THE PARADOX OF CHOICE IN EMERGING ADULTHOOD: ANXIETY AND AMBIVALENCE

Jennifer L. McMillin

A Thesis
Submitted to the Graduate College of Bowling Green State University in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

August 2017

Committee:
Monica A. Longmore, Advisor
Wendy D. Manning
Peggy C. Giordano
Research in the last twenty years has characterized the life course stage of emerging adulthood as a time of unparalleled freedom and an abundance of choice. Few researchers, however, have addressed the darker side to emerging adulthood, including the effects an abundance of choice might have on emerging adults’ mental health. I drew from existing theory to examine how ambivalence associated with too much choice within the markers of adulthood influenced anxiety. Using data from the fifth interview of The Toledo Adolescent Relationship Study (TARS), I used ordinary least squares regression to examine whether the markers of adulthood, and the choices associated with the markers of adulthood including full-time employment, education completion, sustaining an intimate relationship, and living independently from parents influenced anxiety. Additionally, I examined whether social psychological processes of ambivalence, perceived control, and subjective adulthood mediated the relationship between markers of adulthood and anxiety. The only marker of adulthood found to be significantly and positively associated with anxiety in all models was relationship churning, suggesting that wavering in markers of adulthood is more important in terms of anxiety than actually completing or not completing the markers. Ambivalence sustained a significant and positive relationship with anxiety. Likewise, perceived control, and subjective adulthood remained significantly and negatively associated with anxiety. Ambivalence was found to be moderately high in the sample, and in the initial model which added ambivalence, was found to account for the positive relationship of mother’s education being more than high school and anxiety.
ACKNOWLEDGEMENTS

For her undying assistance, tireless work in editing, and for facilitating the maturation of this work, I thank my advisor, Monica Longmore. Likewise, I would also like to thank the other members of my committee, Wendy Manning and Peggy Giordano, as well as the entire TARS team for their patience, persistence and faith in my growth and learning. Additionally, my undergraduate professors who not only ignited my love of sociology, but more importantly cultivated an infatuation with knowledge. Moreover, I would like to thank my mother for her unending emotional support, and assurance during this journey which often seemed without epilogue. I also thank my tenaciously spirited father who has offered incalculable support throughout my academic career. Lastly, for comfort and understanding, I have ceaseless gratitude for Karl.

This research was supported by grants from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (HD036223 and HD044206), the Department of Health and Human Services (5APRPA006009), the National Institute of Justice, Office of Justice Programs, U. S. Department of Justice (Award Nos. 2009-IJ-CX-0503 and 2010-MU-MU-0031), and in part by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (P2CHD050959). The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the authors and do not necessarily reflect the official views of the National Institutes of Health, Department of Health and Human Services, or Department of Justice.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>2</td>
</tr>
<tr>
<td>Life Course and Economic Changes in the Shift of Adulthood</td>
<td>2</td>
</tr>
<tr>
<td>THEORECTICAL FRAMEWORK</td>
<td>6</td>
</tr>
<tr>
<td>Choice and Anxiety</td>
<td>6</td>
</tr>
<tr>
<td>Choice and Ambivalence</td>
<td>7</td>
</tr>
<tr>
<td>LITERATURE</td>
<td>11</td>
</tr>
<tr>
<td>Anxiety and Ambivalence during Emerging Adulthood</td>
<td>11</td>
</tr>
<tr>
<td>Sense of Control</td>
<td>12</td>
</tr>
<tr>
<td>Subjective Adulthood and Markers of Adulthood</td>
<td>12</td>
</tr>
<tr>
<td>Stable Relationships</td>
<td>13</td>
</tr>
<tr>
<td>Completed Education</td>
<td>14</td>
</tr>
<tr>
<td>Stable Employment</td>
<td>15</td>
</tr>
<tr>
<td>Living Independently</td>
<td>15</td>
</tr>
<tr>
<td>CURRENT STUDY</td>
<td>17</td>
</tr>
<tr>
<td>HYPOTHESES</td>
<td>19</td>
</tr>
<tr>
<td>DATA</td>
<td>20</td>
</tr>
<tr>
<td>MEASURES</td>
<td>21</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td>21</td>
</tr>
<tr>
<td>Independent Variables</td>
<td>21</td>
</tr>
<tr>
<td>Mediating Social Psychological Processes</td>
<td>23</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive Statistics for Anxiety, Markers of Adulthood, Social Psychological Processes, and Sociodemographic Characteristics</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>OLS Regression of Developmental Tasks and Social Psychological Processes on Anxiety</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>Correlation Matrix: Anxiety, Markers of Adulthood, Social Psychological Processes and Sociodemographic Characteristics</td>
<td>45</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Percent with High Anxiety by Age</td>
<td>42</td>
</tr>
</tbody>
</table>
INTRODUCTION

