned myths and misconceptions that emerging adults may have of adulthood, this common perception of career being a marker of adulthood suggests that emerging adults may hold similar types of misconceptions regarding career. Misconceptions of adulthood such as being bogged down by responsibilities or becoming stagnant (Cote, 2000; Lopez et al., 2005), could potentially apply to their perceptions of career as well. An example might be an individual believing that once adulthood is reached, they must settle into one (perhaps unappealing) career.

A number of common myths around career have been identified over time; for example, Amundson (1997, p. 77) articulated several: “Once you make a career choice, you are committed for life,” “the choice you make needs to be totally fulfilling,” “successful career choices will guarantee a successful future,” and that the career counselor is “all-knowing” and does most of the work in determining which career would be a good fit. Lewis and Gilhousen (1981) offered a more comprehensive list of career myths, including that individuals should have a clear career plan at all times, that career decisions should occur at a specific point in development (e.g., by high school graduation), that an individual is a failure if they give up on a certain career goal, that a good job leads to transformation, self-actualization, or lifelong happiness, and that individuals can have any career they desire if they put their mind to it. Dorn and Welch (1985, p.

137) provided yet another set, with myths such as that college should be attended for the sole purpose of finding a job, that there is a perfect job out there for everyone, that a career choice will simply become clear over time, and that if a person is interested enough in a particular career the rest will fall into place. Most (nine of 13) of the myths identified by these authors were found to be commonly endorsed in high school students at the time (Dorn & Welch, 1985). Others have pointed out additional myths, such as the idea that successful employees will never face barriers or rejection (Johnson & Silva, 1990), that a job search is time-limited and occurs only once (Liptak, 1989), that one should be anxious if they are unsuccessful in their career path, and that choosing a career is an exact science (Stead, 1993).

It has been argued that holding such myths affects individuals' career decisions and behaviors, regardless of where a person is in their career development process (Amundson, 1997; Liptak, 1989). For example, the endorsement of career myths among high school students has been linked with greater levels of foreclosure, or prematurely deciding not to follow a particular career path (Ladany, Melincoff, Constantine, & Love, 1997; Leal-Muniz & Constantine, 2005). An association between aspirational goals and career myths has also been identified, with those endorsing larger numbers of myths generally having lower career aspirations. Similarly, there appears to be a link between career myths and indecision (Herring, 1990). Therefore, it is imperative for individuals to be aware of the career myths they hold (Palladino, Schultheiss, & Stead, 2004) and then address them in order to move forward in their career development (Amundson, 1997; Dorn & Welch, 1985; Johnson & Silva, 1990; Lewis & Gilhousen, 1981). Such findings indicate a need for being aware of which myths may be most prevalent among various developmental groups (Ladany et al., 1997). A greater understanding of which specific myths are commonly endorsed by emerging adults may help career counselors to refute those

beliefs and replace them with ones that are more likely to foster informed career decisions in this population. Further, it may be beneficial to examine whether or not emerging adults tend to endorse career myths that are related to perceptions of adulthood (e.g., having to stay in a boring career path once adulthood has been reached).

This discussion directly relates to social cognitive learning theory; career myths are essentially commonly held beliefs that affect individuals' career-related behaviors (e.g., whether or not they would apply for a particular job). Therefore, an individual's behaviors will be filtered in part through the career myths they hold. Consistent with Gottfredson's (1981) theory, many myths apply to the career trajectories of specific groups, thus affecting the career development of individuals within those populations. For example, Native Americans have been identified as one population with a relatively high endorsement of career myths. It has been argued that stereotypes of Native Americans in various forms of media lead individuals to internalize myths regarding which careers would or would not fit with the self, resulting in a restricted range of occupational choices (Herring, 1990). At times, myths regarding particular groups may even affect the provision of career services themselves; Shea, Winnie Ma, and Yeh (2007, p. 62) argue that the myth of Asian Americans as being the "model minority" has led to a lower number of services being provided to this group throughout their educational experiences. Two myths may be at play here, the first being that Asian Americans are better students and are already career-driven, and the second being that those who are academically successful do not need as much career-related assistance. Stead (1993) pointed out that while some career myths may be specific to a given population, others have been shown to be universal across groups; the same myths were endorsed among African American and white students in South Africa, as well as among Chicano and white high school students.

Moreover, perhaps the most widely discussed of these types of myths are those related to women and work (see Farland-Smith, 2009). For example, the relatively low numbers of women in science-related fields have been well documented (Gilbert & Calvert, 2003). This is likely a reflection of myths and negative beliefs related to the gender socialization process (e.g., the myth that females are inherently less skilled than males in science and math; Gottfredson, 1981). These socialization processes also differ across cultures; Farland-Smith (2012) found that children in the U.S. had different perceptions of what it means to be a scientist than children in China, with differing misconceptions about scientists being found between the two groups.

Emerging Adulthood and the Millennial Generation

Since emerging adulthood appears to be a rising stage, possible generational effects may be important to consider. Individuals who fall in the age range of emerging adulthood at the time of this writing have been referred to as “millennials,” “Generation Y,” or “Nexters” (Ng, Schweitzer, & Lyons, 2010). There has been some variability in labeling various birth cohorts; for example, Strauss and Howe (1991) identified millennials as those born between 1982 and 2003, while others use cutoffs as early as 1979 or 1980, or as late as 1983 (Myers & Sadaghiani, 2010; Ng et al., 2010; Oblinger & Oblinger, 2005). However, while these discrepancies exist, the current study included only individuals ages 19 to 25; thus, all participants had birth years between 1986 and 1993 and were considered millennials regardless of the definition used.

It appears that many of the same characteristics that people often attribute to emerging adults are also placed on millennials. For example, these groups are often accused of being self-focused, entitled, (Deal et al., 2010), overly optimistic (Hauw & De Vos, 2010), and in need of hand-holding (Hershatter & Epstein, 2010). However, it has been pointed out that the baby boomers, who are often the parents of millennials (Ng et al., 2010), were once characterized in

similar ways, and that each generation that enters the workforce tends to be viewed in this negative light (Deal et al., 2010). For example, generation X was often accused of needing excess feedback from supervisors, being slackers, and being overly technology-driven (Lankard, 1995). As Kowske, Rasch, and Wiley (2010) state, “the consternation new generations’ attitudes and behaviors cause for older generations and vice versa is cyclical and predictable” (p. 274). The fact that this process occurs for every generation appears to provide support for the conceptualization of emerging adulthood as a stage. Also like emerging adults, millennials have been said to be more likely to delay child-rearing and other life transitions later into adulthood than those in previous generations (Deal et al., 2010).

A number of studies have sought to describe how millennials engage in the world of work. First, when this group was asked to rank different factors important to their career decisions, the potential to advance in the work environment was identified as most important. Expectations for advancement were also high, with the majority (68.5%) anticipating a promotion within the first 18 months of work. The same individuals expected to be making an average of \$42,964 as a starting salary and \$69,663 annually after five years of work. It is noteworthy that these expectations differed between women and men, with men generally expecting more rapid promotion and higher salaries (Ng et al., 2010).

It has been argued that millennials’ emphasis on occupational advancement may be related to a sense of entitlement, as many desire high grades, promotions, and salary increases even when it does not appear commensurate with effort (Greenberger, Lessard, Chen, & Farruggia, 2008; Corporate Leadership Council, 2005). For example, no relationship was found between millennials’ expectations for advancement and their college GPA (Ng et al., 2010). It has also been said that millennials are a group that desires frequent feedback, with good grades

or a pay increase being feedback that the job has been well done. Millennials may also be likely to leave a position based on a lack of opportunities to quickly move up the ladder (Ng et al., 2010). However, this group has also been shown to be more satisfied with their current opportunities for advancement than any generation before them (Kowske et al., 2010).

Existing literature has also shown that millennials vary in the extent to which they want to spend their entire lives within one place of employment. Whereas those from previous generations often seek to work for the same organization for a long period of time, only half of millennials report this as a goal (Ng et al., 2010). Consistent with this, a higher turnover rate has been found in millennials compared to the prior two generations (Kowske et al., 2010). Millennials often believe that the best way to advance in one's career is to accept higher-level positions at different locations as they arise. The term "careerism" has been used to describe this strategy, which again stands in contrast to that of previous generations of seeking stable employment in one or only a few organizations (Hauw & De Vos, 2010, p. 295). Moreover, most (71%) of college student millennials said they would take a less-than ideal job when starting their career (Ng et al., 2010; p. 285), with the hope of moving to a more appealing career later. Women were more likely to take a less ideal job than their male counterparts (Ng et al., 2010), again appearing consistent with Gottfredson's (1981) aforementioned theory. Millennials may also have shifted their expectations of job security around the time of the U.S. economic recession, becoming more focused on making themselves competitive in the labor market than attempting to remain in the same organization long-term (Hauw & De Vos, 2010; Tomlinson, 2007).

One of the largest differences between millennials and other generations in their approach to work is in the use of technology. As Hershatter and Epstein (2010, p. 211) put it, millennials

seem to have technology as a sixth sense after having grown up with cell phones, online social networks (e.g., facebook, twitter), and an ability to access an enormous amount of information almost instantly. There may even be a neurological component to this; one neuroscientist found that repeated performance of technological skills actually changes neural circuitry. These individuals may be better at filtering information and responding to a larger number of stimuli (e.g., multi-tasking), but may have greater difficulty in personal interactions and interpreting non-verbal cues, as the latter are tasks they may have done less of over time (Hershatter & Epstein, 2010). Additionally, even if millennials have become relatively adept at multi-tasking, the vast majority of neuroscience literature still contends that this approach is not as effective as concentrating on one task at a time (see Dux, Ivanoff, Asplund, & Marois, 2006). Millennials may also have less discretion over the information they choose to use, in contrast to previous generations who were taught to weigh the validity of a source more heavily. In the work environment, millennials, as a group, may complete tasks relatively quickly and process information efficiently, but there could be a decrease in the quality of the information used (Hershatter & Epstein, 2010). They may also perceive having less access to resources that are not available online, preventing them from fully utilizing information or support services (Pullan, 2010).

Another difference appears to be that millennials tend to make work-life balance a higher priority than those from previous generations (Hauw & De Vos, 2010; Myers & Sadaghiani, 2010). In particular, the parents of millennials are often baby boomers, who were known for having a strong work ethic and often worked longer hours than those from other generations. It may be that the children of baby boomers have decided to reprioritize, typically valuing close relationships and their personal life over career. Likewise, millennials tend to view work as a

means of allowing for a particular lifestyle, rather than as their primary life goal (Myers & Sadaghiani, 2010). However, there is also evidence that millennials have lowered their expectations related to having a work-life balance following the economic recession in the U.S. (Hauw & De Vos, 2010), consistent with the aforementioned finding that this group would take a “less than ideal” position when necessary (Ng et al., 2010). Millennials also tend to have a high desire for flexibility in the work environment. Because millennials may give themselves that flexibility, other generations of workers may view them as selfish or less dedicated (Myers & Sadaghiani, 2010). Millennials also seem to place high value on the sense of meaning found in their work. The social impact of a company has been pointed out as being important to this group, and there is a stereotype that millennials hope to “save the world” through their work (Ng et al., 2010, p. 283). However, there has been some debate about this, as others have found no differences in altruism as a work-related value (Twenge, 2010).

Less debated is that millennials appear to highly value the relationships formed at work (Ng et al., 2010). For example, the quality of relationships with supervisors, managers, and coworkers were a highly motivating factor for this group when making career decisions (Ng et al., 2010, p. 283; Corporate Leadership Council, 2004). Consistent with this, it has been found that millennials tend to score higher on affiliation as both a trait and a motive for career decisions, showing a stronger desire to belong to a group and feel a part of a team (Borges, Manuel, Elam, & Jones, 2010; Wong, Gardiner, Lang, & Coulon, 2008). This valuing of the work environment may be due in part to the increased emphasis on teamwork in education and organized sports (Howe & Strauss, 2000). Similarly, millennials have been said to be heavily supported by parents, teachers, and other adults throughout their childhood, which may have

affected their expectations of support from supervisors (Hershatter & Epstein, 2010). Lastly, the vast majority of millennials seek an employer who shares their values (Ng et al., 2010).

Participants of the current study were emerging adults between the ages of 19 and 25, and were all considered millennials. While some characteristics often attributed to emerging adults are also said to be true of millennials (e.g., being self-focused, overly optimistic), many have pointed out that these attributions are made with every new generation. This may be taken as additional support for the conceptualization of emerging adulthood as a stage of development. However, generational effects remain important to consider, as millennials have grown up in a particular context. For example, technology is second nature to most millennials, and many are entering their first careers during an economic recession. Perhaps as a result, millennials as a group appear to have some values and attitudes toward career that are distinct from those in generations before them. Opportunities for advancement, work relationships and a team-oriented atmosphere, and maintenance of a work-life balance are all viewed by millennials as highly important in their career decisions. They also differ from other generations in that they change places of employment more frequently and view this as a way of moving up the career ladder.

Summary

Emerging adulthood appears to be a stage of development between adolescence and adulthood that is experienced by many individuals between the ages of 18 and 25 and is increasingly common. Though it is certainly not a universal stage, with some differences existing between nations, socioeconomic classes, and racial and ethnic groups, the conceptualization of emerging adulthood does appear to have utility. In particular, there appear to be key themes of emerging adulthood (e.g., self-exploration, independence and responsibility) that may make this group distinct from adults. This may also be linked to differences in career

development processes between emerging adults and adults. Given that career is a developmental process that occurs over the course of the entire lifespan, an exploration of how career development may be unique during the emerging adulthood years is needed. While some research has been conducted examining differences in career-related variables of millennials as opposed to previous generations, the present study included only millennials as participants and explored differences between emerging adult and adult millennials.

This literature review has identified a number of career-related variables that may differ between emerging adulthood and adulthood, which each deserve further attention; this particular study has selected a few of these variables to examine. In particular, the present study investigated whether or not there are differences between emerging adults and adults in career decision self-efficacy, the endorsement of negative beliefs and myths about adulthood and career, the extent to which career is viewed as a defining part of adulthood, and the presence of emerging adulthood themes (e.g., self-exploration, responsibility) when making career decisions. Existing research has pointed to the importance of these variables in the career development process but has not examined how they may differ based on whether or not an individual feels like an adult; thus, the current study aimed to provide an initial exploration of these possible differences.

Chapter III

Methods

This was a descriptive study that was designed to collect survey data pertaining to the identified central themes of emerging adulthood (e.g., high self-exploration, low independence and responsibility), as well as the extent to which emerging adults and adults differed in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA), a measure used to assess emerging adulthood themes in an individual's current period of life. Additionally, it was intended to examine whether or not there was a difference in the presence of emerging adulthood themes in the career decision processes of participants from differing developmental stages (emerging adulthood or adulthood). Data were also collected regarding the career decision self-efficacy of emerging adults and adults. Lastly, information was gathered regarding the extent to which perceptions of adulthood and career vary with developmental stage (i.e., the extent to which participants viewed having a career as a defining characteristic of adulthood, endorsement of myths and negative beliefs related to adulthood and career). The population of interest, measures used, and study design and procedures will be further discussed.

The present study aimed to address the following research questions. Are there differences between emerging adults and adults in levels of self-exploration, as well as in independence, and responsibility? Do emerging adults and adults differ in scores on the IDEA? Are themes of emerging adulthood more prevalent in the career decision process of emerging adults than of their same-aged adult counterparts? Is there a difference in career decision self-efficacy between emerging adults and adults of the same age group? Is there a difference between emerging adults and adults in the extent to which they view having a career as a

defining characteristic of adulthood? Do emerging adults endorse a greater number of negative beliefs and myths regarding adulthood and career than adults of the same age group?

Participants

Participants were solicited through online postings on Facebook.com (a social networking website), as well as on Google groups and Yahoo groups (online listservs focused around particular activities or topics). Individuals were required to be in the age range of 19 to 25 to participate. This particular range was used since it is within the ages of 18-25 that emerging adulthood commonly occurs (Arnett, 1998) and because 19 is the age of consent in some states. The majority of participants (57.9%, $n = 74$) reported being between the ages of 23 and 25, whereas 42.1% ($n = 54$) reported being 19 to 22.

A total of 128 participants responded to all measures and were included in the analysis. An a priori power analysis had revealed that a sample size of 120 was needed to achieve 80% power for finding a medium effect size when using an alpha level of .05. Of these participants, 80% were categorized as adults ($n = 103$), while the remaining 20% were categorized as emerging adults ($n = 25$). These categorizations were based on responses to the Self-Perception of Adulthood Questionnaire.

The current study sought to achieve a sample representative of the general population in terms of gender, race and ethnicity, socioeconomic status, and educational background, according to data provided by the U.S. Census Bureau (U.S. Census Bureau, 2010a, 2010b, 2010c). In terms of gender, 71.9% ($n = 92$) of participants were female, while 28.1% ($n = 36$) were male. Gender appeared to be the largest discrepancy in demographic characteristics between the sample used in the present study and the U.S. population, which is 50.8% female and 49.2% male.

When asked their race and ethnicity, 78.1% ($n = 100$) identified as white, 8.6% ($n = 11$) as African American or Black, 5.4% ($n = 7$) as biracial or multiracial, 4.6% ($n = 6$) as Hispanic or Latino/a, and 3.1% ($n = 4$) as Asian. Overall, the present study's sample appeared somewhat consistent with the U.S. population. The largest exception to this was the number of those identified as Hispanic or Latino/a, which is 16.3% in the U.S. population compared to only 4.6% in the current sample. Demographic characteristics of participants, as well as comparisons between the sample and the U.S. population, are further delineated in Table I.