The last twenty years has seen a growing body of research on emerging adulthood. Emerging adulthood refers to the stage in the life course from roughly 18 to 29 years old, and is marked by individuals’ exploration of role identities, employment, education and relationship commitment (Arnett, 2000). Researchers have characterized this new stage in the life course as being one of historically unprecedented freedom and an abundance of choice. Yet, most scholars have neglected, or deemphasized the darker side of ‘an abundance of choice’ during emerging adulthood. In my study, I examined whether excessive opportunities to choose among alternatives with respect to employment, education, intimate relationships, and living independently generates anxiety, and whether this anxiety is accounted for by a sense of ambivalence, perceptions of control, or feeling like an adult.
BACKGROUND

Life Course and Economic Changes in the Shift of Adulthood

In the U.S. the availability of ample choice is a social fact that characterizes the life course stage of emerging adulthood. I used insights from the life course perspective to understand the social psychological consequences of choice on well-being, specifically anxiety. Elder (1994) has asserted that the central tenets of the life course perspective are (1) linked lives - individuals are connected and change together through family and shared relationships; (2) historical time - the period in which individuals reside and their cohort year affects outcomes; (3) timing of events- in terms of order, occurrence, and span leads to behavioral expectations based on age; and (4) agency - individuals plan and make choices that affect their life outcomes. From a life course perspective, then, individuals are shaped by relationships, historical time and place, and their sense of agency and personal control. As such expectations for stages in the life course are continually changing. For example, compared with contemporary emerging adulthood, the 1950s ideal of adulthood involved a rather straightforward transition between adolescence and adulthood. After completing their education, young adults went primarily from their parental home into the workforce and/or marriage. Young adults had choice (whom to marry, whether to have children and how many, where to live, educational level, and where to work), but that choice was constrained and expedited by expected life course trajectories.

Today, it takes much longer to achieve adult status, and the timing of traditional life course events increasingly is delayed (Silva, 2013, p. 6). Since the late 1960s, with the increasing availability of effective birth control methods to single individuals (Goldin & Katz, 2002), the increasing acceptance of a recreational sexual script, and the increasing popularity of premarital cohabitation (Smock, 2000), young adults have delayed or foregone marriage completely
(Arnett, 2004). Currently, the average age of first marriage in the U.S. is 27 for women and 29 for men (U.S. Census Bureau, 2015). In contrast, the average age of first marriage in 1960 was 23.8 for men and 20 for women, and 25 for men and 22 for women in 1980 (U.S. Census Bureau, 2004). Additionally, the American economic climate no longer supports an ample number of high paying, low education jobs, mostly as a result of the breakup of unions and the shift of manufacturing overseas (Arnett, 2007b; Sachs & Shatz, 1994; Wilson, 1996). This shift of manufacturing has led to wage stagnation and subsequently ubiquitous debt encumbrance. The connection between the economic sphere and emerging adulthood becomes obvious here, and emerging adulthood may simply be symptomatic of late capitalism. For instance, financial security or stable employment often is considered a requirement for the transition to marriage, especially for cohabiters (Sassler, 2004; Smock, Manning & Porter, 2005), and debt encumbrance and an unstable job sector (especially in terms of the lowly, expanding service sector) greatly extend and hinder the transition to adulthood.

The notion of emerging adulthood, as a stage in the life course of transition between adolescence and young adulthood, is relatively new. Mortimer and Moen (2016) have suggested that new social constructions of stages in the life course occur as a result of who is doing the producing versus who is doing the consuming in modern society. They have argued, for example, that the life stage of childhood developed as a result of children’s roles becoming less about providing labor for the family, and more about educational and child fulfillment on the part of parents. Similarly, adolescence as a life stage developed not only with the increasing freedom of teen years and required fulfillment of high school education, but also as a new targeted group of consumers who often identified themselves according to the type of music they listened to, or the type of clothing they wore.
Now, emerging adulthood represents a new period where many adults lack full labor force participation, many are extending their educations, and many are delaying marriage. For example, in the Toledo Adolescent Relationships Study, 56% of young adults, ages 22 to 29, are employed full-time, and 15% are currently in school. In terms of union status, 20% are single, 29% are dating, and 29% are cohabiting. Thus, only 22% are married.

In contrast to Elder’s emphasis on agency, Brannen and Nilsen (2002) have suggested that the individual is not as much an efficacious agent in creating a biography, but rather driven by institutional structures in making choice. The educational institution is one example. In the U.S., a college education now separates those who are successful from those who are considered less successful, with recent Pew data suggesting that the median income for those with a bachelor’s degree, compared with those with only a high school degree, is $17,500 more a year (Taylor, Fry, & Oates, 2014). Recent estimates, however, have also suggested that the average student debt for those between the ages of 25 and 30, and who have attended college, is approximately $26,500 (Brown, Haughwout, Lee, Scally & Van Der Kalaauw, 2015). Again, relating to Elder’s (1994) notion of linked lives, this high cost of college can impede becoming independent of parental support well after college, as evidenced by the number of young adults (40%) returning to the parental home after initial departure (Copp, Giordano, Longmore, & Manning, 2015; Parker, 2012). Likewise, parental assistance can be advantageous because intimate relationships dissolve, more education is required or temporary employment ends (Furstenberg, Kennedy, McLoyd, Rumbaut, & Settersten, 2004). Sequencing of trajectories (e.g., educational trajectory, parenthood trajectory, employment/career trajectory), which refers to the socially constructed way life events and transitions play out in the long-term, becomes less direct and more complicated and these options are now viewed as choices rather than developmental
tasks associated with the transition to adulthood (Arnett, 1997). Emerging adults now have the choice whether to get married, to extend education, to go into the workforce, or to do any combination of the three. The emphasis has been shifted to the development of the self (Gecas & Burke, 1995), and the life course stage of emerging adulthood has become a sort of a shopping period in which to discern what life style will best fit a young person's desired adult lifestyle.
THEORETICAL FRAMEWORK

Choice and Anxiety

There is no doubt that this historically new period of transition, emerging adulthood, has profound psychological effects on individuals. Specifically, there is a blurring boundary and a diversification of life stages (Mortimer & Moen, 2016). Markers of adulthood have become less clear, and a number of scholars have attempted to piece out which markers really matter (such as educational attainment, full-time employment, or subjective markers of adulthood, such as feeling like an adult) in defining adulthood. However, a recurring theme is that emerging adulthood is a transitional stage in which young adults are finding it more difficult to gain a sense of financial security and to find their place in society in order to develop into fully functioning adults (Gitelson & McDermott, 2006). Further, emerging adulthood is characterized as a time of instability and exploration, particularly when it comes to intimate relationships (Arnett, 2000). Building on these conceptualizations of emerging adulthood, I explored what it means to be ‘lost’ within young adulthood, and what the ramifications of being lost are to emerging adults’ levels of anxiety.

The economic shift to a period of delayed adulthood also has ramifications for how young adults function psychologically. Damon (2009) has described young adults as “drifting” due to a struggle for and lack of long-term goals and purpose, which often results in anxiety (often characterized as excessive fear or worry). Yet, in contrast, Arnett (2007a) has asserted that a roughly linear process occurs within emerging adulthood - in that depression decreases, and self-esteem increases. However, some young adults may feel lost and experience mental health problems as a consequence. For example, in contrast to Arnett’s (2007a) assertion, other scholars have argued that emerging adults have the highest risk and prevalence for depressive episode of
any life stage (Kuwabara, Van Voorhees, Gollan, & Alexander, 2007; Twenge, 2000). Scholars (Arnett, 2004) have suggested that job bouncing and delayed marriage may account for a recent increase in emerging adult depression and anxiety. I argued, however, that the increase in anxiety may not be contributable to a lack of choice, but rather an abundance of choice.

For the general population, rates of symptomatic anxiety have increased in the last fifty years (Twenge, 2000). However, the cause of this increased anxiety have been widely debated and discussed. An estimated 18% (Kessler, Chiu, Demler & Walters, 2005) of all American adults experience anxiety disorders, with an average age of onset of 11 (Kessler, Berguln, Demler, Jin & Merikangas, 2005), and women are 60% more likely to experience anxiety disorders in their lifetime compared to men (Kessler, Chiu, et al., 2005). Likewise, the use of prescription medication to combat emotional disorders such as anxiety has become commonplace. However, it is worth noting that symptomatic anxiety does not necessarily mean a diagnosed anxiety disorder, and occasional anxiety is considered a normative reaction to stress, and as I have discussed, possibly stress associated with an abundance of choice.