Information on the role transitions of participants (e.g., marital status, living situation) was also gathered. In short, 9.4% ($n = 12$) of the sample was married, 3.9% ($n = 5$) had at least one child as a dependent, 41.4% ($n = 53$) worked full-time, and 21.1% ($n = 27$) lived with parent(s) or other relative(s). In terms of education levels, degree attainment of both participants and their parents appeared high. About 60.9% ($n = 78$) of the sample had at least a degree from a 4-year university. Another 24% ($n = 31$) were working to complete a degree from a 4-year university. Highest parental education level was used as a proxy for socioeconomic status; about 64% ($n = 82$) of participants had at least one parent with a 4-year degree. Role transitions (e.g., marriage, number of children) of participants, education levels of participants, and education levels of their parents are presented in Tables II, III, and IV.

Measures

Demographic Questionnaire. A 21-item demographic questionnaire was administered to all participants (see Appendix A). Both fill-in-the-blank and multiple-choice items were included to gather information such as age, gender, race and ethnicity, current employment, current educational enrollment and the highest level of education completed, future educational and career plans, and living situation (e.g., living alone, with roommates, with family, with

Table I

Demographic Characteristics of Participants

<i>Variable</i>	<i>Sample n</i>	<i>%</i>	<i>United States %</i>
Gender			
Female	92	71.9	50.8
Male	36	28.1	49.2
Race and Ethnicity*			
Asian	4	3.1	4.8
American Indian or Alaskan Native	0	0.0	0.9
Black or African American	11	8.6	12.6
Native Hawaiian or Other Pacific Islander	0	0.0	0.2
White	100	78.1	72.4
Biracial or Multiracial	7	5.4	2.9
Hispanic or Latino/a	6	4.6	16.3
Chose not to respond	2	1.6	
Age**			
19	6	4.7	
20	7	5.5	
21	13	10.2	
22	28	21.9	
23	23	18.0	
24	23	18.0	
25	28	21.9	

Note. *Totals do not equal the sample size ($n = 128$) because two participants who identified as Hispanic or Latino/a in ethnicity also indicated a race.

**Percentages of those who were these particular ages were not available in the 2010 U.S. Census; only age ranges were provided.

spouse). Many individuals do not accurately self-report parental income level; thus, the highest level of parental education was used as a proxy for socioeconomic status. Many items on this questionnaire assessed whether or not the participant had completed particular role transitions traditionally associated with adulthood, such as whether or not the individual was married or had children.

Table II

Role Transitions of Participants

<i>Variable</i>	<i>Sample n</i>	<i>%</i>
Marital Status		
Single	86	67.2
Partnered/Long-term relationship	28	21.9
Married	12	9.4
Divorced	1	0.8
Widowed	1	0.8
Children who are currently dependents?		
Yes	5	3.9
No	122	95.3
Current paid employment		
Full-time	53	41.4
Part-time	42	32.8
None	24	18.8
Other	9	7.0
Living situation		
Living alone	19	14.8
Living with a spouse or partner	25	19.5
Living with roommate(s)	56	43.8
Living with parent(s) or relative(s)	27	21.1
Single parent living with child	1	0.8

Emerging Adulthood Questionnaire. The EAQ was developed by the investigator for the present study due to a lack of existing instruments measuring the components of emerging adulthood. It is comprised of eight items anchored in the two central themes of 1) self-exploration and 2) independence and responsibility. The questionnaire was administered to all participants (see Appendix B). Participants were asked to consider how they compare to most adults along these dimensions. For example, one item asks, “How does your current level of financial independence compare with most adults?” with response options of “significantly more than most adults,” “slightly more than most adults,” “about the same as most adults,” “slightly less than most adults,” or “significantly less than most adults” (Cobb, 2013b). This measure was

Table III

Education Levels of Participants

<i>Variable</i>	<i>Sample n</i>	<i>%</i>
Highest Level of Education Completed		
Graduate degree	13	10.2
Some graduate school	13	10.2
Degree from 4-year university	52	40.6
Degree from 2-year college	3	2.3
Some college	30	23.4
High school diploma	12	9.4
General Education Diploma (GED)	2	1.6
Other	3	2.3
Current Educational Enrollment		
Graduate school	31	24.2
4-year university	31	24.2
2-year college	2	1.6
High school	1	0.8
No current enrollment	60	46.9
Other	2	1.6
Did not respond	1	0.8

Table IV

Highest Education Levels of Participants' Parents

<i>Variable</i>	<i>Sample n</i>	<i>%</i>
Highest Level of Parental Education Completed		
Graduate degree	42	32.8
Some graduate school	3	2.3
Degree from 4-year university	37	28.9
Degree from 2-year college	13	10.2
Some college	19	14.8
High school diploma	13	10.2
Junior high	1	0.8

created for the present study to enable the examination of participants' self-perception of developmental status (defined by the Self-Perception of Adulthood Questionnaire, Cobb, 2013d) as related to perceived levels of independence/responsibility and self-exploration, which are said to distinguish between emerging adulthood and adulthood. Scores may range from 8 to 40, with higher scores indicating greater endorsement of themes related to emerging adulthood (e.g., higher self-exploration than most adults, lower independence and responsibility than most adults).

The EAQ was developed following a review of the existing literature on the topic of emerging adulthood and its associated themes. Within this literature, the most commonly discussed psychological variables were self-exploration, as well as independence and responsibility. Other variables have been discussed as well: feeling "in between," being focused on the self, and differing social supports and pressures such as "helicopter parenting" (Arnett, 1998, 2000, 2001, 2004; Cote, 2000; LeMoyne & Buchanan, 2011; Lopez et al., 2005; Somers & Settle, 2010a, 2010b; Tanner, 2006). However, these may fall under the broader variables of self-exploration, independence, and responsibility. For example, "helicopter parenting" could be considered part of independence and responsibility (LeMoyne & Buchanan, 2011; Somers & Settle, 2010a, 2010b). The central themes (self-exploration, independence, responsibility) also seem consistent with Tanner's (2006) concept of recentering, in which the individual moves from high self-exploration and low independence and responsibility to lower self-exploration and high independence and responsibility.

Arnett (1994, 1998, 2000, 2001, 2006) identified subcomponents of each of the primary themes. The theme of independence and responsibility included a sense of personal responsibility, financial independence, and an ability to make decisions independently. Self-

exploration, on the other hand, has been said to take place primarily in the areas of love and relationships, work and career, and worldview (Arnett, 2000, 2006). Therefore, an item was created to correspond with each of these subcomponents. For example, the item, “How does your current level of personal responsibility (e.g., accepting consequences of your own actions or inaction) compare with most adults?” is intended to capture the personal responsibility that Arnett (1994, 1998, 2001) discussed. Additionally, an item was added on level of general responsibility compared to adults, as well as an item asking about self-exploration related to hobbies or lifestyle. The latter may be relevant given that emerging adults are often said to experiment or engage in “now or never” behaviors, which seems to fall under self-exploration (Arnett, 2005; Bradley & Wildman, 2002; Ravert, 2009). Lastly, since variables associated with emerging adulthood are usually discussed relative to adulthood (e.g., emerging adults having less responsibilities than their adult counterparts), this instrument used response choices that require participants to compare themselves to “most adults.”

Self-Perception of Adulthood Questionnaire. A 12-item questionnaire was developed by the investigator for the present study to assess whether participants perceive themselves as emerging adults or adults, both in general, and in a variety of life roles and tasks. It begins with the question, “Do you think that you have reached adulthood?” with response options of “yes” or “no” (see Appendix C). Participants also were asked to respond to a series of items with the stem, “I feel like an adult...” such as “When I am involved in my community” and “When I manage my finances,” with response options of “yes,” “no,” or “N/A” (Cobb, 2013d)

Responses were used to categorize participants as either emerging adults or adults. If individual participants responded “yes” to a majority of items 2 through 12, they were categorized as adults for the purposes of the current study, whereas those who responded “no” to

a majority of these items were categorized as emerging adults. Given the additional response option of “N/A,” the possibility existed that a participant could mark an even number of “yes” and “no” responses. In those cases, item 1 from this instrument (“Do you think that you have reached adulthood?”) was used to categorize the participant into a developmental stage.

Similar self-report measures have been used to capture self-perception of adulthood both broadly and within a range of life roles (Arnett, 1997; Nelson & McNamara, 2005; Shanahan et al., 2005). Such measures provide an alternative to using age to categorize participants as emerging adults or adults, since factors other than age appear to be more relevant in determining these developmental stages (Reifman, Arnett, & Coleman, 2007). Variations of the item, “Do you think that you have reached adulthood?” with response options of “yes,” “no,” or “in some respects yes, in some respects no,” have been used (with minor variations) in a number of studies (see Nelson & McNamara, 2005; Arnett, 1997, 2001; for examples). Some researchers have collapsed responses to make the variable dichotomous, with those who responded “yes” being categorized as adults and those who responded “no” or “in some respects yes, in some respects no” being considered emerging adults (Nelson & McNamara, 2005).

The Self-Perception of Adulthood Questionnaire (Cobb, 2013d) used in the present study utilized a forced-choice approach, asking participants to respond to the question of whether or not they thought they had reached adulthood with a simple “yes” or “no.” The forced-choice item was combined with an approach used by Shanahan et al. (2005), in which participants were also asked whether or not they feel like an adult within a number of life roles. It also seems consistent with Super’s career rainbow theory (Okocha, 2001; Super, 1980), which proposes that development, and career development in particular, is a process that is interconnected with one’s many life roles (e.g., parent, sibling, employee, student, citizen). The Self-Perception of

Adulthood Questionnaire contained some items similar to those used by Shanahan et al. (2005), such as those related to work, school, and community environments, and also added content emphasized by Super's career rainbow, such as the role of being a citizen (Super, 1980). Including such questions within this instrument was viewed as helping account for various role transitions that participants may or may not have experienced, while also allowing for a more holistic view of the individual.

Emerging Adulthood Themes in Career Decisions. The investigator created this 19-item measure for the present study to assess the extent to which central themes of emerging adulthood (e.g., low independence and responsibility, high self-exploration) occur during participants' career decision processes (see Appendix D). The stem, "When I think about my career decisions..." is followed by items such as, "I feel I am still exploring which careers might fit me best." Participants rate items on a 4-point scale ranging from "not at all like me" to "exactly like me." The range of possible scores on this measure is 19-76. Higher scores on this measure indicate greater prevalence of emerging adulthood themes when making career decisions, with many items being reverse-scored (Cobb, 2013a).

The process of developing this measure began in a similar manner as the Emerging Adulthood Questionnaire (Cobb, 2013b); a thorough review of the literature pointed toward self-exploration, as well as independence and responsibility, as likely variables at play in determining emerging adult or adult status. The investigator then broke down these variables into subcomponents that may be central to the constructs and that may have particular implications for career development. Under the umbrella of self-exploration were 1) continued identity development beyond adolescence, including an evaluation of interests and abilities, 2) perception of many possibilities and trying out various roles or career paths, and 3) feeling unstable or

unsettled. Within the themes of independence and responsibility were 1) continued dependence on the family of origin, 2) lack of responsibility for others (e.g., children, partner), 3) engaging in now or never behaviors (e.g., travelling, alcohol or drug use) before having to become responsible, 4) low acceptance of personal responsibility, and 5) feeling as though one's decisions are not truly their own. Each of these subcomponents has been discussed in relation to the broader themes of emerging adulthood within the literature. Following the creation of these subcomponents, two to three items were then written based on each, with at least one item being positively worded and at least one being negatively worded.

Lastly, the item, "I have decided on a career path and feel comfortable with it. I also know how to go about implementing my choice" was added. This item, along with the response choices used throughout the instrument, were stimulated by the Career Decision Scale (Osipow 1987; Osipow et al., 1976). This item in particular was selected due to its strong psychometric properties even as a single item (Osipow, 1987) and because it fit with the subcomponent of feeling unstable or unsettled, with adults probably being more likely than emerging adults to report that this item is "exactly like me."

Perceptions of Adulthood and Career. The Perceptions of Adulthood and Career (Cobb, 2013c) is a 13-item measure created for the present study by the investigator. It is intended to assess both the extent to which participants consider having a career to be a defining characteristic of adulthood, as well as the endorsement of particular beliefs or myths regarding adulthood and career (see Appendix E). These areas comprise two subscales: 1) connection between adulthood and career, and 2) negative beliefs and myths.

The connection between adulthood and career is a seven-item subscale including items such as "I see little relationship between becoming an adult and having a career" and "Having a

career that provides personal fulfillment and satisfaction is important to being an adult,” with response options of “very true,” “somewhat true,” “somewhat false,” and “very false.” Scores on this subscale may range from 7 to 28, with higher scores indicating that the participant perceives having a career to be a defining feature of the developmental stage of adulthood. Given that some items were negatively worded, these were reverse-scored.

The negative beliefs and myths subscale is comprised of six items, including “Part of adulthood means having to stop ‘job-hopping’ and settle into one career,” with response options matching those of the first subscale (Cobb, 2013c). The range of possible scores on this subscale is 6 to 24. Higher scores indicate that the participant holds negative beliefs and myths about adulthood and career that may make reaching adulthood seem undesirable. As with the first subscale, some items were reverse-scored.

While there have been some previous attempts to create an instrument measuring the endorsement of career myths (e.g., the Career Myths Scale; see Palladino, Schultheiss, & Stead, 2004 & Stead, 1993), none were found to be both available at the time of this writing and appropriate for both college and non-college populations. Thus, Perceptions of Adulthood and Career (Cobb, 2013c) was developed for the present study. The first subscale, the connection between adulthood and career, was theoretically based on the findings that career and adulthood are often intimately connected in people’s minds (Lopez et al., 2005), though the specific pieces of career that might be important in those perceptions have not been examined. For instance, the question could be asked whether it is simply having a career that makes a person more likely to consider himself or herself an adult, or if it is something about particular careers that makes one feel more adult. Therefore, this subscale contains items regarding whether or not having a career is associated with perceptions of adulthood, as well as whether or not specific elements that

individuals may hope to find in a career (e.g., financial stability, personal fulfillment, relationships formed, high performance) are associated with perceived adulthood status.

The second subscale, negative beliefs and myths, was designed to include negative beliefs and myths associated with both adulthood and career. This subscale was based on both the findings that individuals tend to view career and adulthood as closely related (Lopez et al., 2005), as well as that many emerging adults have misconceptions regarding what it means to become an adult (Cote, 2000; Lopez et al., 2005). Primarily, it has been found that many emerging adults view adulthood as a time of stagnation and slowed growth (Cote, 2000; Lopez et al., 2005). A question that seems to follow is whether or not emerging adults endorse similar myths about career. Thus, items such as, “The career development process seems like it ends when adulthood is reached” were created and comprise this subscale.

Career Decision Self-Efficacy Scale Short Form (CDSE-SF). The Career Decision Self-Efficacy Scale Short Form (Betz et al., 2005; Betz & Klein, 1996) assesses confidence in career-related tasks. Participants respond to 25 items on a scale of 1 (“no confidence at all”) to 5 (“complete confidence”), with higher total scores indicating greater self-efficacy (Betz et al., 2005; Betz & Klein, 1996; Whitfield, Feller, & Wood, 2009). A sample item is “How much confidence do you have that you could determine what your ideal job would be?” (Betz et al., 2005; Betz & Klein, 1996; Maples & Luzzo, 2005). The measure is comprised of the following five subscales: self-appraisal, occupational information, goal selection, planning, and problem-solving (Betz et al., 2005).

The short form is deemed to be at least psychometrically equivalent to its predecessor (The Career Decision-Making Self-Efficacy Scale; CDMSE). The short form has a reliability of .94, compared to .97 for the full 50-item scale (Betz et al., 1996). The reliability coefficients on

the five subscales range from .73 on self-appraisal to .83 on goal selection, with all being above the minimally acceptable .70 (Ong & Van Dulmen, 2006). The short form has also been shown to have convergent validity with instruments examining similar constructs, such as the Career Decision Scale (CDS) and My Vocational Situation (MVS; Betz et al., 1996).

The CDSE-SF has been used with both college student and adult populations, and has been adapted for use with secondary students (Betz & Taylor, 2006; Whitfield, Feller, & Wood, 2009). Since four items on the CDSE-SF specifically ask about academic majors (Betz et al., 2005; Betz & Klein, 1996), it is frequently used in college populations. However, the sample used in this study included but was not limited to college students; thus, these four items were minimally altered with permission from the author. The item, “Select one major from a list of potential majors you are considering” was changed to “Select one career from a list of potential careers you are considering.” Another item, “Determine the steps to take if you are having academic trouble with an aspect of your chosen major” instead read as “Determine the steps to take if you are having trouble with an aspect of your chosen career.” “Determine the steps you need to take to successfully complete your chosen major” was changed to “Determine the steps you need to take to successfully reach your chosen career goal.” Lastly, “Change majors if you did not like your first choice” was altered to “Change careers if you did not like your first choice.” The CDSE-SF psychometric properties have remained robust even when similar revisions are made (Betz & Taylor, 2006).