**Choice and Ambivalence**

Too much choice may lead to a sense of ambivalence. Weigert (1991) has described what is philosophically known as Buridan’s Ass. That is, the mule, which is equally hungry and thirsty, standing equidistance from hay and water starves to death. Improbable, perhaps, but Buridan’s Ass plays on the notion of ambivalence, that a person choosing between two equally alluring goals may experience indecisiveness, stress and anxiety. Weigert, combining the idea of both sociological ambivalence (contradictions in conforming to roles, structures and norms) and psychological ambivalence (mixed emotions and motivations stemming from the psyche) has stated that ambivalent feelings result from “cultural, institutional, interaction, or social
psychological factors” (p. 44). Simply, ambivalence is indecision regarding what to do, think, and having the experience of mixed emotions. Change is grounds for ambivalence, and as a result of ambivalence a person can often bounce from one role to another. In an ambivalent state, proactive decision making goes on hold, acting out emotional life is muted, feelings are contradictory, motivation is weakened, knowledge is inconsistent, the path to a satisfying life is blurred and anxiety is high. Indeed, ambivalence stems from an inability to see the sociological factors so ripe in driving an individual’s life, such as that of the drive to constantly accumulate characteristic of individuals’ lifestyles in capitalist societies. Weigert (1991) asserted that as society becomes increasingly modern, individuals’ lives become more disjointed, less connected and more ambivalent.

In an individualistic society, such as the U.S., which emphasizes self-reliance, freedom, mastery and personal achievement (Gecas, 1989), there is a perception of ample choice, and that choice is thought to reflect self-development. The choices with which individuals are confronted can become overwhelming, especially if all choice is similarly (un)appealing. Making a good choice, in the presence of other bad choice may be easy, to the point where other choices become irrelevant. However, choosing between equally appealing options may evoke ambivalence. The reality is that commitment to one choice involves lost opportunities associated with the choice not taken. Fear of such loss can have an indecisively paralyzing and ambivalence-inducing effect when individuals feel that they are caught in a mangled web of life choices. Additionally, individuals continually are confronted with social comparisons (Gecas, 1982)- that what individuals are doing and whom they are needs to live up to peer, consumer, and societal comparisons. This ideological knowledge that individuals are responsible for their own choices, and subsequent consequences can have a compounding effect on a sense of ambivalence. As a
result of ambivalence and individualistic ideological leanings, perception of choice can lead to self-blame for failure and ultimately a paralyzing sense of anxiety (Salecl, 2001; Schwartz, 2004).

Schwartz (2004) has also suggested that ample choice has contributed to the chance and perception of making a mistake in choosing. In the presence of ample choice, individuals may feel that the decision made has to be perfect. This may be why emerging adults remain so fluid in and out of roles, often boomeranging back to a parent's household after initial departure (Copp, Giordano, Longmore, & Manning, 2015), starting and stopping college, and breaking up and getting back with intimate partners. Indeed, individuals are always attempting to maximize their rewards, and this decision-making can lead to a great amount of effort and subsequently stress (Schwartz, 2004).

It is possible that once a difficult role choice is made, role failure may become detrimental to well-being. In examining identity, Schwartz, Zamboanga, Weisskirch, and Rodriguez (2009) found that current identity exploration was associated with psychological distress including anxiety, depression and impulsivity, and past episodes were associated with poorer psychological well-being. Similarly, Dezutter and colleagues (2013) found that an established meaning of life was associated with various measures of psychological well-being, and absent or poorly established meaning of life were associated with psychological distress, including anxiety. Together these studies suggest that exploration of choices may be generally psychologically detrimental, but poor choice commitments may also be psychologically detrimental. Indeed, several scholars have asserted that the increase in anxiety in emerging adulthood does indeed stem from this sorting through and jump from romantic partners and job
prospects (Arnett, 2004; Arnett, 2013). However, my hypothesis, that wavering in the markers of adulthood generates anxiety, has not been sufficiently empirically tested.
LITERATURE

Anxiety and Ambivalence during Emerging Adulthood

Although rates of anxiety are high for many Americans, rates of general anxiety in emerging adulthood are especially high. Arnett and colleagues (Arnett, 2014; Arnett & Schwab, 2013) reported that more than half of emerging adults are anxious. Researchers (Fergusson, Horwood, & Lynskey, 1997) have found significant association with unemployment, substance use and anxiety disorders. Researchers, however, have failed to address the mechanism that underlay these associations. Further, although depression has been shown to vary significantly by social class, anxiety has been shown to vary significantly less by social class and may vary more so by material resources (Stansfeld, Clark, Rodgers, Caldwell, & Power, 2008). Additionally, childhood poverty and adverse childhood conditions are associated with heightened anxiety in early adulthood (McLaughlin et al., 2010; Najam et al., 2010). Thus, current financial strain and economic strain during childhood appear to influence general anxiety.