Inventory of the Dimensions of Emerging Adulthood (IDEA). The Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007a) is a recently-developed, 31-item measure that asks participants to consider whether or not particular characteristics associated with emerging adulthood are present in their current period of life (see

Appendix F). The stem, “Is this period of your life a...” is used, followed by items such as, “a time of finding out who you are?” Participants rate each item on a scale of 1 (strongly disagree) to 4 (strongly agree). The measure is comprised of the following six subscales: identity exploration, experimentation/possibilities, negativity/instability, other-focused, self-focused, and feeling “in-between.” Each scale consists of 3-7 items and is formed by the summation of scores on those items (Reifman et al., 2007a).

The IDEA was found to have internal consistency reliability of .85 on the identity exploration subscale, .83 on the experimentation/possibilities subscale, .82 on the negativity subscale, .73 on the other-focused subscale, .70 on the self-focused subscale, and .80 on the feeling ‘in-between’ subscale. Test-retest reliability was found to be sufficient on all scales except the feeling “in-between” subscale, which had a test-retest reliability of .37 (Reifman, Arnett, & Colwell, 2007b). Convergent and discriminant validity were examined by looking at the correlations between each subscale and other constructs. It was found that those who are high on negativity are generally low in life satisfaction ($r = -.38$) and in feelings of mastery ($r = -.35$). Identity exploration was correlated with higher hopes for the self ($r = .34$) and perceived career opportunities ($r = .25$). Lastly, the identity exploration, experimentation/possibilities, other-focused, and self-focused scales are each correlated with future orientation, with r values of .20, .22, .29, and .23, respectively (Reifman et al., 2007a). Further data on the IDEA is needed in order to determine its utility. Therefore, this study included the IDEA as a means of generating additional data and contributing to the continued study of emerging adulthood as a posited developmental stage. A list of all dependent variables used in this study and measures associated with each are included in Table V.

Table V

*Dependent Variables and the Measure Associated with Each
Dependent Variables* *Measures*

Levels of responsibility and self-exploration	Emerging Adulthood Questionnaire
Scores on the Inventory of the Dimensions of the Dimensions of Emerging Adulthood (measures emerging adulthood themes in the current period of life)	Inventory of the Dimensions of Emerging Adulthood
Existence of emerging adulthood themes in career decisions	Emerging Adulthood Themes in Career Decisions
Career decision self-efficacy	Career Decision Self-Efficacy Scale – Short Form
Extent to which career is viewed as a defining characteristic of adulthood	Perceptions of Adulthood and Career (Connection between Adulthood and Career subscale)
Endorsement of negative beliefs and myths regarding career	Perceptions of Adulthood and Career (Negative Beliefs and Myths subscale)

Design and Procedures

After gaining approval from the Institutional Review Board, participants were recruited through online postings on the social networking website, Facebook.com, as well as on Google groups and Yahoo groups, as described earlier. The investigator created a posting on her Facebook page that offered participation in a research study related to career issues. It also stated that each individual’s completion of the study would result in a two dollar donation being made by the investigator to The Humane Society. The investigator also posted this information on open Google and Yahoo groups, meaning that permission was not needed from a moderator to post; for groups that were closed, the investigator emailed the moderator of the group and asked

if they would be willing to post the information and survey link. All postings made by the investigator included an invitation for individuals to share the study information and link with others as well. Upon clicking the survey link on a post, participants learned basic information about the study, potential risks, that participation is voluntary and that no negative consequences would be incurred if they declined to participate, and that no identifying information would be collected (see Appendix G for information letter). They were then asked to provide online informed consent.

After providing consent, all participants were administered a set of online questionnaires that included the following instruments developed for the present study: the demographic questionnaire, the Emerging Adulthood Questionnaire, the Self-Perception of Adulthood Questionnaire, Emerging Adulthood Themes in Career Decisions, Perceptions of Adulthood and Career, the Career Decision Self-Efficacy Short Form, and the Inventory of the Dimensions of Emerging Adulthood. The measures created by the investigator for the present study (the Emerging Adulthood Questionnaire, the Self-Perception of Adulthood Questionnaire, Emerging Adulthood Themes in Career Decisions, Perceptions of Adulthood and Career) were administered in a combined, randomized format, so that each participant was presented with every item but in a different order. All participants received the demographic questionnaire first. The remaining measures were counterbalanced. These online versions were generated by the investigator using Qualtrics.

The total time spent by each participant was expected to be 15-30 minutes. Actual durations recorded by Qualtrics ranged from 10 minutes to hours or days, given that participants could leave the survey on their browser and work on it intermittently. Responses were also recorded by Qualtrics based on the participant's IP address, allowing individuals to click the link

a second time and be directed to their partially completed survey. Following their completion of all instruments, participants received an online debriefing, where they learned further details regarding the nature of the study (see Appendix H). They were also informed of specific online and national career development services that are low-cost or free of charge (e.g., O*NET). After data collection was closed, a donation of two dollars was conferred to The Humane Society by the investigator for each participant who completed the study.

Once the data collection phase was complete, the investigator downloaded the raw data directly from Qualtrics into the Statistical Package for the Social Sciences (SPSS). Participants were then categorized into a developmental stage (emerging adulthood or adulthood) based on their responses to the Self-Perception of Adulthood Questionnaire (Cobb, 2013d). This information was entered into SPSS prior to data analysis.

Data Analysis

After identifying a developmental stage for each participant (based on the Self-Perception of Adulthood instrument) and adding this data to the SPSS file, a one-way (emerging adulthood/adulthood) multivariate analysis of variance (MANOVA) was used to analyze the data. This analysis explored whether or not differences exist in career-related dependent variables based on the independent variable of self-perceived developmental status both in general and in a range of life roles. More specifically, the dependent variables were career decision self-efficacy, the prevalence of emerging adulthood themes during the career decision process, perceptions of career as being a defining feature of adulthood, endorsement of negative beliefs and myths regarding adulthood and career, levels of independence/responsibility and self-exploration, and scores on the IDEA. Reliability coefficients of each measure used were also examined. Three of the measures created by the investigator for the current study had

unacceptable reliability and were excluded from the analysis, which will be further discussed.

An additional one-way MANOVA was also conducted using responses to the single item, “Do you think that you have reached adulthood?” as the independent variable. Differences were examined on each of the dependent measures based on this more global self-perception of developmental status. Chi-square analyses were also used to examine demographic variables as a function of developmental status (emerging adult/adult).

Chapter IV

Results

Research Questions

Existing research has not yet provided clear definitions of emerging adulthood, nor adequately assessed how this construct might relate to career development processes. Thus, the present study aimed to address the following research questions: Are there differences between emerging adults and adults in levels of responsibility and self-exploration? Do emerging adults and adults differ in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA)? Are themes of emerging adulthood more prevalent in the career decision process of emerging adults than of their same-aged adult counterparts? Is there a difference in career decision self-efficacy between emerging adults and adults of the same age group? Is there a difference between emerging adults and adults in the extent to which they view having a career as a defining characteristic of adulthood? Do emerging adults endorse a greater number of negative beliefs and myths regarding adulthood and career than adults of the same age group?

Procedures

Individuals were required to be ages 19-25 to participate. This is consistent with the age range within which emerging adulthood is said to occur (Arnett, 1998) and also in compliance with particular state laws in which 19 is the age of consent. Participants were recruited through online postings on Facebook.com (a social networking website), Google groups, and Yahoo groups (online listservs). All postings included an invitation for individuals to pass along information about the study to others. After providing consent, participants were administered the following instruments: the demographic questionnaire, the Emerging Adulthood Questionnaire, the Self-Perception of Adulthood Questionnaire, Emerging Adulthood Themes in

Career Decisions, Perceptions of Adulthood and Career, the Career Decision Self-Efficacy Short Form, and the Inventory of the Dimensions of Emerging Adulthood. Once data collection was complete, participants were categorized as either emerging adults or adults based on their responses to the Self-Perception of Adulthood instrument created for the present study by the investigator.

Self-Perception of Adulthood

The original categorization of participants was based on their responses to the Self-Perception of Adulthood Questionnaire, an instrument created for the present study that asks participants whether or not they feel like an adult in general and within various life roles (Cobb, 2013d). In order to be categorized as an adult, a participant had to respond that they felt like an adult in more roles than not. Eighty percent were categorized as adults ($n = 103$), while the remaining 20% were categorized as emerging adults ($n = 25$). Frequencies of responses on individual items are listed in Table VI below. When asked whether or not they felt like an adult in different roles, participants most commonly felt like adults when managing their finances (87.5%, $n = 112$), performing civic duties (80.5%, $n = 103$), when involved with their communities (77.3%, $n = 99$), and when at work (76.6%, $n = 98$). Participants were less likely to feel like adults when at school (43.0%, $n = 55$) or when with their family (44.5%, $n = 57$). When asked the broader question of “Do you think that you have reached adulthood?”, 66.4% ($n = 85$) said they felt they had, whereas 33.6% ($n = 43$) felt they had not (Cobb, 2013d).

Reliability

Cronbach’s alpha was used to examine the internal consistency reliability of each of the measures used. For the CDSE-SF, Cronbach’s alpha was estimated to be .92, which is

comparable to the .94 previously reported by Betz et al. (1996). Cronbach's alpha on each of the five subscales of the CDSE-SF was also computed: .71 on self-appraisal, .65 on occupational

Table VI

Item Frequencies on the Self-Perception of Adulthood Questionnaire, In Order by Frequency of "Yes" Response

<i>Item</i>	<i>n</i>	<i>%</i>
I feel like an adult when I manage my finances (e.g., paying bills, balancing checkbook).		
Yes	112	87.5
No	10	7.8
N/A	6	4.7
I feel like an adult when I enact my rights or perform my duties as a citizen (e.g., voting, filing tax returns).		
Yes	103	80.5
No	18	14.1
N/A	7	5.5
I feel like an adult when I am involved in my community.		
Yes	99	77.3
No	19	14.8
N/A	10	7.8
I feel like an adult when I am at work.		
Yes	98	76.6
No	17	13.3
N/A	13	10.2
Do you think that you have reached adulthood?		
Yes	85	66.4
No	43	33.6
I feel like an adult when I engage in leisurely or recreational activities.		
Yes	79	61.7
No	39	30.5
N/A	10	7.8
I feel like an adult when I am with a significant other.		
Yes	78	60.9
No	22	17.2
N/A	28	21.9

Table VI (continued)

Item Frequencies on the Self-Perception of Adulthood Questionnaire, In Order by Frequency of “Yes” Response

<i>Item</i>	<i>n</i>	<i>%</i>
I feel like an adult when I am with my friends.		
Yes	78	60.9
No	45	35.2
N/A	5	3.9
I feel like an adult when I am at home.		
Yes	77	60.2
No	47	36.7
N/A	4	3.1
I feel like an adult when I am around people who might be perceived as authority figures (e.g., supervisors/bosses, professors, a parent).		
Yes	73	57.0
No	50	39.1
N/A	5	3.9
I feel like an adult when I am with my family.		
Yes	57	44.5
No	66	51.6
N/A	5	3.9
I feel like an adult when I am at school.		
Yes	55	43.0
No	37	28.9
N/A	36	28.1

information, .77 on goal selection, .74 on planning, and .81 on problem-solving. Each of the subscales met the commonly accepted minimum of .70 (e.g., Heppner, Wampold, & Kivlighan, 2007; Ong & Van Dulmen, 2006; Ponterotto & Ruckdeschel, 2007), with the exception of occupational information. This particular result stands in some contrast to Betz et al. (1996), who found that these reliability coefficients ranged from .73 to .83.

The IDEA had a Cronbach's alpha of .76. Cronbach's alpha was also examined on each of its subscales: .68 on identity exploration, .79 on experimentation/possibilities, .79 on negativity/instability, .70 on other-focused, .70 on self-focused, and .78 on feeling in-between. These are lower than those reported by Reifman, Arnett, & Colwell (2007b), who found internal consistency estimates of .85, .83, .82, .73, .70, and .80, respectively. However, most still have adequate coefficients, with the exception of the identity exploration subscale. The current study did not analyze the subscales of the IDEA but sought to provide this additional information about their reliability.

The remaining instruments were created by the investigator for the present study due to a lack of existing measures of the constructs of interest. The Self-Perception of Adulthood Questionnaire (the independent measure originally used to classify individuals as emerging adults or adults) was estimated to have a Cronbach's alpha of .77, which exceeds the accepted minimum. The Connection Between Adulthood and Career had an internal consistency of .70, which meets the accepted minimum (e.g., Heppner, Wampold, & Kivlighan, 2007; Ong & Van Dulmen, 2006; Ponterotto & Ruckdeschel, 2007). However, the remaining measures had relatively low internal consistency. The Cronbach's alpha of Negative Beliefs and Myths was .61, The Emerging Adulthood Themes in Career Decisions had a Cronbach's alpha of .59, and The Emerging Adulthood Questionnaire had a Cronbach's alpha of only .33. Thus, results using Negative Beliefs and Myths, The Emerging Adulthood Themes in Career Decisions, and The Emerging Adulthood Questionnaire were not interpreted due to these low reliability coefficients. While some researchers have drawn lower boundaries of acceptability that would allow results of Negative Beliefs and Myths to be interpreted (Aiken, 2000; DeVellis, 1991), this seems to be the exception in psychological research rather than the rule.

Correlations Between Measures

Discriminant validity was also examined since the measures included in the study were not expected to relate to one another. None of the correlations between measures used were significant, indicating that instruments which were not expected to relate to one another indeed did not. Pearson correlation coefficients between the dependent measures used are presented in Table VII below.

Table VII
Correlations Between Measures

Variables	1	2	3
1. CBAC	-		
2. IDEA	.14	-	
3. CDSE-SF	.16	.12	-

Note. *Significant at the .05 level

Analyses and Data by Research Question, Based on Responses to the Self-Perception of Adulthood Questionnaire

Chi-square analyses were used to examine demographic variables as a function of developmental group classification. Given the low numbers on certain demographic variables (e.g., the number of participants with children as dependents who identified as emerging adults; the number of participants who identified as both Hispanic or Latino/a and as an emerging adult), many analysis results had multiple cells with a count of less than five. Thus, the majority of these chi square results were not interpretable. However, it was determined that there was not a

significant difference in gender between emerging adults and adults ($\chi^2(1, 126) = .000, p = .98$). Similarly, no significant difference was found between emerging adults and adults in whether or not they had future career plans involving changing careers ($\chi^2(1, 126) = 3.79, p = .052$).

A one-way (emerging adulthood/adulthood) multivariate analysis of variance (MANOVA) was conducted in order to explore the relationships among these variables. The overall observed power of the MANOVA was .97, which is well above the accepted minimum of .80. Levene's test for equality of variances was not significant for the Inventory of the Dimensions of Emerging Adulthood (IDEA; $F(1, 126) = .09, p = .75$) or the Career Decision Self-Efficacy Scale – Short Form (CDSE-SF; $F(1, 126) = 1.09, p = .29$). This indicates that the assumption of homogeneity of variance was not violated. Box's M test of equality of covariance matrices was not significant ($M = 33.17, F(21, 7002.11) = 1.42, p = .09$), again suggesting that equal variance can be assumed. However, Levene's test was significant for Connection between Adulthood and Career (CBAC; $F(1, 126) = 5.16, p = .02$), meaning the assumption of homogeneity of variance was violated on this particular measure. Thus, the Welch t-test was used to equalize the variance, which will be further discussed. Descriptive statistics and results of this one-way MANOVA are presented in table IIX. Additionally, a second one-way MANOVA was used to analyze possible differences on the dependent measures based on responses to the single item, "Do you think that you have reached adulthood?" Results of this analysis will be delineated as well.

Differences in Career Decision Self-Efficacy Between Emerging Adults and Adults.

Emerging adults had significantly less confidence in their career decisions than adults, as measured by Betz' Career Decision Self-Efficacy Scale Short Form (CDSE-SF; $F(1, 126) = 9.06, p < .01$). Cohen's d was -.63, while Pearson's r was -.30, indicating a medium effect size.

Table IIX

Descriptive Statistics and One-way MANOVA Results, Original Classification of Emerging Adulthood vs. Adulthood

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>
IDEA	96.03	8.98	128	1.54	1, 126	.216
Emerging Adult	94.04	8.46	25			
Adult	96.52	9.07	103			
CDSE	3.78	0.51	128	9.06	1, 126	.003*
Emerging Adult	3.51	0.56	25			
Adult	3.85	0.47	103			
	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
CBAC	21.32	3.33	128	.04	1, 30.47	.827**
Emerging Adult	21.48	4.24	25			
Adult	21.28	3.09	103			

Note. *Significant at the .05 level

**Significance level after having variances equalized using the Welch test (due to the fact that Levene’s test was violated for the CBAC)

This finding suggests that emerging adults have less confidence in areas such as obtaining information about majors and careers and determining which might be ideal for them. The investigator conducted another one-way MANOVA to determine whether or not significant differences existed between emerging adults and adults on each of the CDSE-SF subscales. All subscales significantly differed between emerging adults and adults (i.e., self-appraisal, $F(1, 126) = 5.58, p < .05$; occupational information, $F(1, 126) = 3.94, p < .05$; goal selection, $F(1, 126) = 13.12, p < .05$; planning, $F(1, 126) = 4.55, p < .05$; problem-solving, $F(1, 126) = 5.61, p < .05$). Descriptive statistics and results of this one-way MANOVA are presented in Table IX.

Differences Between Emerging Adults and Adults in the Extent to which Career is Viewed as a Defining Characteristic of Adulthood. On the Perceptions of Adulthood and Career subscale of Connection between Adulthood and Career, Levine’s Test of Equality of Error Variances was rejected ($F(1, 126) = 5.16, p = .025$). Therefore, the Welch t-test was used to analyze this data, which is preferred when equal variance cannot be assumed. Results of the

Table IX

Descriptive Statistics: Subscales of the CDSE-SF as Dependent Variables and Original Classification as Independent Variable

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>
CDSE-SF Self-Appraisal	3.79	0.56	128	5.58	1, 126	.020*
Emerging Adult	3.56	0.62	25			
Adult	3.85	0.53	103			
CDSE-SF Occupational Info.	4.02	0.59	128	3.94	1, 126	.049*
Emerging Adult	3.81	0.66	25			
Adult	4.07	0.56	103			
CDSE-SF Goal Selection	3.71	0.62	128	13.12	1, 126	.000*
Emerging Adult	3.32	0.64	25			
Adult	3.81	0.58	103			
CDSE-SF Planning	3.81	0.64	128	4.55	1, 126	.035*
Emerging Adult	3.56	0.64	25			
Adult	3.86	0.63	103			
CDSE-SF Problem Solving	3.58	0.64	128	5.61	1, 126	.019*
Emerging Adult	3.31	0.74	25			
Adult	3.64	0.60	103			

Note. *Significant at the .05 level

Welch t-test indicated that there was no significant difference between emerging adults and adults in the extent to which career is associated with reaching adulthood ($t(1, 30.47) = .04, p > .05$).

Differences in Scores Between Emerging Adults and Adults on the Inventory of the Dimensions of Emerging Adulthood (IDEA). No significant differences were found in scores on the Inventory of the Dimensions of Emerging Adulthood ($F(1, 126) = 1.54, p > .05$) between the two groups.

Analyses and Data by Research Question, Based on the Single Item Classification

Again, the investigator conducted chi-square analyses to determine whether or not there were differences in demographic variables (e.g., race, gender) between emerging adults and adults. This time, developmental status was determined based on responses to the item, “Do you think that you have reached adulthood?” with options of “yes” or “no.” As described above, some of the chi square analyses generated low cell numbers (i.e., less than five) and were not interpretable. This was due to there being few participants who both had certain demographic characteristics and identified as an emerging adult (e.g., the number of participants who identified as both Hispanic or Latino/a and as an emerging adult). However, several of these analyses were interpretable.

The percentages of those who identified as emerging adults or adults differed by living situation (living alone, with a spouse or partner, with one or more roommates or housemates, with parents or relatives, or as a single parent living with a child; $\chi^2(1, 126) = 11.38, p = .02$). There was also a significant difference between these groups in currently having paid employment; more of the participants who reported full-time employment thought that they had reached adulthood ($\chi^2(1, 126) = 14.03, p = .003$). Unlike the chi square results based on the full Self-Perception of Adulthood Questionnaire, a significant difference was also found between emerging adults and adults in whether or not they had future career plans that involve changing fields ($\chi^2(1, 126) = 4.85, p = .02$). A higher percentage of those who reported that they did have

plans to switch fields also identified as not yet having reached adulthood. However, no significant difference was found between developmental groups on the item, “Do you consider your current position to be your career?” ($\chi^2(1, 126) = .164, p = .09$). Lastly, no significant difference in gender was found between these groups ($\chi^2(1, 126) = .14, p = .70$).

As noted above, an additional one-way MANOVA was conducted in order to examine differences on the dependent measures based on responses to this single item (“Do you think that you have reached adulthood?”) This was done to gain further information about the construct of emerging adulthood and to further gauge the usefulness of the original independent measure. When this classification system was used, 66.4% were categorized as adults ($n = 85$), whereas 33.6% were emerging adults ($n = 43$). The overall observed power of this MANOVA was .98, again above the minimum needed. Levene’s test for equality of variances was not significant for any of the measures (CBAC; $F(1, 126) = 1.31, p = .25$; IDEA; $F(1, 126) = .45, p = .50$; CDSE-SF; $F(1, 126) = .06, p = .80$), nor was Box’s M test ($M = 21.98, F(21, 27400.37) = .98, p = .47$), indicating that equal variance can be assumed. Results of this analysis will be discussed by research question. Descriptive statistics and results are presented in table X below.

Differences in Career Decision Self-Efficacy Between Emerging Adults and Adults.

Results indicated that emerging adults had significantly lower confidence in making career-related decisions than adults ($F(1, 126) = 9.89, p < .05$). Cohen’s d was $-.59$, while Pearson’s r was $-.28$, indicating a small to medium effect size.

Another one-way MANOVA was used to examine whether or not there were differences between the two developmental groups on each of the CDSE-SF subscales. Significant differences were found on four of the five subscales: self-appraisal, $F(1, 126) = 4.00, p < .05$;

Table X

Descriptive Statistics and One-way MANOVA Results, Using Single Item Classification

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>
IDEA	96.03	8.98	128	4.39	1, 126	.038*
Emerging Adult	98.34	8.67	43			
Adult	94.87	8.95	85			
CDSE	3.78	0.51	128	9.89	1, 126	.002*
Emerging Adult	3.59	0.48	43			
Adult	3.88	0.50	85			
CBAC	21.32	3.33	128	.59	1, 126	.441
Emerging Adult	21.00	3.47	43			
Adult	21.48	3.26	85			

Note. *Significant at the .05 level

occupational information, $F(1, 126) = 7.89, p < .05$; goal selection, $F(1, 126) = 10.43, p < .05$; and problem-solving, $F(1, 126) = 5.61, p < .05$. Contrary to the results discussed above in which all five subscales were significant, there was no significant difference in planning, $F(1, 126) = 4.55, p > .05$. Descriptive statistics and results of this one-way MANOVA are presented in Table XI.

Differences Between Emerging Adults and Adults in the Extent to which Career is Viewed as a Defining Characteristic of Adulthood. No significant difference was found between the two developmental groups in the association between career and adult status ($F(1, 126) = .597, p > .05$).

Differences in Scores Between Emerging Adults and Adults on the Inventory of the Dimensions of Emerging Adulthood (IDEA). Results indicated that scores on the Inventory of the Dimensions of Emerging Adulthood significantly differed between emerging adults and

Table XI

Descriptive Statistics: Subscales of the CDSE-SF as Dependent Variables and Single Item Classification as Independent Variable

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>
CDSE-SF Self-Appraisal	3.79	0.56	128	4.00	1, 126	.048*
Emerging Adult	3.65	0.51	25			
Adult	3.86	0.57	103			
CDSE-SF Occupational Info.	4.02	0.59	128	7.89	1, 126	.006*
Emerging Adult	3.82	0.58	25			
Adult	4.12	0.57	103			
CDSE-SF Goal Selection	3.71	0.62	128	10.43	1, 126	.002*
Emerging Adult	3.47	0.60	25			
Adult	3.84	0.60	103			
CDSE-SF Planning	3.81	0.64	128	2.76	1, 126	.099
Emerging Adult	3.67	0.58	25			
Adult	3.87	0.66	103			
CDSE-SF Problem Solving	3.58	0.64	128	10.97	1, 126	.001*
Emerging Adult	3.32	0.63	25			
Adult	3.71	0.61	103			

Note. *Significant at the .05 level

adults ($F(1, 126) = 4.39, p < .05$). The effect size was small; Cohen's d was .39, while Pearson's r was .19.

Summary

Given the low reliability of the Emerging Adulthood Questionnaire (.33), Emerging Adulthood Themes in Career Decisions (.59), and Negative Beliefs and Myths (.61), these three measures were excluded from the analysis. Results from the first MANOVA (based on the Self-Perception of Adulthood Questionnaire) indicated that emerging adults exhibited lower career decision self-efficacy than adults. This finding appears fairly robust given its medium effect size, strong reliability coefficients, and significance on all five subscales. There were no

significant differences between developmental groups on the extent to which career is viewed as a defining characteristic of adulthood or in scores on the IDEA.

Another MANOVA analysis examined the relationship between the single item, “Do you think that you have reached adulthood” and the dependent measures. When this method of classifying participants as either emerging adults or adults was used, results were similar to the previous analysis except scores also differed on the IDEA. Significant findings were that scores on the IDEA differed and that emerging adults had lower self-efficacy in their career decisions than adults. When the subscales of the Career Decision Self-Efficacy Scale Short Form were examined, differences were found in four of the five subscales. Unlike the initial results above, there was not a significant difference between emerging adults and adults on the career planning subscale of the CDSE-SF. Differences were not found between emerging adults and adults in the association between career and having reached adulthood.

Chapter V

Discussion

Summary of the Present Study

The construct of emerging adulthood is relatively new in developmental psychology and there has been little consistency or clarity around its definition. The current dissertation study was intended to work toward a clear, useful conceptualization of emerging adulthood. It was also meant to describe possible relationships between the stage of emerging adulthood and career development processes. Implications may be useful for career counselors, psychologists who work in settings with emerging adult populations (e.g., college counseling centers), and vocational rehabilitation counselors. Knowledge of how the career development of emerging adults might be unique from other developmental stages may help inform which types of interventions would be beneficial for this group. The present study examined the following research questions:

1. Are there differences between emerging adults and adults in levels of responsibility and self-exploration?
2. Do emerging adults and adults differ in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA)?
3. Are themes of emerging adulthood more prevalent in the career decision process of emerging adults than of their same-aged adult counterparts?
4. Is there a difference in career decision self-efficacy between emerging adults and adults of the same age group?
5. Is there a difference between emerging adults and adults in the extent to which they view having a career as a defining characteristic of adulthood?

6. Do emerging adults endorse a greater number of negative beliefs and myths regarding adulthood and career than adults of the same age group?

Recruitment and Participants

The current study was unique in that it utilized a social networking website and online listservs to recruit participants. One hope was that this method would generate some diversity in the sample obtained. The representativeness of the sample could have been improved, such as having a more even gender split, higher percentages of those who identify as Hispanic or Latino/a or as Black or African American, and greater variation in educational attainment. In particular, the majority of participants had earned a 4-year degree or were currently working toward a 4-year degree. The majority of their parents had gone to college as well. The relatively high educational attainment of the sample may also indicate middle to high socioeconomic status. Thus, caution should be taken in applying the results of this study to those from lower socioeconomic backgrounds.

However, this method still may have led to a more representative sample than other feasible alternatives might have garnered. For instance, many studies on this topic have used a convenience sample of college freshmen and sophomores from a single university (e.g., Arnett, 1994, 1997; Bradley & Wildman, 2002; Nelson & McNamara, 2005). In contrast, all ages (19-25) were represented in the current study's sample and 53 participants (41.4%) reported working full-time. Thus, the developmental stage of emerging adulthood could be examined on a population that includes but is not limited to college students.

The sample obtained also appears to have some variability in role transitions. The most common role transitions completed by participants were getting a full-time job and moving out of the family of origin's home. Much less common were marriage and having children. These

sample characteristics seem to fit with the idea that those within the emerging adult age range now tend to be delaying marriage in favor of seeking higher education or other activities (Arnett, 2000; Cote, 2000, 2006; Douglass, 2007).

Measures

Another distinctive aspect of the current study was the measures used. There was a lack of existing measures to examine the constructs of interest; thus, the study investigator created most of the measures (a demographic questionnaire, the Emerging Adulthood Questionnaire, the Self-Perception of Adulthood Questionnaire, Emerging Adulthood Themes in Career Decisions, Perceptions of Adulthood and Career) for the present study. For example, no known measure existed to categorize individuals as emerging adults or adults. While the Inventory of the Dimensions of Emerging Adulthood (IDEA) provides scores on a continuum, there are no cut-off points that would allow an individual to be labeled as being in one developmental stage or another. Additionally, there had been limited research regarding the psychometric properties of the IDEA. Instead, the Self-Perception of Adulthood Questionnaire was constructed by the investigator specifically for this study. This measure asked participants whether or not they think they have reached adulthood in general and within different roles (e.g., at work, with friends, with family; Cobb, 2013d). Possible differences between emerging adults and adults on career-related dependent variables were then examined. A similar analysis was also conducted using responses to the single item, “Do you think that you have reached adulthood?” as the independent variable. Unfortunately, reliability coefficients of the Emerging Adulthood Questionnaire (.33), Emerging Adulthood Themes in Career Decisions (.59), and Negative Beliefs and Myths (.61) were unacceptable; these were therefore excluded from the analysis.

Conclusions

Summary of Results. Initial results of this study (using the Self-Perception of Adulthood instrument to categorize participants into a developmental stage) suggest that emerging adults may have less confidence in making career decisions than adults. This included confidence in appraising one's own abilities and skills, gathering occupational information, selecting career goals, making career-related plans, and problem-solving. However, there were other areas in which emerging adults and adults appeared similar; results showed that these groups did not differ in their association between career and adulthood or in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA).

An additional MANOVA was conducted to examine whether or not these results differed when the single item, "Do you think that you have reached adulthood?" was used to categorize participants as emerging adults or adults. These results again showed differences between the two groups in career decision self-efficacy; this was found in four of the five subscales. However, the career planning subscale was not significant, indicating that emerging adults and adults may not differ from one another in this particular area. Scores also significantly differed on the IDEA. Significant differences did not exist in the groups' views of the connection between career and adulthood. Overall, a primary difference between these results and those using the original classification system (based on the entire Self-Perception of Adulthood Questionnaire) was that when the single item was used as the independent variable, scores on the IDEA differed between emerging adults and adults. Given that theoretically, it would be anticipated that self-perception of adulthood would relate to scores on the IDEA, this second analysis is more consistent with the expected results.

Self-Perception of Adulthood. Participant responses to the Self-Perception of Adulthood Questionnaire illustrated that many individuals ages 19-25 feel like adults in some ways but not in others. For instance, while 80% percent were categorized as adults, only 43% felt like adults when at school, 44.5% when with their family, and 57% when around authority figures. Roughly 60% felt like adults when at home, when with friends, and when with a significant other. This appears consistent with much of the existing literature on emerging adulthood, which has suggested that reaching adult status often feels unclear (Arnett, 2000; Lopez et al., 2005; Molgat, 2007; Tanner & Arnett, 2011).

The Self-Perception of Adulthood Questionnaire also seems to have had a low threshold for categorizing a participant as an adult. The measure's scoring required that a participant respond "no" (that they did not feel like an adult) on more items than not in order to be considered an adult. Otherwise, they were categorized as an emerging adult. As noted previously, it seems that a number of participants who were categorized as adults still felt they had not fully reached this stage, continuing to not yet feel like an adult under certain circumstances. Moreover, a subset of the sample responded that they did not think they had reached adulthood, but when asked if they felt like an adult in a number of different roles, they responded "yes" to the majority of items. It could be that individuals feel less adult-like in only one or a few life roles but that this still largely impacts their overall self-perception of developmental status. This could mean that developmental status may be better characterized by the single question of self-perception (e.g., "Do you think that you have reached adulthood?") rather than by a series of items about a range of roles.

Furthermore, when the entire Self-Perception of Adulthood instrument was used to classify participants as emerging adults or adults, there was no significant difference between

these developmental groups in scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA). Given that one would expect these to be related, this finding raises questions about this particular classification approach. When the single item classification was instead used as the independent variable, the two developmental groups did differ in their IDEA scores. This again seems to indicate that emerging adulthood may be more accurately captured by this single question rather than multiple questions about feeling like an adult in a variety of life roles.

However, it should also be noted that the effect size for the relationship between the item, “Do you think that you have reached adulthood?” and scores on the IDEA was small. Since a strong relationship between these two variables would be expected, this again elicits questions about the categorizations of emerging adults and adults. It is possible that the IDEA could be improved to better assess the construct of emerging adulthood and fit with one’s overall self-perception of whether or not they think they are an adult.

Emerging Adulthood and Its Central Themes. Given that the Emerging Adulthood Questionnaire had unacceptable reliability, this study cannot assess whether or not the identified central themes of emerging adulthood, which were self-exploration and independence/responsibility, indeed differ between emerging adults and adults.

Emerging Adulthood Themes and Career Development. Similarly, due to the low reliability of Emerging Adulthood Themes in Career Decisions, this study cannot examine whether or not the identified themes of emerging adulthood arise in the career decisions of emerging adults more than adults.

Career Decision Self-Efficacy of Emerging Adults. According to both sets of results, emerging adults had lower career decision self-efficacy than their adult counterparts, meaning that emerging adults had less confidence that they would be able to engage in various tasks

needed for the career decision process. This appears to be one of the most useful findings of the present dissertation study, particularly given the strong psychometric properties of the instrument. This finding also suggests that it may not be just one area of career decision self-efficacy that emerging adults have relative difficulty with. Rather, the original results (using the full Self-Perception of Adulthood Questionnaire) showed that this difference held true on all five subscales, which were self-appraisal, occupational information, goal selection, planning, and problem-solving (Betz et al., 2005). Alternatively, using the single-item classification of “Do you think that you have reached adulthood?” significant differences were found between emerging adults and adults on four of the five subscales (i.e., self-appraisal, occupational information, goal selection, problem-solving).

Based on these results, overall self-efficacy in making career decisions may be lower for emerging adults. However, it may be that career planning is one area that this group is not behind their adult counterparts in. Perhaps emerging adults create plans but do not have the confidence in other areas in order to carry them out. For example, a college student could have general ideas about where he or she would like to be in five years, but may not have adequate information about the self or various work environments to determine whether or not their hopeful career is a good fit. The individual may also feel unable to develop specific goals and problem-solve when challenges arise. Thus, it seems that emerging adults may not need any more assistance in making plans than their adult counterparts. However, they do seem to need to increase their confidence in each of these other areas (i.e., self-appraisal, occupational information, goal selection, problem-solving) in order to successfully enact those plans. Emerging adults might also need more of a reality check than adults; this may involve a career counselor helping an individual to discover when parts of their plan may be unrealistic or particularly challenging.