With respect to depression, Muris (2002) found that low levels of self-efficacy are associated with anxiety and depression, even while controlling for prior anxiety. There is ample evidence of a strong relationship between anxiety and depression, such that anxiety may develop into depression, or vice versa (Moffitt et al., 2007). Eysenck and Calvo (1992) also found that anxiety impaired efficiency more than effectiveness. Additionally, other researchers (Kessler, Don, Berglund, & Wittchen, 1999) have suggested that anxiety is debilitating to a level comparable to major depression. Other scholars have found that anxious individuals make choices differently, with those who are anxious selecting low risk and low reward options (Raghunathan & Pham, 1999). So, it is possible once a choice is made, individuals who are anxious as a result of ambivalence may choose the safest option, instead of one that may be risky
but more rewarding. For instance, someone who is anxious may choose to stay in an unhappy or contentious relationship, which could further exacerbate depression, and anxiety. It is also possible that compounding situational constraints reflecting feelings of ambivalence (for instance being underemployed, or in a churning relationship) could further exacerbate anxiety.

**Sense of Control**

Feeling in control of one’s life also affects well-being. Ross and Mirowsky (2013) asserted that the belief that individuals have control over what happens in their lives is associated with low psychological distress. Indeed, it is likely that stress may be high in a time of dramatic changes and transitions that feel out of individual control, and that the ability, inability or ambivalence in choosing how to change such stress may result in anxiety. Especially with respect to educational attainment, those without a high school degree may lack a sense of control because they lack resources to be able to choose. Kiecolt (1994) also viewed this distress and stress as a possible impetus to change. So, it is possible that ambivalence is manifested as anxiety.

**Subjective Adulthood and Markers of Adulthood**

In relation to subjective adulthood, viewing oneself as an adult is strongly linked to completion of markers of adulthood such as moving out of a parental household (Benson & Furstenberg, 2003). Nelson and Barry (2005) found that those who categorized themselves as being adults have better overall mental health, and a stronger sense of identity compared to those who do not identifying as adults.

Several markers traditionally have been associated with achieving adulthood status including (1) forming a stable relationship, (2) completion of education, (3) holding full-time employment, (4) having children, and (5) establishing separate residence from parents (Sharon,
2015). Since these markers typically denote adulthood status, wavering within these categories may be associated with choice ambivalence.

Four of these markers of adulthood (educational attainment, full-time employment, establishing a stable relationship, and living independent of parents) may be especially anxiety provoking, as well as likely influenced by choice ambivalence. I focused on these in order to tap the three indicators most consistently associated with achieving adult status, and which can be categorized in terms of ambivalence. However, it should be noted that the notion of pregnancy ambivalence, a conflicted desire in having children associated with decreased contraceptive use, has been found in a high proportion of emerging adults (53% men, and 36% women) (Higgins, Popkin & Santelli, 2012). This high proportion could, in part, be due to individuals having completed one or more of the markers associated with adulthood, including attempting to form stable relationships.

*Stable Relationships*

Union formation is an important developmental task during emerging adulthood (Shanahan, Porfeli, Mortimer & Erickson, 2005). During emerging adulthood, nearly three-fourths of individuals are involved in intimate relations (Scott, Steward-Sterng, Manlove, Schelar & Cui, 2011). Although most Americans still hold the ideal of finding a relationship that will last a lifespan (Cherlin, 2009; Edin & Kefalas, 2011), Shulman and Connolly (2013), as well as Copp, Giordano, Manning and Longmore (2016) have argued that the life stage of emerging adulthood is characterized by uncertainty about intimate relationships.

Further, emerging adulthood may also be associated by relationship ambivalence. To capture this notion, the process of churning seems apt. Churning is the process of on-again, off-again relationships specifically characteristic within the time of emerging adulthood. Indeed, half
of emerging adults have reported getting back together with an ex-partner, or engaging in sexual activity with an ex-partner after initial break up (Halpern-Meekin, Manning, Giordano, & Longmore, 2013a). Churning may be an indicator of healthy relationship formation, exploration and development. It may also be an indicator of choice ambivalence. An initial break up may be at least partially caused partially by perceived alternatives within a dating market (Miller, 1997). However, couples might get back together once they have found that they missed what they initially had. In turn, churning may also lead to anxiety because of this inability to be satisfied due to perceived abundance of choice. Prior studies have found an association with churning, arguing, physical and verbal abuse (Dailey, Pfiester, Jin, Beck & Clark, 2009; Halpern-Meekin, Manning, Giordano & Longmore, 2013a). Certainly, if churning is related to choice ambivalence, feelings of anxiety after initial churning may be associated with hostile outcomes, and an inability to properly manage conflict.