This appears to fit with the aforementioned idea that emerging adults are often relatively optimistic compared to adults (Arnett, 2000, 2007b). It is possible that this optimism also applies to career development, such as a student believing that a degree will automatically lead to employment and success.

Additionally, given the literature on possible low levels of independence and responsibility during emerging adulthood, it may be that individuals in this developmental group do not feel they have the confidence to make career decisions on their own. According to the aforementioned social cognitive learning theory, self-efficacy is influenced by individuals' learning experiences (Bandura, 1977, 1997). This indicates that there may be some difference in learning experiences between emerging adults and adults of the same age range; for example, one hypothesis might be that emerging adults are more likely to have been implicitly taught that making their own decisions (without help from parents or authority figures) is more likely to result in negative outcomes. This idea stands in contrast to some previous research that indicated that parental support raises confidence in college students (Stringer & Kerpleman, 2010), but fits with much of the literature on "helicopter parenting" and how delaying separation from parental figures can be detrimental (LeMoyne & Buchanan, 2011; Somers & Settle, 2010a, 2010b).

Social learning theory also posits that decisions and behaviors, such as those related to career, are filtered through an individual's beliefs, one of which is their self-efficacy (Bandura, 1977, 1997). Thus, these results suggest that emerging adults are not only less likely to believe in their ability to make good career decisions, but they are then less likely to actually engage in related behaviors (e.g., preparing a good resume, determining what one values most in a job, talking with someone in a field of interest). It has also been shown that low self-efficacy in this

area tends to lead to avoidance of making choices, reduced job performance, and relatively low persistence (e.g., in job-searching) (Bandura, 1977, 1997).

Endorsement of Myths or Negative Beliefs. Negative Beliefs and Myths was found to have a reliability of .61 and was thus excluded from the analysis. Therefore, the current study was unable to assess whether or not emerging adults and adults differ in their endorsement of career myths or negative beliefs about career.

View of Career as a Defining Characteristic of Adulthood. Additionally, both analyses found that emerging adults and adults did not differ in the extent to which they viewed career as a defining component of adulthood. This fits with the Lopez et al. (2005) finding that entering a career is more commonly associated with adulthood than any other role transition. Based on the results of the current study, it appears that this belief is generally consistent regardless of developmental stage (emerging adulthood/adulthood). This also seems to align with the significant difference in current paid employment between emerging adults and adults found in the present study. However, regardless of employment (full-time, part-time, none), some variation in self-perception of adulthood still existed. This appears to fit with the idea that while career is often perceived as a key component (Lopez et al., 2005), there are additional variables that help determine whether or not one feels they have reached adulthood.

Scores on the Inventory of the Dimensions of Emerging Adulthood. When using the original classification of developmental status (based on responses to the Self-Perception of Adulthood Questionnaire), emerging adults and adults did not differ in their scores on the Inventory of the Dimensions of Emerging Adulthood (IDEA). This finding is noteworthy given that the IDEA is a measure that is meant to assess emerging adult themes in the current period of life. Thus, theoretically, one would expect these to be related.

However, when responses to the single item, “Do you think that you have reached adulthood?” were used as the independent variable, differences were indeed found between emerging adults and adults on the IDEA. Again, this seems to suggest that the single item classification may better capture the construct of emerging adulthood. It may be that one’s global self-perception of whether or not they think they are an adult is more useful in determining developmental status than an examination of whether or not they feel like an adult within various life roles. Still, none of the existing methods of classifying individuals as emerging adults or adults are ideal. For instance, the effect size of the relationship between the single item classification and the IDEA was small. A greater understanding of the components affecting one’s perception of their developmental status seems to be needed.

Implications

The present study has some implications for settings that serve individuals in the 19-25 age range, and particularly those that offer some kind of career services (e.g., educational settings, vocational rehabilitation programs, employment programs, mental health agencies). Based on the results, emerging adults may benefit from increased career services focused on building career decision self-efficacy. This could involve assessing the client or student’s current career decision self-efficacy, perhaps even by administering the CDSE-SF and seeing which areas the individual needs to build confidence in. It also seems that specific interventions designed to increase self-efficacy may be helpful. Emerging adults may also benefit from being given opportunities to practice career-related tasks with guidance but also some autonomy. While it may be tempting for career counselors to provide specific suggestions (e.g., suggestions of a major, choice of words on a resume or cover letter), emerging adults appear more likely to

benefit from developing the confidence and skills to complete such tasks themselves. These opportunities might be offered both individually and in workshops.

Additionally, given the literature on low levels of independence in emerging adults, it may be helpful to encourage these individuals to make career decisions with greater independence. Part of this process may involve counselors doing a more thorough assessment of parental and family of origin influences on career decisions. This might include but would certainly not be limited to types of messages received, support received, and overall parental involvement. Services could then focus more heavily on working with the individual to seek career information and support from sources other than the family of origin.

These implications seem particularly relevant for colleges and universities. First, it may be beneficial for institutions to promote their career services related to making career decisions. In such settings, it may also be helpful to provide services for parents, such as during freshman orientation. One option might be to offer a workshop teaching parents the importance of allowing their daughter or son space to make their own decisions related to careers and majors. College settings may vary in the amount of involvement between students and their parent(s); these implications may be particularly relevant for settings in which parents tend to be very active in students' lives (e.g., those with primarily traditional college students in terms of age). Consistent with social learning theory, if students are unable to build self-efficacy, it is unlikely that they will engage in many of the behaviors needed to obtain a career. This may then result in less career opportunities and lower work satisfaction over the lifespan.

These ideas also seem to be supported when examining response frequencies on the Self-Perception of Adulthood Questionnaire. Most items had a majority of participants responding that "yes," they felt like an adult in that particular role. The exceptions to this were "when I am

with my family” and “when I am at school.” It stands to reason that the findings of this study may be useful for those who are both still in school and have a high degree of parental or family involvement. Furthermore, there was a significant difference in living situation between emerging adults and adults when the single item, “Do you think that you have reached adulthood?” was used as the independent variable. Though the current study was unable to examine whether or not independence and responsibility were indeed related to emerging adulthood, this still seems to be a viable hypothesis.

Focusing on these specific needs of students may end up reducing attrition rates and time to graduation as well. For example, students may move more quickly toward a career rather than being indecisive (e.g., changing majors frequently, taking additional credit hours rather than graduating and entering a career). This would be beneficial not only to students themselves, but to colleges and universities as a whole.

Limitations

Sampling Bias. A few limitations of this study could be discussed. First, a portion of the sample of participants was solicited from the investigator’s Facebook page. Due to this, the sample was in part filtered through the social network of one individual and likely resulted in a less random sample, particularly in terms of socioeconomic status, educational attainment, gender, and race, among other variables. Additionally, using Facebook.com or the Internet itself prevents individuals without access to these tools from participating in the study. However, it should be noted that the investigator was outside of the age range of potential participants; thus, the investigator relied primarily on others re-posting the study information and link. This may have aided in reducing some of the bias inherent in this recruitment method. Further, participants were not exclusively recruited on Facebook.com; Google groups and Yahoo groups

were also used for advertising the study. Unfortunately, it is unknown what percentage of participants found the study on Facebook.com as opposed to one of the Google or Yahoo groups; this information was not asked for within the survey or otherwise tracked.

Related to these recruitment limitations, some of the demographic characteristics of participants were not representative of the nation as a whole. Most notably, there were unequal numbers of female and male participants, and the sample was relatively educated, and likely of middle to high socioeconomic status. It can be argued that those of middle or upper socioeconomic status are more likely to have the time and money to postpone adulthood, having increased opportunities to explore the self and delay responsibilities (e.g., by travelling, attending a 4-year college, engaging in an unpaid internship). This postponement of responsibilities was consistent with the lack of certain role transitions completed by participants; few were married or had children. There is a possibility that emerging adulthood is at least somewhat convoluted with social class. Therefore, caution should be taken before generalizing these results to diverse groups.

Cross-Cultural Relevance. Additionally, the current study did not analyze any relationships across groups other than developmental stages (emerging adulthood/adulthood). While it would be beneficial for research in this area to examine potential differences in any of the dependent variables based on educational background (e.g., 4-year university, 2-year college, no postsecondary education), for example, such research questions were outside of the scope of the present study due to having limited funding and thus an inadequate sample size to run analyses with a large number of groups. Instead, the present study began to explore differences in the aforementioned career-related dependent variables between self-perceived adults and emerging adults. However, there may be differences between diverse groups in the extent to

which emerging adulthood takes place (Arnett, 2000, 2003). For example, it may be that individuals from higher socioeconomic backgrounds and greater educational opportunities are more likely to have extra time for self-exploration before beginning a career (Arnett, 2000; Cote, 2000). The results of the present study only indicated whether or not the dependent variables related to perceived developmental status. Thus, if some groups were more likely than others to perceive themselves as emerging adults (i.e., not yet having reached adulthood), the results may have greater implications for those specific groups. Again, it should not be assumed that results will generalize across groups. Future research might attend to these issues in order to provide a more complete picture of how the developmental stage of emerging adulthood may relate to the career development processes of individuals from diverse groups.

Measures. Another limitation was the lack of psychometric data for the instruments created by the study investigator for the present study. As noted previously, the available psychometric data were internal consistency estimates, which were low on the Emerging Adulthood Questionnaire (.33), Emerging Adulthood Themes in Career Decisions (.59), and Negative Beliefs and Myths (.61), resulting in their exclusion from the analysis. This is a clear limitation of the current study, though previously published instruments that measured these constructs were not available.

Theories of emerging adulthood as a developmental stage are relatively new, resulting in a lack of existing instruments to measure it. The exception to this is The Inventory of the Dimensions of Emerging Adulthood (IDEA; Reifman, Arnett, & Colwell, 2007a), though it currently does not have the empirical data needed to support its use. Additionally, it is not intended for categorizing individuals as emerging adults or adults. Though the current study administered the IDEA as a means of collecting additional data on its utility, it relied upon

participants' self-report of perceived adult status (both using responses on the full Self-Perception of Adulthood Questionnaire and the single item, "Do you think that you have reached adulthood?") rather than using the IDEA to define the independent variable of developmental stage.

This strategy of collecting self-report data using questions such as, "Do you think that you have reached adulthood?" has been the primary method used in much of the research on emerging adulthood to date (e.g., Arnett, 1997, 2001, p. 142; Molgat, 2007; Nelson & McNamara, 2005; Shanahan, Porfeli, Mortimer, & Erickson, 2005). This use of self-report data does present limitations, as there may be some question as to how reliable individuals are in assessing their own developmental progression. This form of measurement is subjective rather than relying upon behavioral data that could potentially be more accurate. However, there may also be an important distinction between the individual's perception of whether or not they have reached adulthood and more behavioral indicators of reaching of adulthood (e.g., displaying responsible behaviors), with it being difficult to determine which has larger implications for career development. Again, the present study used the former (self-perception of developmental stage) as the independent variable.

As mentioned previously, the single item of "Do you think that you have reached adulthood?" may be more useful as a measure of emerging adulthood than the full Self-Perception of Adulthood Questionnaire created by the investigator for the present study. This is in part because regardless of whether or not participants generally thought they had reached adulthood, most responded that they did feel like adults in the majority of specific life roles. Most participants also had a small number of life roles in which they did not yet feel like an adult. Additionally, the single item was significantly related to scores on the IDEA, unlike the

full Self-Perception of Adulthood Questionnaire. However, it still seems that a more accurate measure of the construct of emerging adulthood could be created.

It should also be noted that many existing measures of the career-related constructs of interest were developed for specific populations such as college or high school students. Therefore, they would not be appropriately used with those with differing educational experiences or those who are currently in other life stages. The Career Decision Self-Efficacy Scale Short Form (CDSE-SF; Betz et al., 2005; Betz & Klein, 1996) is one exception that can be used with a wider range of participants and was thus used as a dependent measure. Additional instruments were created for this study by the investigator, which were designed to measure the remaining dependent variables and are intended for use with both college and non-college populations.

Recommendations for Future Research

Further research continues to be needed to better understand the construct of emerging adulthood and the ways in which it differs from neighboring developmental stages. Again, this study relied primarily on instruments created by the investigator for the current study since none had already been developed that were strong in their psychometric properties. In order to better understand emerging adulthood itself, more time could be spent establishing quality measures of the construct.

The low reliability of the Emerging Adulthood Questionnaire prevented the current study from exploring whether or not the central themes of emerging adulthood are indeed high self-exploration and low independence and responsibility. Future studies may benefit from doing more exploration of these variables, as well as potential others that may make people feel either more or less adult-like. Perhaps most useful would be a qualitative study using interviews on

these possible components of emerging adulthood; this kind of thorough process may help to better define the construct. An exploratory factor analysis would then be needed to further refine any instrument(s) created.

Also, treating emerging adulthood as a continuous variable (in which individuals experience different degrees of the stage) might be beneficial, since there indeed seems to be a range in the extent to which the stage is experienced. In the meantime, researchers may wish to use a single item classification system, such as the present study's "Do you think that you have reached adulthood?" rather than questions about perceived developmental status in various roles. Lastly, since the Inventory of the Dimensions of Emerging Adulthood is one of the few measures in existence related to this construct, it would also be useful to research this instrument more fully. Each of these areas of research might help to better conceptualize emerging adulthood, including the extent to which it is indeed a distinctive period of development (Tanner & Arnett, 2011, p. 15), as well as the specific themes associated with it.

Additionally, further research on possible differences between emerging adults and adults in career development appears needed. Since the current study was unable to examine the extent to which emerging adulthood themes arise for this population when making career decisions, research on this topic would likely be useful. An examination of possible differences between emerging adults and adults in career-related myths and negative beliefs seems needed as well, as the current study was unable to do so due to the low reliability of the associated measure. Also, given the finding that emerging adults have relatively low career decision self-efficacy compared to adults, studies might explore which interventions most effectively build self-efficacy within this particular group.

Future studies might also explore a possible connection between parental relationships and self-perception of adulthood. More specifically, it may be worthwhile to further examine whether or not those with high levels of parental involvement are less likely to feel like adults. Though some survey items in this study attended to the relational context of career development, it could have been beneficial to have included an entire instrument devoted to assessing this. Similarly, the interplay between role transitions and psychological variables deserves more discussion; for instance, it might be useful to look at the extent to which transitions such as moving out of the parental home are associated with perceived developmental status. Somewhat related to this, it would be interesting to study whether or not there is a difference between emerging adults and adults of the same age in their cognitive development. It might be expected that emerging adults would make decisions based on their family of origin's views rather than taking a more societal or personal perspective; this would appear consistent with Perry's (1970) theory of cognitive development.

Additionally, research in this area should make every effort to include individuals from diverse backgrounds, to compare participants from differing socioeconomic statuses, education levels, racial or ethnic groups, or disability statuses (e.g., level of cognitive ability). While some attention has been given to this in the past, the interplay between such variables and developmental status (emerging adulthood/adulthood) still needs to be better understood. Research needs to assess the extent to which emerging adulthood does or does not exist across diverse groups, as well as how the expression of the stage might vary. This must be accomplished before results can be utilized with diverse groups, and would also add to the greater understanding of emerging adulthood itself and the cultural context in which it is most likely to occur.

References

- Aiken, L.R., (2000). *Psychological testing and assessment*. (10th ed.) Boston, MA: Allyn and Bacon.
- Amato, P.R., Booth, A., Johnson, D.R., & Rogers, S.J. (2007). *Alone together: How marriage in America is changing*. Cambridge, MA: Harvard University Press.
- Amundson, N. (1997). Myths, metaphors, and moxie: The 3Ms of career counseling. *Journal of Employment Counseling*, 34, 76-84. doi: 10.1002/j.2161-1920.1997.tb00461.x
- Anderssen, N., Jacobs, D.R., Sidney, S., Bild, D.E., Sternfeld, B., Slattery, M.L., & Hannan, P. (1996). Change and secular trends in physical activity patterns in young adults: A seven-year longitudinal follow-up in the coronary artery risk development of young adults study. *American Journal of Epidemiology*, 143, 351-362. Retrieved from Medline database.
- Aquilino, W.S., & Supple, A.J. (2001). Long-term effects of parenting practices during adolescence on well-being outcomes in young adulthood. *Journal of Family Issues*, 22, 289- 306. doi: 10.1177/019251301022003002
- Arnett, J.J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Development*, 1, 213-224. doi: 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. doi: 10.1159/000022591

- Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480. doi: 10.1037/0003-066X.55.5.469
- Arnett, J.J. (2001). Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, 8, 133-143. doi: 10.1023/A:1026450103225
- Arnett, J.J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child & Adolescent Development*, 100, 63-76. doi: 10.1002/cd.75
- Arnett, J.J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Arnett, J.J. (2005). The developmental context of substance use in emerging adulthood. *The Journal of Drug Issues*, 35, 235-253. doi: 10.1177/002204260503500202
- Arnett, J.J. (2006). Emerging adulthood: Understanding the new way of coming of age. In J.J. Arnett & J.L. Tanner (Eds.). *Emerging adults in America: Coming of age in the 21st century* (pp. 3-17). Washington, DC: American Psychological Association.
- Arnett, J.J. (2007a). Emerging adulthood, a 21st century theory: A rejoinder to Hendry and Kloep. *Child Development Perspectives*, 1, 80-82. doi: 10.1111/j.1750-8606.2007.00018.x
- Arnett, J.J. (2007b). Suffering, selfish, slackers? Myths and reality about emerging adults. *Journal of Youth and Adolescence*, 36, 23-29. doi: 10.1007/s10964-006-9157-z
- Arnett, J.J. (2010). Oh, grow up! Generational grumbling and the new life stage of emerging adulthood – Commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5, 89-92. doi: 10.1177/1745691609357016

- Arnett, J.J., & Eisenberg, N. (2007). Introduction to the special section: Emerging adulthood around the world. *Child Development Perspectives, 1*, 66-67. doi: 10.1111/j.1750-8606.2007.00015.x
- Arnett, J.J., & Tanner, J.L. (2011). Themes and variations in emerging adulthood across social classes. In J.J. Arnett, M. Kloep, L.B. Hendry, & J.L. Tanner (Eds.). *Debating emerging adulthood: Stage or process?* (pp. 31-50). New York: Oxford University Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215. doi: 10.1037/0033-295X.84.2.191
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman & Company.
- Baranowski, T., Cullen, K.W., Basen-Engquist, K., Wetter, D.W., Cummings, S., Martineau, D.S., Prokhorov, A.V., Chorley, J., Beech, B., & Hergenroeder, A.C. (1997). Transitions out of high school: Time of increased cancer risk? *Preventative Medicine, 26*, 694-703. doi: 10.1006/pmed.1997.0193
- Betz, N.E. (2007). Career self-efficacy: Exemplary recent research and emerging directions. *Journal of Career Assessment, 15*, 403-422. doi: 10.1177/1069072707305759
- Betz, N.E. (2008). Advances in vocational theories. In S. Brown & R. Lent (Eds.). *Handbook of Counseling Psychology 4th ed.* (pp. 357-374). New York, NY: Wiley Press.
- Betz, N.E., Hammond, M., & Multon, K. (2005). Reliability and validity of response continua for the Career Decision Self-Efficacy Scale. *Journal of Career Assessment, 13*, 131-149. doi: 10.1177/1069072704273123

- Betz, N., & Klein, K. (1996). Relationships among measures of career self-efficacy, generalized self-efficacy, and global self-esteem. *Journal of Career Assessment, 4*, 285-298. doi: 10.1177/106907279600400304
- Betz, N.E., Klein, K.L., & Taylor, K.M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment, 4*, 47-57. doi: 10.1177/106907279600400103
- Betz, N.E., & Taylor, K.M. (2006). *Manual for the Career Decision Self-Efficacy Scale and CDSE-Short Form*. Columbus, OH: The Ohio State University.
- Biggart, A., & Walther, A. (2006). Coping with yo-yo transitions: Young adults' struggle for support. In C. Leccardi & E. Ruspini (Eds.). *A New Youth? Young People, Generations, and Family Life* (pp. 41-62). Burlington, VT: Ashgate Publishing Company.
- Blustein, D.L. (2001). The interface of work and relationships: Critical knowledge for 21st century psychology. *The Counseling Psychologist, 29*, 179-192. doi: 10.1177/0011000001292001
- Borges, N.J., Manuel, R.S., Elam, C.L., & Jones, B.J. (2010). Differences in motives between millennial and generation X medical students. *Medical Education, 44*, 570-576. doi: 10.1111/j.1365-2923.2010.03633.x
- Bradley, G., & Wildman, K. (2002). Psychosocial predictors of emerging adults' risk and reckless behaviors. *Journal of Youth and Adolescence, 31*, 253-265. doi: 10.1023/A:1015441300026
- Bryck, R.L., & Fisher, P.A. (2012). Training the brain: Practical applications of neural plasticity from the intersection of cognitive neuroscience, developmental psychology, and prevention science. *American Psychologist, 67*, 87-100. doi: 10.1037/a0024657

- Bynner, J. (2005). Rethinking the youth phase of the life course: The case for emerging adulthood. *Journal of Youth Studies, 8*, 367-384. doi: 10.1080/13676260500431628
- Caprara, G.V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G.M., Barbaranelli, C., & Bandura, A. (2008). *Journal of Educational Psychology, 100*, 525-534. doi: 10.1037/0022-0663.100.3.525
- Cobb, M.D. (2013a). Emerging Adulthood Themes in Career Decisions. Unpublished instrument. Auburn University.
- Cobb, M.D. (2013b). Emerging Adulthood Questionnaire. Unpublished instrument. Auburn University.
- Cobb, M.D. (2013c). Perceptions of Adulthood and Career. Unpublished instrument. Auburn University.
- Cobb, M.D. (2013d). Self-Perception of Adulthood Questionnaire. Unpublished instrument. Auburn University.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in patterns of developmental transitions in the emerging adulthood period. *Developmental Psychology, 39*, 657-669. doi: 10.1037/0012-1649.39.4.657
- Colby, A., Kohlberg, L., Gibbs, J., & Lieberman, M. (1983). A longitudinal study of moral judgment. *Monographs of the Society for Research in Child Development, 48*, 1-96. doi: 10.1111/1540-5834.ep11861322
- Corporate Leadership Council. (2004). Generation X and Y employees. Washington, DC: Corporate Executive Board.
- Corporate Leadership Council. (2005). HR considerations for engaging Generation Y employees. Washington, DC: Corporate Executive Board.

- Cote, J. (2000). *Arrested adulthood*. New York: New York University Press.
- Cote, J.E. (2006). Emerging adulthood as an institutionalized moratorium: Risks and benefits to identity formation. In J.J. Arnett & J.L. Tanner (Eds.). *Emerging adults in America: Coming of age in the 21st century* (pp. 85-116). Washington, DC: American Psychological Association.
- Craik, F.I.M., & Bialystok, E. (2006). Cognition through the lifespan: Mechanisms of change. *Trends in Cognitive Sciences*, *10*, 131-139. doi: 10.1016/j.tics.2006.01.007
- Crews, F., He, J., & Hodge, C. (2006). Adolescent cortical development: A critical period of vulnerability for addiction. *Pharmacology, Biochemistry, & Behavior*, *86*, 189-199. doi: 10.1016/j.pbb.2006.12.001
- Crowley, K., Mayer, P., & Stuart-Hamilton, I. (2009). Changes in reliance on reading and spelling subskills across the lifespan. *Educational Gerontology*, *35*, 503-522. doi: 10.1080/03601270902727722
- Cullen, K.W., Koehly, L.M., Anderson, C., Baranowski, T., Prokhorov, A., Basen-Engquist, K., Wetter, D., & Hergenroeder, A. (1999). Gender differences in chronic disease risk behaviors through the transition out of high school. *American Journal of Preventative Medicine*, *17*, 1-7. doi: 10.1016/S0749-3797(99)00038-0
- Deal, J.J., Altman, D.G., & Rogelberg, S.G. (2010). Millennials at work: What we know and what we need to do (if anything). *Journal of Business and Psychology*, *25*, 191-199. doi: 10.1007/s10869-010-9177-2
- DeVellis, R.F. (1991). *Scale development*. Newbury Park, NJ: Sage Publications.

- Diamond, L.M., & Fagundes, C.P. (2011). Implications of parasympathetic nervous system functioning for affect regulation and romantic relationships in emerging adulthood. In F.D. Fincham & M. Cui (Eds.), *Romantic relationships in emerging adulthood* (pp. 252-272). New York, NY: Cambridge University Press.
- Dickerson, D. (2008). The millennial brain and risk. *Campus Activities Programming, 41*, 10-15. Retrieved from Education Research Complete database.
- Dorn, F.J., & Welch, N. (1985). Assessing career mythology: A profile of high school students. *The School Counselor, 33*, 137-142. Retrieved from ERIC database.
- Douglass, C.B. (2007). From duty to desire: Emerging adulthood in Europe and its consequences. *Child Development Perspectives, 1*, 101-108. doi: 10.1111/j.1750-8606.2007.00023.x
- Dowda, M., Ainsworth, B.E., Addy, C.L., Saunders, R., & Riner, W. (2003). Correlates of physical activity among U.S. young adults, 18 to 30 years of age, from NHANES III. *Annals of Behavioral Medicine, 26*, 15-23. doi: 10.1207/S15324796ABM2601_03
- Dux, P.E., Ivanoff, J., Asplund, C.L., & Marois, R. (2006). Isolation of a central bottleneck of information processing with time-resolved fMRI. *Neuron, 52*, 1109-1120. doi: 10.1016/j.neuron.2006.11.009
- Erikson, E.H. (1950). *Childhood and society*. New York: W.W. Norton & Company.
- Erikson, E.H. (1959). *Identity and the life cycle*. New York: W.W. Norton & Company.
- Farland-Smith, D. (2009). Exploring middle school girls' science identities: Examining attitudes and perceptions of scientists when working "side-by-side" with scientists. *School Science and Mathematics, 109*, 415-427. doi: 10.1111/j.1949-8594.2009.tb17872.x

- Farland-Smith, D. (2012). How does culture shape students' perceptions of scientists? Cross-national comparative study of American and Chinese elementary students. *Journal of Elementary Science Education, 21*, 23-42. doi: 10.1007/BF03182355
- Fawson, S. (2009). Drawing development: Historical perspectives, developmental stages, current approaches. *The Psychology of Education Review, 33*, 3-9.
- Fischer, J. L., Forthun, L. F., Pidcock, B. W., & Dowd, D. A. (2007). Parent relationships, emotion regulation, and college student alcohol problems. *Journal of Youth and Adolescence, 36*, 912 – 926. doi: 10.1007/s10964-006-9126-6
- Fotheringham, M.J., Wonnacott, R.L., & Owen, N. (2000). Computer use and physical inactivity in young adults: Public health perils and potentials of new information technologies. *Annals of Behavioral Medicine, 22*, 1-8. doi: 10.1007/BF02895662
- Fredricks, J.A., Alfeld-Liro, C.J., Huda, L.Z., Eccles, J.S., Patrick, H., & Ryan, A.M. (2002). A qualitative exploration of adolescents' commitment to athletics and the arts. *Journal of Adolescent Research, 17*, 68-97. doi: 10.1177/0743558402171004
- Freud, S. (1923). *The Ego and the Id. The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XIX: The Ego and the Id and Other Works*. London: Vintage Books.
- Germeijs, V., & Verschueren, K. (2009). Adolescents' career decision-making process: Related to quality of attachment to parents? *Journal of Research on Adolescence, 19*, 459-483. doi: 10.1111/j.1532-7795.2009.00603.x
- Gilbert, J., & Calvert, S. (2003). Challenging accepted wisdom: Looking at the gender and science education question through a different lens. *International Journal of Science Education, 25*, 861-878. doi: 10.1080/09500690305030

- Ginzberg, E., Ginsberg, S., Axelrad, S., & Herma, J. (1951). *Occupational choice: An approach to a general theory*. New York: Columbia University Press.
- Gogtay, N., Giedd, J.N., Lusk, L., Hayashi, K.M., Greenstein, D., Vaituzis, A.C., Nugent, T.F., Herman, D.H., Clasen, L.S., Toga, A.W., Rapoport, J.L., Thompson, P.M., & Ungerleider, L.G. (2004). Dynamic mapping of human cortical development during childhood through early adulthood. *Proceedings of the National Academy of Sciences of the United States of America*, *101*, 8174-8179. doi: 10.1073/pnas.0402680101
- Goldscheider, F.K., & Davanzo, J. (1986). Semiautonomy and leaving home in early adulthood. *Social Forces*, *65*, 187-201. doi: 10.2307/2578942
- Gore, P.A., Leuwerke, W.C., & Turley, S. (2006). A psychometric study of the College Self-Efficacy Questionnaire. *Journal of College Student Retention*, *7*, 227-244. Retrieved from ERIC database.
- Gottfredson, L.S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, *28*, 545-579. doi: 10.1037//0022-0167.28.6.545
- Gow, A.J., Johnson, W., Pattie, A., Brett, C.E., Roberts, B., Starr, J.M., & Deary, I.J. (2011). Stability and change in intelligence from age 11 to ages 70, 79, and 87: The Lothian birth cohorts of 1921 and 1936. *Psychology and Aging*, *26*, 232-240. doi: 10.1037/a0021072
- Gredler, M.E. (2009). Hiding in plain sight: The stages of mastery/self-regulation in Vygotsky's cultural-historical theory. *Educational Psychologist*, *44*(1), 1-19. doi: 10.1080/00461520802616259

- Greenberger, E., Lessard, J., Chen, C., & Farruggia, S.P. (2008). Self-entitled college students: Contributions of personality, parenting, and motivational factors. *Journal of Youth and Adolescence*, 37, 1193-1204. doi: 10.1007/s10964-008-9284-9
- Groeschel, S., Vollmer, B., King, M.D., & Connelly, A. (2010). Developmental changes in cerebral grey and white matter volume from infancy to adulthood. *International Journal of Developmental Neuroscience*, 28, 481-489. doi: 10.1016/j.ijdevneu.2010.06.004
- Hartung, P.J., Porfeli, E.J., & Vondracek, F.W. (2005). Child vocational development: A review and reconsideration. *Journal of Vocational Behavior*, 66, 385-419. doi: 10.1016/j.jvb.2004.05.006
- Hauw, S.D., & De Vos, A. (2010). Millennials' career perspective and psychological contract expectations: Does the recession lead to lowered expectations? *Journal of Business and Psychology*, 25, 293-302. doi: 10.1007/s10869-010-9162-9
- Helwig, A.A. (2008). From childhood to adulthood: A 15-year longitudinal career development study. *Career Development Quarterly*, 57, 38-50. doi: 10.1002/j.2161-0045.2008.tb00164.x
- Hendry, L.B., & Kloep, M. (2007a). Conceptualizing emerging adulthood: Inspecting the emperor's new clothes? *Child Development Perspectives*, 1, 74-79. doi: 10.1111/j.1750-8606.2007.00017.x
- Hendry, L.B., & Kloep, M. (2007b). Redressing the emperor! – A rejoinder to Arnett. *Child Development Perspectives*, 1, 83-85. doi: 10.1111/j.1750-8606.2007.00019.x
- Heppner, P.P, Wampold, B.E., & Kivlighan, D.M. (2007). *Research design in counseling*. (3rd ed.) Pacific Grove, CA: Brooks Cole.

- Herring, R.D. (1990). Attacking career myths among Native Americans: Implications for counseling. *School Counselor*, 38, 13-19. Retrieved from MasterFILE Premier database.
- Hershatler, A., & Epstein, M. (2010). Millennials and the world of work: An organization and management perspective. *Journal of Business and Psychology*, 25, 211-223. doi: 10.1007/s10869-010-9160-y
- Hoffner, C.A., Levine, K.J., & Toohey, R.A. (2008). Socialization to work in late adolescence: The role of television and family. *Journal of Broadcasting and Electronic Media*, 52, 282-302. doi: 10.1080/08838150801992086
- Holland, J.L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35-45. doi: 10.1037/h0040767
- Holland, J.L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Piaget, J., & Inhelder, B. (1969). *The psychology of the child*. New York: Basic Books.
- Jepsen, D.A., & Dickson, G.L. (2003). Continuity in life-span career development: Career exploration as a precursor to career establishment. *Career Development Quarterly*, 51, 217-233. doi: 10.1002/j.2161-0045.2003.tb00603.x
- Johnson, R.W., & Silva, S. (1990). Confronting a career myth: The case of Rhonda. *Career Development Quarterly*, 38, 204-208. doi: 10.1002/j.2161-0045.1990.tb00382.x
- Keating, D. (2004). Cognitive and brain development. In R.M. Lerner & L.D. Steinberg (Eds.). *Handbook of adolescent psychology* (pp. 45-84). Hoboken, NJ: John Wiley.