Completed Education

As a marker of adulthood, education has become a lengthy transition. In forming a now longer cycle of educational attainment, young adults continuously move between full time employment and education and various romantic relationships (Eliason, Mortimer & Vuolo, 2015). Education is associated with a sense of control. Mirowsky and Ross (2007) have suggested that parents’ and individuals’ educational attainment is associated positively with a sense of control, and that attainment of subsequent education is associated with increases in a sense of self control. Too, they have suggested that emerging adulthood is an especially vulnerable time for individuals with lower levels of education. Specifically, a sense of control for individuals who have not completed high school decreases dramatically beginning in emerging adulthood and extending into middle age (Mirowsky & Ross, 2007). As such, it is possible that
feelings of anxiety are higher for those individuals who have not completed, or who are currently completing their education.

**Stable Employment**

Work and stable employment often is associated with positive mental health outcomes. Work socialization connects individuals to society. Moen (2016) referred to employment as “the fundamental public ecology in which the adult life course plays out” (p. 250), suggesting that work itself promotes healthy living and positive overall welfare, including financial security, high self-esteem and self-efficacy, and positive identity formation. Indeed, she has suggested that employment paves the way to independence, stability, meaning, and self-worth because work roles help to structure adults’ lives. It is the main structuring of overall adult life. Stable employment represents mastery of the life course, with good jobs offering autonomy and control (Moen, 2016). Indeed, longer periods of unemployment are associated with higher levels of depression and lower self-esteem (Galambos, Barker, & Krahn, 2006). Therefore, it seems appropriate to look at unemployment, or part-time employment in relation to anxiety. There has been research associating gainful activity, being employed full-time or in school full-time, with decreased levels of intimate partner violence (Alvira-Hammond, Longmore, Manning, & Giordano, 2014). It is possible if individuals are gainfully active in school or employment, even despite being ambivalent in other areas, that they may still see positive psychological outcomes.

**Living Independently**

Living with parents well into emerging adulthood has become exceedingly common (Fry, 2013). Recent estimates have suggested that over 30% of young adults live with their parents, making living at home the most common living arrangement for young adults for the first time in American history (Fry, 2016). Living with a parent during emerging adulthood may be due to
preferences on the part of parents and their adult children, Yet, living in the parental residence may reflect role failure, or economic need, and these needs may increase during times of economic downturn (Da Vanzo & Goldscheider, 1990). Not only does staying in or moving back to a parental home impede completing the markers of adulthood, but it may also represent being ambivalent in the choices of emerging adulthood. For instance, individuals could fail to move out at all because of ambivalence about living on their own. Additionally, individuals could move out from cohabiting with a romantic partner, and may be too ambivalent in one or more of the markers of adulthood to live independently. Indeed, boomeranging back to the parental home in emerging adulthood has been associated with higher levels of depression, especially for those who were experiencing employment issues (Copp, Giordano, Longmore, & Manning, 2015). However, prior empirical work has not examined returning home and anxiety.
CURRENT STUDY

As noted, the relationship between sociological issues such as the transition to adulthood and anxiety lacks empirical attention. There is a host of research on the life stage of emerging adulthood. However, little research exists on how choice quantity influences anxiety in emerging adulthood.

Yet, in a culture that embraces the idea of having ample choice, this concept is imperative to explore. Indeed, it remains important to understand the sociological origins of anxiety in emerging adulthood, in order to provide resources for those in a vulnerable life stage. My goal was to determine how ambivalence in the markers of adulthood influences the psychological outcome of anxiety. Thus, I first assessed whether the markers of adulthood, and wavering within those individual markers in terms of employment, education and intimate relationships leads to anxiety.

I also noted that there may be mediating mechanisms that influence the association between wavering in the markers of adulthood and anxiety. I examined whether an ambivalence scale mediated, or accounted for, the association between education, employment, and relationship churning and anxiety. Likewise, I accounted for perceived control and subjective adulthood as additional mediators. That is, those who feel they have more control, and those who view themselves as adults may be less likely to experience anxiety despite ambivalence. Ross and Mirowsky (2013) contend that perception of control, and the belief that the world is not controlled by chaotic factors (powerlessness), are associated with lower levels of distress. Other scholars have suggested that subjective markers such as feeling like an adult are increasingly important for the millennial generation, which is having great difficulty achieving the traditional markers.
I used multivariate regression models to examine anxiety as a consequence of relationship churning, educational attainment, employment and living independently and whether ambivalence, feeling like an adult, and a sense of control mediated these associations. I controlled for prior anxiety, and medication use, which are both likely to be associated with current levels of anxiety.