- Kelley, A.E., Schochet, T., & Landry, C.F. (2004). Risk taking and novelty seeking in adolescence. In R.E. Dahl & L.P. Spear (Eds.). *Adolescent brain development: Vulnerabilities and opportunities* (Vol. 1021, pp. 27-32), *Annals of the New York Academy of Sciences*. New York: NY: New York Academy of Sciences.
- Keniston, K. (1970). Youth: A “new” stage of life. *American Scholar*, 39, 631-653. Retrieved from Readers’ Guide Retrospective: 1890-1982 database.
- Kins, E., & Beyers, W. (2010). Failure to launch, failure to achieve criteria for adulthood? *Journal of Adolescent Research*, 25, 743-777. doi: 10.1177/0743558410371126
- Kohlberg, L., & Hersh, R.H. (1977). Moral development: A review of the theory. *Theory into Practice*, 16, 53-59. doi: 10.1080/00405847709542675
- Komro, K. A., & Toomey, T. L. (2002). Strategies to prevent underage drinking. *Alcohol Research & Health*, 26, 5–14. Retrieved from Academic Search Premier database.
- Kowske, B.J., Rasch, R., & Wiley, J. (2010). Millennials’ (lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of Business and Psychology*, 25, 265-279. doi: 10.1007/s10869-010-9171-8
- Labouvie-Vief, G. (2006). Emerging structures of adult thought. In J.J. Arnett & J.L. Tanner (Eds.). *Emerging adults in America: Coming of age in the 21st century* (pp. 59-84). Washington, DC: American Psychological Association.
- Ladany, N., Melincoff, D.S., Constantine, M.G., & Love, R. (1997). At-risk urban high school students’ commitment to career choices. *Journal of Counseling & Development*, 76, 45-52. doi: 10.1002/j.1556-6676.1997.tb02375.x

- Lankard, B.A. (1995). Career development in Generation X: Myths and realities. *ERIC Clearinghouse on Adult, Career, and Vocational Education*. Columbus, OH. Retrieved from ERIC database.
- Leal-Muniz, V., & Constantine, M.G. (2005). Predictors of the career commitment process in Mexican American college students. *Journal of Career Assessment, 13*, 204-215. doi: 10.1177/1069072704273164
- LeMoyne, T., & Buchanan, T. (2011). Does 'hovering' matter? Helicopter parenting and its effect on well-being. *Sociological Spectrum, 31*, 399-418. doi: 10.1080/02732173.2011.574038
- Lent, R.W., Brown, S.D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003). Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models. *Journal of Counseling Psychology, 50*, 458-465. doi: 10.1037/0022-0167.50.4.458
- Lerner, R.M. (2002). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Lawrence Earlbaum Associates.
- Lerner, R.M., Skinner, E.A., & Sorell, G.T. (1980). Methodological implications of contextual/dialectic theories of development. *Human Development, 23*, 225-235. Retrieved from ERIC database.
- Leslie, E., Sparling, P.B., & Owen, N. (2001). University campus settings and the promotion of physical activity in young adults: Lessons from research in Australia and the USA. *Health Education, 101*, 116-125. doi: 10.1108/09654280110387880

- Levine, K.J., & Hoffner, C.A. (2006). Adolescents' conceptions of work: What is learned from different sources during anticipatory socialization? *Journal of Adolescent Research, 21*, 647-669. doi: 10.1177/0743558406293963
- Lewis, R.A., & Gilhousen, M.R. (1981). Myths of career development: A cognitive approach to vocational counseling. *The Personnel and Guidance Journal, 59*, 296-299. doi: 10.1002/j.2164-4918.1981.tb00553.x
- Liptak, J.J. (1989). Irrational expectations in the job search process. *Journal of Employment Counseling, 26*, 35-40. 10.1002/j.2161-1920.1989.tb00930.x
- Lopez, 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*, 1-31. doi: 10.2202/1940-1639.1424
- Luyckx, K., Schwartz, S.J., Goossens, L., & Pollock, S. (2008). Employment, sense of coherence, and identity formation: Contextual and psychological processes on the pathway to sense of adulthood. *Journal of Adolescent Research, 23*, 566-591. doi: 10.1177/0743558408322146
- Marcotte, J. (2008). Quebec's adult educational settings: Potential turning points for emerging adults? Identifying barriers to evidence-based interventions. *Canadian Journal of Educational Administration and Policy, 77*, 1-18. Retrieved from ERIC database.
- Maples, M.R., & Luzzo, D.A. (2005). Evaluating DISCOVER's effectiveness in enhancing college students' social cognitive career development. *Career Development Quarterly, 53*, 274-285. doi: 10.1002/j.2161-0045.2005.tb00996.x

- McWhirter, E.H., Torres, D., & Rasheed, S. (1998). Assessing barriers to women's career adjustment. *Journal of Career Assessment*, 6, 449-479. doi: 10.1177/106907279800600406
- Meacham, S.J. (2001). Vygotsky and the blues: Re-reading cultural connections and conceptual development. *Theory into Practice*, 40(3), 190-197. doi: 10.1207/s15430421tip4003_7
- Messersmith, E.E., Garrett, J.L., Davis-Kean, P.E., Malanchuk, O., & Eccles, J.S. (2008). Career development from adolescence through emerging adulthood: Insights from information technology occupations. *Journal of Adolescent Research*, 23, 206-227. doi: 10.1177/0743558407310723
- Miller, C. H., Burgoon, M., Grandpre, J. R., & Alvaro, E. M. (2006). Identifying principal risk factors for the initiation of adolescent smoking behaviors: The significance of psychological reactance. *Health Communication*, 19, 241-252. doi: 10.1207/s15327027hc1903_6
- Miller, C.H., & Quick, B.L. (2010). Sensation seeking and psychological reactance as health risk predictors for an emerging adult population. *Health Communication*, 25, 266-275. doi: 10.1080/10410231003698945
- Mitchell, B.A. (1998). Too close for comfort? Parental assessments of "boomerang kid" living arrangements. *Canadian Journal of Sociology*, 23, 21-46. doi: 10.2307/3341660
- Mitchell, B.A., Wister, A.V., & Gee, E.M. (2004). The ethnic and family nexus of homeleaving and returning among Canadian young adults. *Canadian Journal of Sociology*, 29, 543-575. doi: 10.1353/cjs.2005.0013

- Mokdad, A.H., Serdula, M.K., Dietz, W.H., Bowman, B.A., Marks, J.S., & Koplan, J.P. (1999). The spread of the obesity epidemic in the United States, 1991-1998. *Journal of the American Medical Association*, 282, 1519-1522. doi: 10.1001/jama.282.16.1519
- Molgat, M. (2007). Do transitions and social structures matter? How “emerging adults” define themselves as adults. *Journal of Youth Studies*, 10, 495-516. doi: 10.1080/13676260701580769
- Motulsky, S.L. (2010). Relational processes in career transition: Extending theory, research, and practice. *The Counseling Psychologist*, 38, 1078-1114. doi: 10.1177/0011000010376415
- Murphy, K.A., Blustein, D.L., Bohlig, A.J., & Platt, M.G. (2010). The college-to-career transition: An exploration of emerging adulthood. *Journal of Counseling & Development*, 88, 174-181. doi: 10.1002/j.1556-6678.2010.tb00006.x
- Myers, K.K., & Sadaghiani, K. (2010). Millennials in the workplace: A communication perspective on millennials’ organizational relationships and performance. *Journal of Business and Psychology*, 25, 225-238. doi: 10.1007/s10869-010-9172-7
- National Association for Sport and Physical Education. (2007). *College/university physical activity programs: A critical piece in the education of young adults* [Position paper]. Reston, VA: Author. Retrieved from ERIC database.
- Nauta, M.M., & Kahn, J.H. (2007). Identity status, consistency and differentiation of interests, and career decision self-efficacy. *Journal of Career Assessment*, 15, 55-65. doi: 10.1177/1069072705283786
- Nelson, L.J., & Chen, X. (2007). Emerging adulthood in China: The role of social and cultural factors. *Child Development Perspectives*, 1, 89-91. doi: 10.1111/j.1750-8606.2007.00004.x

- Nelson, L.J., & McNamara, B. (2005). Distinguishing features of emerging adulthood: The role of self-classification as an adult. *Journal of Adolescent Research, 20*, 242-262. doi: 10.1177/0743558404273074
- Ng, E.S.W., Schweitzer, L., & Lyons, S.T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology, 25*, 281-292. doi: 10.1007/s10869-010-9159-4
- Oblinger, D., & Oblinger, J. (2005). Educating the net generation. Retrieved from <http://www.educause.edu/educatingthenetgen>
- Okocha, A.A. (2001, January). *Facilitating career development through Super's Life Career Rainbow*. Paper presented at the annual conference of the National Consultation on Career Development, Ottawa, Ontario. Retrieved from <http://www.eric.ed.gov/PDFS/ED462641.pdf>
- Ong, A.D., & Van Dulmen, H.M. (2006). *Oxford handbook of methods in positive psychology (series on positive psychology, volume 13)*. New York: Oxford University Press.
- Osipow, S.H. (1987). *Career Decision Scale Manual (Revised)*. Odessa, FL: Psychological Assessment Resources, Inc.
- Osipow, S.H., Carney, C.G., Winer, J., Yanico, B., & Koschier, M. (1976). *Career Decision Scale*. Odessa, FL: Psychological Assessment Resources, Inc.
- Overton, W. F., & Reese, H. W. (1973). Models of development: Methodological implications. In J.R. Nesselroade & H.W. Reese (Eds.). *Life-span Developmental Psychology: Methodological Issues* (pp 65-86). New York: Academic Press.

- Owen, N., Leslie, E., Salmon, J., & Fotheringham, M.J. (2000). Environmental determinants of physical activity and sedentary behavior. *Exercise and Sport Sciences Reviews*, 28, 153-158. Retrieved from SPORTDiscus database.
- Palladino Schultheiss, D.E., & Stead, G.B. (2004). Construct validity of the Career Myths Scale among South African adolescents. *Journal of Psychology in Africa*, 14, 9-15. Retrieved from PsycINFO database.
- Park, D.C., & Payer, D. (2006). Working memory across the adult lifespan. In E. Bialystok & F.I.M. Craik (Eds.). *Lifespan cognition: Mechanisms of change* (pp. 128-142). New York, NY: Oxford University Press.
- Perry, W.G. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart, & Winston.
- Pharo, H., Sim, C., Graham, M., Gross, J., & Hayne, H. (2011). Risky business: Executive function, personality, and reckless behavior during adolescence and emerging adulthood. *Behavioral Neuroscience*, 125, 970-978. doi: 10.1037/a0025768
- Pisarik, C.T., & Shoffner, M.F. (2009). The relationship among work possible selves, socioeconomic position, and the psychological well-being of individuals in early adulthood. *Journal of Career Development*, 35, 306-325. doi: 10.1177/0894845308327276
- Ponterotto, J.G., & Ruckdeschel, D.E. (2007). An overview of coefficient alpha and a reliability matrix for estimating adequacy of internal consistency coefficients with psychological research measures. *Perceptual and Motor Skills*, 105, 997-1014. doi: 10.2466/pms.105.3.997-1014

- Porfeli, E.J., & Skorikov, V.B. (2010). Specific and diversive career exploration during late adolescence. *Journal of Career Assessment, 18*, 46-58. doi: 10.1177/1069072709340528
- Pullan, M.C. (2010). Student support services for millennial undergraduates. *Journal of Educational Technology Systems, 38*, 235-251. Retrieved from ERIC database.
- Quimby, J.L., & O'Brien, K.M. (2004). Predictors of student and career decision-making self-efficacy among nontraditional college women. *Career Development Quarterly, 52*, 323-339. doi: 10.1002/j.2161-0045.2004.tb00949.x
- Raeff, C. (2011). Distinguishing between development and change: Reviving organismic-developmental theory. *Human Development, 54*, 4-33. doi: 10.1159/000324334
- Ravert, R.D. (2009). "You're only young once": Things college students report doing now before it is too late. *Journal of Adolescent Research, 24*, 376-396. doi: 10.1177/0743558409334254
- Reese, H. W., & Overton, W. F. (1970). Models of development and theories of development. In L.R. Goulet & P.B. Baltes (Eds.). *Life-span developmental psychology: Research and Theory* (pp. 115-145). New York: Academic Press.
- Reifman, A., Arnett, J.J., & Colwell, M.J. (2007a). Emerging adulthood: Theory, assessment, and application. *Journal of Youth Development, 2*, 39-50. Retrieved from http://data.memberclicks.com/site/nae4a/JYD_070201_final.pdf
- Reifman, A., Arnett, J.J., & Colwell, M.J. (2007b). The IDEA: Inventory of the Dimensions of Emerging Adulthood. Unpublished manuscript.
- Rocke, C., Li, S., & Smith, J. (2009). Intraindividual variability in positive and negative affect over 45 days: Do older adults fluctuate less than young adults? *Psychology and Aging, 24*, 863-878. doi: 10.1037/a0016276

- Salthouse, T.A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review*, *103*, 403-428. doi: 10.1037/0033-295X.103.3.403
- Salthouse, T.A. (2003). Interrelations of aging, knowledge, and cognitive performance. In U. Staudinger & U. Lindenberger (Eds.). *Understanding human development: Dialogues with lifespan psychology* (pp. 265-287). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Schoeni, R.F., & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R.A. Settersten, F.F. Furstenberg, & R.G. Rumbaut (Eds.). *On the frontier of adulthood: Theory, research, and public policy* (pp. 396-416). Chicago: University of Chicago Press.
- Schwartz, S.J., Zamboanga, B.L., Ravert, R.D., Kim, S.Y., Weisskirch, R.S., Williams, M.K., Bersamin, M., & Finley, G.E. (2009). Perceived parental relationships and health-risk behaviors in college-attending emerging adults. *Journal of Marriage and Family*, *71*, 727-740. doi: 10.1111/j.1741-3737.2009.00629.x
- Shanahan, M.J., Porfeli, E., Mortimer, J.T., & Erickson, L.D. (2005). Subjective age identity and the transition to adulthood: When do adolescents become adults? In R.A. Settersten, F.F. Furstenberg, & R.G. Rumbaut (Eds.). *On the frontier of adulthood: Theory, research, and public policy* (pp. 225-255). Chicago, IL: University of Chicago Press.
- Shapiro, M., Ingols, C., & Blake-Beard, S. (2008). Confronting career double binds: Implications for women, organizations, and career practitioners. *Journal of Career Development*, *34*, 309-333. doi: 10.1177/0894845307311250

- Shea, M., Winnie Ma, P., & Yeh, C.J. (2007). Development of a culturally specific career exploration group for urban Chinese immigrant youth. *Career Development Quarterly*, *56*, 62-73. doi: 10.1002/j.2161-0045.2007.tb00020.x
- Skinner, B.F. (1953). *Science and human behavior*. New York: Macmillan.
- Somers, P., & Settle, J. (2010a). The helicopter parent: Research toward a typology (part I). *College & University*, *86*, 18-27. Retrieved from ERIC database.
- Somers, P., & Settle, J. (2010b). The helicopter parent (part 2): International arrivals and departures. *College & University*, *86*, 2-9. Retrieved from ERIC database.
- Stanton, W.R. (2002). The dimensions of stage theories. *Current Psychology: Developmental, Learning, Personality, Social*, *21*, 176-198. doi: 10.1007/s12144-002-1012-0
- Stead, G.B. (1993). The Career Myths Scale: Its validity and applicability. *International Journal for the Advancement of Counseling*, *16*, 89-97. doi: 10.1007/BF01418145
- Stevens, M.C., Pearlson, G.D., & Calhoun, V.D. (2009). Changes in the interaction of resting-state neural networks from adolescence to adulthood. *Human Brain Mapping*, *30*, 2356-2366. doi: 10.1002/hbm.20673
- Stiles, J. (2009). On genes, brains, and behavior: Why should developmental psychologists care about brain development? *Child Development Perspectives*, *3*, 196-202. doi: 10.1111/j.1750-8606.2009.00106.x
- Stodden, D., Langendorfer, S., & Robertson, M.A. (2009). The association between motor skill competence and physical fitness in young adults. *Research Quarterly for Exercise and Sport*, *80*, 223-229. Retrieved from ERIC database.
- Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. New York, NY: William Morrow & Company.

- Stringer, K.J., & Kerpelman, J.L. (2010). Career identity development in college students: Decision making, parental support, and work experience. *Identity: An International Journal of Theory and Research*, *10*, 181-200. doi: 10.1080/15283488.2010.496102
- Super, D.E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, *16*, 282-298. doi: 10.1016/0001-8791(80)90056-1
- Super, D.E. (1992). Toward a comprehensive theory of career development. In D.H. Montross & C.J. Shinkman (Eds.). *Career development: Theory and practice* (pp. 35-64). Springfield, IL: Charles C. Thomas.
- Super, D.E., Savickas, M.L., & Super, C.M. (1996). The life-span, life-space approach to careers. In D. Brown & L. Brooks (Eds.). *Career choice and development* (3rd ed., pp. 121-178). San Francisco: Jossey-Bass.
- Tanner, J.L. (2006). Recentering during emerging adulthood: A critical turning point in life span human development. In J.J. Arnett & J.L. Tanner (Eds.). *Emerging adults in America: Coming of age in the 21st century* (pp. 21-55). Washington, DC: American Psychological Association.
- Tanner, J.L., & Arnett, J.J. (2011). Presenting “emerging adulthood”: What makes it developmentally distinctive? In J.J. Arnett, M. Kloep, L.B. Hendry, & J.L. Tanner (Eds.). *Debating emerging adulthood: Stage or process?* (pp. 13- 30). New York: Oxford University Press.
- Tapert, S. F., Aarons, G. A., Sedlar, G. R., & Brown, S. A. (2001). Adolescent substance use and sexual risk-taking behavior. *Journal of Adolescent Health*, *28*, 181–189. doi: 10.1016/S1054-139X(00)00169-5

- Tomlinson, M. (2007). Graduate employability and student attitudes and orientations to the labour market. *Journal of Education and Work*, 20, 285-304. doi: 10.1080/13639080701650164
- Twenge, J. (2010). A review of the empirical evidence on generational differences in work attitudes. *Journal of Business and Psychology*, 25, 201–210. doi: 10.1007/s10869-010-9165-6
- U.S. Census Bureau (2010a). *Educational attainment: 2010 American community survey 1-year estimates*. Retrieved February 29, 2012, from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_S1501&prodType=table
- U.S. Census Bureau (2010b). *Income in the past 12 months (In 2010 inflation-adjusted dollars): 2010 American community survey 1-year estimates*. Retrieved February 29, 2012, from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_S1901&prodType=table
- U.S. Census Bureau (2010c). *Profile of general population and housing characteristics: 2010: 2010 Demographic profile data*. Retrieved February 29, 2012, from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table

- U.S. Department of Health and Human Services. (1996). *Physical activity and health: A report of the surgeon general*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Retrieved February 29, 2012 from <http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf>
- Van Mechelen, W., Twisk, J.R.W., Post, G.B., Snel, J., & Kemper, H.G. (2000). Physical activity of young people: The Amsterdam longitudinal growth and health study. *Medicine and Science in Sports and Exercise*, 32, 1610-1616. Retrieved from SportDiscus database.
- Walsh, W.B., & Eggerth, D.E. (2005). Vocational psychology and personality: The relationship of the five-factor model to job performance and job satisfaction. In W.B. Walsh & M.L. Savickas (Eds.). *Handbook of vocational psychology: Theory, research, and practice* (3rd ed.) (pp. 267-295). Mahwah, NJ: Lawrence Erlbaum Associates.
- Weitzman, E. R., & Kawachi, I. (2000). Giving means receiving: The protective effect of social capital on binge drinking on college campuses. *American Journal of Public Health*, 90, 1936–1939. Retrieved from Academic Search Premier database.
- Westberg, A. (2004). Forever young? Young people's conception of adulthood: The Swedish case. *Journal of Youth Studies*, 7, 35-53. doi: 10.1080/1367626042000209949
- 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, 493-568. doi: 10.1177/0011000004265660
- Whitfield, E.A., Feller, R.W., & Wood, C. (2009). *A counselor's guide to career assessment instruments* (5th ed.). Broken Arrow, OK: National Career Development Association.

- Winters, K. (2007, May). *Youth, brain development and gambling risk: Intersections on the developmental highway*. Presented at the Missouri Department of Mental Health Spring Training Institute, Lake of the Ozarks, MO. Retrieved from http://www.powershow.com/view/26439-NzZiY/Youth_Brain_Development_and_Gambling_Risk_Intersections_on_the_Developmental_Highway_flash_ppt_presentation
- Wintre, M.G., Bowers, C., Gordner, N., & Lange, L. (2006). Re-evaluating the university attrition statistic: A longitudinal follow-up study. *Journal of Adolescent Research, 21*, 111-132. doi: 10.1177/0743558405285658
- Wong, M., Gardiner, E., Lang, W., & Coulon, L. (2008). Generational differences in personality and motivation. Do they exist and what are the implications for the workplace? *Journal of Managerial Psychology, 23*, 878-890. doi: 10.1108/02683940810904376
- Worpole, K. (1996). The age of leisure. In P. Raggatt, R. Edwards, & N. Small (Eds.). *The learning society: Challenges and trends* (pp.112-121). New York: Routledge.
- Young, R.A., Valach, L., Ball, J., Paseluikho, M.A., Wong, Y.S., DeVries, R.J., McLean, H., Turkel, H. (2001). Career development in adolescence as a family project. *Journal of Counseling Psychology, 48*, 190-202. doi: 10.1037//0022-0167.48.2.190
- Zimmermann, T.D., & Meier, B. (2006). The rise and decline of prospective memory performance across the lifespan. *The Quarterly Journal of Experimental Psychology, 59*, 2040-2046. doi: 10.1080/17470210600917835
- Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensations seeking*. New York: Cambridge University Press.

Appendix A

Demographic Questionnaire

1. Age: _____
2. Please write the year in which you were born: _____
3. Gender:
 - Male
 - Female
 - Other: _____
4. Race and ethnicity (may check more than one):
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Hispanic or Latino/a
 - Native Hawaiian and Other Pacific Islander
 - White
 - Biracial or Multiracial: _____
 - Other: _____
5. Marital Status:
 - Single
 - Partnered/Long-term relationship
 - Married
 - Separated
 - Divorced
 - Widowed
 - Other: _____

6. Do you have any children who are currently dependents?

- Yes
- No

7. Highest Level of Education Completed (check one):

- Graduate degree
- Some graduate school
- Degree from a 4-year university
- Degree from a 2-year college
- Some college
- High school diploma
- General Education Diploma (GED)
- Middle (“junior high”) or primary school
- Other: _____

8. Current Educational Enrollment (check one):

- No current enrollment
- General Education Diploma (GED) preparation course
- High school
- 2-year college
- 4-year university
- Graduate school
- Other: _____

9. Highest level of education you intend to complete (check one):

- Graduate degree
- Some graduate school
- Degree from a 4-year university
- Degree from a 2-year college

- Some college
- High school diploma
- General Education Diploma (GED)
- Other: _____

10. Do you currently have paid employment (check one)?

- Yes, full-time employment
- Yes, part-time employment
- No, not currently working
- Other: _____

11. If you currently have paid employment, what is your current job title? _____

12. If you currently have paid employment, how many hours do you work each week? _____

13. If you currently have paid employment, do you consider your current position to be your career?

- Yes
- No

14. If you currently have paid employment, do you have future career plans that involve changing fields?

- Yes
- No

15. Have you ever accessed any of the following services related to career development? (check however many apply):

- Career exploration course
- Career counseling
- Career assessment (in person)
- Career assessment (online)
- Other online career services

- Job search assistance
- Other: _____
- None

16. Living Situation (check one):

- Living alone
- Living with a spouse or partner
- Living with one or more roommates or housemates
- Living with parent(s) or relative(s)
- Single parent living with child

17. If living with parent(s) or relative(s), please indicate your primary reason for this living situation:

- Receiving financial support from parent(s) or relative(s)
- Receiving personal/social support from parent(s) or relative(s)
- Both of the above
- Other: _____
- N/A

18. If living with parent(s) or relative(s), did you at any point move out of the home and later move back?

- Yes
- No
- N/A

19. Are your parent(s) currently working?

- Yes – two parents are working
- Yes – one parent is working
- No – neither parent is working
- N/A or unknown

20. Please list the profession of each parent, if applicable: _____

21. Highest Level of Education completed by parent(s) (check one, or one for each parent):

- Graduate degree
- Some graduate school
- Degree from a 4-year university
- Degree from a 2-year college
- Some college
- High school diploma
- General Education Diploma (GED)
- Middle (“junior high”) or primary school
- Other: _____

Appendix B

Emerging Adulthood Questionnaire

1. How does your current number of responsibilities compare with most adults?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

2. How does your current level of personal responsibility (e.g., accepting consequences of your own actions or inaction) compare with most adults?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

3. How does your current level of financial independence compare with most adults?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

4. Compared to most adults, do you make decisions independently of parents or others?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults

- Slightly less than most adults
- Significantly less than most adults

5. Compared to most adults, how much do you engage in self-exploration related to work and career (e.g., thinking about or testing whether or not different kinds of jobs fit with the self)?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

6. Compared to most adults, how much do you engage in self-exploration related to love and relationships (e.g., thinking about or testing what type of significant other or relationship fits with the self)?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

7. Compared to most adults, how much do you engage in self-exploration related to your worldview (e.g., thinking about or testing whether or not different beliefs or perspectives fit with the self)?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

8. Compared to most adults, how much do you engage in self-exploration related to your hobbies or lifestyle (e.g., thinking about or testing whether or not different hobbies or lifestyles fit with the self)?

- Significantly more than most adults
- Slightly more than most adults
- About the same as most adults
- Slightly less than most adults
- Significantly less than most adults

Appendix C

Self-Perception of Adulthood Questionnaire

1. Do you think that you have reached adulthood?

- Yes
- No

Please use the following stem on items 2-12:

I feel like an adult...

2. When I am at work

- Yes
- No
- N/A

3. When I am at school

- Yes
- No
- N/A

4. When I am at home

- Yes
- No
- N/A

5. When I am involved in my community

- Yes
- No
- N/A

6. When I enact my rights or perform duties as a citizen (e.g., voting, filing tax returns)

- Yes
- No

- N/A

7. When I engage in leisurely or recreational activities

- Yes
- No
- N/A

8. When I manage my finances (e.g., paying bills, balancing checkbook)

- Yes
- No
- N/A

9. When I am with my friends

- Yes
- No
- N/A

10. When I am with my family

- Yes
- No
- N/A

11. When I am with a significant other

- Yes
- No
- N/A

12. When I am around people who might be perceived as authority figures (e.g., supervisors/bosses, professors, a parent)

- Yes
- No
- N/A

Appendix D

Emerging Adulthood Themes in Career Decisions

1. I have decided on a career path and feel comfortable with it. I also know how to go about implementing my choice.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

Please use the following stem when considering items 2-22:

When I think about my career decisions...

2. I consider a number of career possibilities.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

3. I feel I am still exploring which careers might fit me best.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

4. I cannot help but be influenced by my parents.

- Exactly like me
- Very much like me

- Only slightly like me
- Not at all like me

5. I think that this is a time in my life in which I am steady in my career path.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

6. I believe I have few reasonable options other than my current career path.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

7. I cannot help but be influenced by my current or future significant other.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

8. I feel I know myself well enough to know which careers I am well suited for.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

9. I accept personal responsibility for any decisions or indecision related to career.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

10. I feel responsible not only for myself but for others (e.g., partner or spouse, children).

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

11. I consider options other than employment, such as volunteering or taking time off to travel.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

12. I feel that these decisions are *not* truly my own.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

13. I do not feel that I have a clear career path.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

14. I wish other people would help me reach career decisions that I will be happy with.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

15. I think my parent(s) would offer financial support for any career-related decisions I might make (e.g., additional education or training).

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

16. I rarely feel in charge.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

17. Options such as completing an internship, volunteering, or doing other unpaid work rarely cross my mind.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

18. I believe that those decisions affect me more than anyone around me.

- Exactly like me

- Very much like me
- Only slightly like me
- Not at all like me

19. I am more concerned with making good career decisions than how my parent(s) might react.

- Exactly like me
- Very much like me
- Only slightly like me
- Not at all like me

Appendix E

Perceptions of Adulthood and Career

*1. Having a career seems like a major part of what it means to be an “adult.”

- Very true
- Somewhat true
- Somewhat false
- Very false

**2. The career development process seems like it ends when adulthood is reached.

- Very true
- Somewhat true
- Somewhat false
- Very false

*3. Part of adulthood is maintaining a career that offers financial stability.

- Very true
- Somewhat true
- Somewhat false
- Very false

*4. Having a career that provides personal fulfillment and satisfaction is important to being an adult.

- Very true
- Somewhat true
- Somewhat false
- Very false

**5. Becoming an adult means having to join the “rat race” by entering a boring or otherwise unappealing job.

- Very true
- Somewhat true
- Somewhat false
- Very false

**6. Adulthood means having to stop “job-hopping” and settle into one career.

- Very true
- Somewhat true
- Somewhat false
- Very false

**7. Once someone selects a career path, it is difficult to go back.

- Very true
- Somewhat true
- Somewhat false
- Very false

*8. The relationships a person forms at work are an important part of adulthood.

- Very true
- Somewhat true
- Somewhat false
- Very false

*9. People who delay paid employment (e.g., taking time off to travel, going to graduate school, joining the PeaceCorps or doing other volunteer work) seem to be putting off becoming an adult.

- Very true
- Somewhat true

- Somewhat false
- Very false

**10. By the time a person is an adult, they should know what career they want.

- Very true
- Somewhat true
- Somewhat false
- Very false

*11. Performing highly at work is an important part of adulthood.

- Very true
- Somewhat true
- Somewhat false
- Very false

**12. Most adults are bogged down by their work responsibilities.

- Very true
- Somewhat true
- Somewhat false
- Very false

*13. I see little relationship between becoming an adult and having a career.

- Very true
- Somewhat true
- Somewhat false
- Very false

* Connection Between Adulthood and Career scale items

**Negative Beliefs and Myths scale items

Appendix F

Inventory of the Dimensions of Emerging Adulthood

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.

Is this period of your life a...

1. time of many possibilities?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

2. time of exploration?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

3. time of confusion?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

4. time of experimentation?

- Strongly disagree
- Somewhat disagree

- Somewhat agree
- Strongly agree

5. time of personal freedom?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

6. time of feeling restricted?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

7. time of responsibility for yourself?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

8. time of feeling stressed out?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

9. time of instability?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

10. time of optimism?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

11. time of high pressure?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

12. time of finding out who you are?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

13. time of settling down?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

14. time of responsibility for others?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

15. time of independence?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

16. time of open choices?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

17. time of unpredictability?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

18. time of commitments to others?

- Strongly disagree
- Somewhat disagree
- Somewhat agree

- Strongly agree

19. time of self-sufficiency?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

20. time of many worries?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

21. time of trying out new things?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

22. time of focusing on yourself?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

23. time of separating from parents?

- Strongly disagree

- Somewhat disagree
- Somewhat agree
- Strongly agree

24. time of defining yourself?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

25. time of planning for the future?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

26. time of seeking a sense of meaning?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

27. time of deciding on your own beliefs and values?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

28. time of learning to think for yourself?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

29. time of feeling adult in some ways but not others?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

30. time of gradually becoming an adult?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

31. time of not being sure whether you have reached full adulthood?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree

Appendix G

Information Letter

*Auburn University
Department of Special Education, Rehabilitation, and Counseling Psychology
2084 Haley Center
Auburn, AL 36849*

Information Letter

You are invited to participate in a research study to investigate occupational and career issues. The study is being conducted by Megan D. Cobb, B.S., under the direction of Dr. John Dagley, in the Auburn University Department of Special Education, Rehabilitation, and Counseling Psychology. You are a possible participant because you are of legal age in your state.

If you choose to participate, you will respond to an online questionnaire that includes demographic information and questions regarding your career development. This should take about 15-20 minutes, possibly up to 30.

There is no expected risk to participants in this study. You may discontinue participation at any time by closing your browser. Although unlikely, if you should experience any psychological discomfort, please contact a career development professional or mental health provider in your area.

For each participant who completes the study, \$2 will be donated to the Humane Society by the researcher. Your participation is completely voluntary. If you change your mind about participating, you can withdraw by closing your browser. However, after you submit the anonymous survey it cannot be withdrawn.

Your privacy will be protected. Information obtained from this study will remain anonymous and the data you provide will be stored in a password protected format by the researcher. Information obtained through your participation may be published in a professional journal and/or presented at a professional conference, but such information will not be directly connected with you or any other participants.

If you have questions about this study, please contact Megan D. Cobb at mdc0010@tigermail.auburn.edu or Dr. John Dagley at jdagley@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research Compliance or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

IF YOU WANT TO PARTICIPATE AND ARE OF LEGAL AGE IN YOUR STATE, CLICK ON THE LINK BELOW. IF NOT, JUST CLOSE YOUR BROWSER. YOU MAY PRINT THIS LETTER TO KEEP IF YOU WISH.

The Auburn University Institutional Review Board has approved this document for use from
May 25, 2012 to April 24, 2013. Protocol #12-156 EX 1204.
Live link to survey: https://auburn.qualtrics.com/SE/?SID=SV_3t3UtZTrORXpsSE

Appendix H

Debriefing

For the Study entitled:
“An Examination of Emerging Adults’ Career Development”

Dear Participant,

During this study, you were asked to respond to an online questionnaire that included demographic information and questions regarding your career development. You were told that the purpose of the study was to investigate occupational and career issues. The actual purpose of the study was to examine potential differences in career development processes depending on whether or not individuals perceive themselves to have reached adulthood. We did not tell you everything about the purpose of the study because having that knowledge may have influenced the way you responded to questions.

You are reminded that your original consent document stated that you could discontinue participation at any time by closing the window of your browser. You were also informed that this is an anonymous study for which no identifying data is being collected and that it will not be possible to track or identify individual participants. If you have any concerns about your participation or the data you provided, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

If you have questions about your participation in the study, please contact Megan Cobb at mdc0010@tigermail.auburn.edu, or her faculty advisor, Dr. John Dagley, at jdagley@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Office of Human Subject Research (334-844-5966, hsubjec@auburn.edu) or Auburn University’s Institutional Review Board (IRBChair@auburn.edu).

If you have experienced distress as a result of your participation in this study, please use the referral list of career development resources provided following this form. This includes information on how to locate a career counselor if needed.

Please again accept our appreciation for your participation in this study.

Megan Cobb
Doctoral Candidate

Dr. John Dagley
Faculty Advisor

4/5/12

Auburn University
Department of Special Education, Rehabilitation, & Counseling Psychology

Career Services

The following resources may be helpful to individuals with career-related questions or concerns. Those who are currently students are also encouraged to utilize the career services provided by their academic institution.

Finding a Career Counselor

National Career Development Association

http://associationdatabase.com/aws/NCDA/pt/sp/consumer_find

- Learn what kinds of services career counselors provide
- Tips for locating and selecting a counselor
- Search for a career counselor by state

Other Online Career Development Resources

O*NET

<http://www.onetonline.org/>

- Free online resource sponsored by the U.S. Department of Labor/Employment and Training Administration
- Information on most occupations, including descriptions of daily tasks, job qualifications and requirements, wage and salary information, employment trends, value and interest areas, etc.
- Assessments related to career interests and job options

Career One Stop

<http://www.careeronestop.org/>

- Free online resource sponsored by the U.S. Department of Labor
- Information on occupations and industries, both nationally and by state, including descriptions of daily tasks, job requirements, wage and salary information, employment trends, tools and technology used, education and training, related occupations, etc.
- Information on job searching, resumes and cover letters, preparing for an interview, relocation, unemployment, education and training, transitioning from the military, disaster recovery, etc.
- Links to a variety of career assessments

Minnesota iSEEK

<http://www.iseek.org/>

- Free online resource sponsored by six Minnesota state offices

- Explore career paths through self-assessment, goal setting, and listings of over 500 careers
- Tools for educational planning
- Includes a blog on career-related issues