I also controlled for sociodemographic background characteristics. Some sociologists have suggested that young adulthood experiences may not be uniform across classes. Young adults in poverty are more likely to have children and leave home at younger ages, but less likely to leave home after the age of 18 (Berzin & De Marco, 2010). Therefore, I controlled for race, maternal education, and gender.
HYPOTHESES

I hypothesized that relationship churning, lack of educational attainment, being employed less than full time and not living independent of parents would be associated positively with anxiety. A compounding of choice (in a model with all independent variables) in more than one area (i.e., churning, educational attainment, employment, and where to live) further leads to anxiety. Additionally, I expected that perceived control, subjective adulthood, and ambivalence would mediate the association between these factors and anxiety.
DATA

I examined data collected at the fourth and fifth interviews of The Toledo Adolescent Relationship Study (TARS). TARS is a longitudinal five wave stratified random sample of initially 1,321 adolescents drawn from school rosters from 62 schools in Lucas County, Ohio and a survey filled out by a parent or guardian (mostly mothers). Initial interviews were collected in-home beginning in 2001. The fourth interview was conducted in 2006 when respondents were ages 17-24, and the fifth interview was conducted in 2010 when respondents were between the ages of 22 and 29. The study oversampled Black and Hispanic individuals, and the socio-demographic characteristics of the county are consistent with national statistics. Demographic characteristics are from the parent questionnaire from the first interview. The primary independent and dependent variables are from the fifth interview.

The fifth interview of The Toledo Adolescent Relationship Study consisted of 1,022 respondents. However, after accounting for the (72) respondents who had never been in an intimate relationship, the analytic sample consisted of 950 respondents. In order to preserve the number of respondents in the sample, respondents who failed to answer studied questions must be accounted for so if respondents were missing on a variable, the missing values were replaced with the mean of that variable. If the variable was dichotomous, the missing value was replaced with the modal category. For instance, the variable for subjective adulthood is dichotomous, and the model category is “yes.” Fourteen respondents refused to answer or were missing, so they were recoded as “yes” responses. It should be noted that while mean imputation is efficient for replacing missing values, it often leads to underestimated standard deviations (Fichman & Cummings, 2003).
MEASURES

Dependent Variable

Anxiety, measured at the fifth interview, was a five-item mean scale based on the Symptom Checklist 90 (SCL-90- R) (Derogatis, 1975). Items range on a five point scales from (1) “never,” to (5) “very often.” Questions asked if in the past week the respondent had been distressed or bothered by the following (1) “feeling tense or keyed up,” (2) “suddenly feeling scared for no reason,” (3) “feeling so restless you could not sit still,” (4) “spells of terror or panic,” and (5) “feeling nervous or anxious.” Items ranged on a five point scale from (1) “never,” to (5) “very often” (alpha = .86). Anxiety was a skewed scale, so the log was taken (skew = 1.56). For the sample, the average level of anxiety prior to logging anxiety was 1.64 with a standard deviation of .74, indicating that respondents reported relatively low levels of anxiety. However, the standard deviation indicated that there were moderate levels of variation in reporting levels of anxiety.

As a control variable, prior anxiety was measured identically in the fourth interview (alpha = .82). Average prior anxiety was exactly the same as the fifth interview (1.64), but the standard was slightly lower (standard deviation = .68) indicating that there is slightly more variation in reported levels of anxiety at the fifth interview. Again, since the scale was skewed, (skew = 1.60), I took the log of anxiety to control for skewness.

Independent Variables

Employment was measured using two items. Respondents were asked if they were employment (yes or no). Respondents were then asked if they were employed full-time or part-time. About 44% of respondents were employed less than full-time, and 56% were employed full-time.
Education was measured by asking how far respondents had gotten in school. Response categories included: “dropped out of high school,” “currently in high school,” “graduated from high school/ earned GED,” “certificate or specialized training program” “currently in four-year college,” “some college but not currently attending,” “graduated from college with Associate or junior college degree,” “graduated from college with Bachelor’s degree,” “graduate or professional school.” I recoded education as: (1) “less than a high school degree,” (2)“high school degree,” (3)“some college/ training,” and (4)“college degree or more.” The mean response was 3.00 with a standard deviation of .92, indicating that, on average, respondents had a high school degree.

Relationship churning was measured following the strategy used by Halpern-Meekin et al.(2013b). Respondents in a current relationship were classified as churning if they reported ever having broken up with their current partners. Respondents who reported on a past relationship were classified as churning if they reported having broken up with a past partner more than once (72 respondents not in a current or recent relationship will be excluded from analyses). I excluded the “stably broken up” and “stably together” independent variables, which were in Haplen-Meekin et al.’s (2013b) original analysis. Nearly 37% respondents had experienced relationship churning. That is, the respondent had broken up with a current or recent partner and gotten back together.

Living Independently was coded using a single item, which asked respondents if they were currently living on their own, “away from your mom and dad/ guardian.” Response categories included 0) “not currently living independently” (21%), and 1) “currently living independently” (79%).
Mediating Social Psychological Processes

Ambivalence, a five item scale, included the following items: (1) “I’m still not exactly certain what I want to do with my life,” (2) “People are always on me to settle down,” (3) “I’m not ready to settle down quite yet,” (4) “I sometimes wish for the freedom from responsibilities I had when I was younger,” and (5) “I have potential, but just am not living up to it” (alpha = .75). Responses ranged from (1) “strongly disagree” to (5) “strongly agree.” For the sample, the mean was 2.47 (standard deviation = .83), and the range was 1-5, indicating a moderate amount of ambivalence reported by sample respondents.

Perceived control (fifth interview) was measured with a single item, which asked respondents the extent to which they agreed with the statement: “I have little control over the bad things that happen to me” (reverse coded). Responses ranged from (1) strongly agree to (5) strongly disagree. The average perceived control was 3.51 (standard deviation = 1.02) with a range of 1-5, suggesting that respondents reported that they felt fairly in control over the bad things that had happened to them.

Subjective adulthood, a dichotomous item, asked: “Do you feel like an adult at this point in your life?” Responses included either (0) “no,” (8%) or (1) “yes” (92%).

Control Variables

Race (measured at the first interview) was self-reported, and was recoded into four dichotomous variables: “White” (66%), “Black” (21%), “Hispanic” (11%), and “Other” (2%). People identifying as “Other” race (22 respondents) were kept in the analyses to preserve sample size. Age was based on reported date of birth. The average age and range was 25, and 22 – 29, respectively. Gender indicated the respondent’s gender. More than half the sample was female (55%).
Mother’s education was from parent interviews taken at wave one, and was used as a proxy for social class background. Mother’s education was measured according to dichotomous variables coded as “less than a high degree,” “high school degree,” “high school degree,” and “college or more.” Descriptive statistics indicated that 11% of respondent’s mother’s had less than a high school degree, the majority had a high school degree or “some college, or training” (both 33%), and 23% had a college degree or higher.

Medication Use was measured at the fifth interview with single item, which asked in “In the last 2 years (or 24 months), how often have you used prescription medication to cope with stress?” Answers ranged from (1) “never,” (2) “once or twice a year,” (3) “once every 2-3 months,” (4) “once a month,” (5) “once every 2-3 weeks” (6) “once a week” (7) “2-3 times a week” (8) “once a day,” and (9) “more than once a day.” The mean medication was 1.59 (range 1-9) with a standard deviation of 1.74 meaning that on average a respondent used medication to cope with stress between (1) “never” and (2) “once or twice a year.”
STATISTICAL ANALYSES

Figure 1, graphically displayed low and high anxiety by age. I reported sample descriptive statistics in table 1. Zero-order and ordinary least squares models were used to test the relationship between choice ambivalence (churning, education, employment, and living independently), and control variables (see table 2). In the multivariate models, to account for the relationship between choice ambivalence (the indicators) and anxiety, the indicators are separated across separate models with added controls, and then added together in a final model. Social psychological mediators, including perceived control, ambivalence, and subjective adulthood, are also added across separate models. Models 1, 2, 3 and 4 tested separately the relationship between separate indicators, aforementioned controls and anxiety. Model 5 included the markers of adulthood together to test the relationship between all adulthood indicators and anxiety. Model 6 add the mediating social psychological variables (first, the ambivalence scale, then perceived control, and finally subjective adulthood) to the preceding models.
RESULTS

Table 1

In Table 1 and Table A1, I included descriptive statistics, and bivariate correlations for all variables included in the multivariate models. Descriptive statistics are also noted in the measures section. In figure 1, I graphed mean levels of anxiety for the initial sample. To graph high and low anxiety, I divided anxiety at the mean (1.64). The graph demonstrated that anxiety was highest for those aged 25 years, with 39.4% reporting higher than mean (1.64) anxiety. The results indicate that levels of anxiety are generally high in emerging adulthood. It is likely that if both younger and older ages were included in the sample, there would be more respondents identifying as having low anxiety prior to and following emerging adulthood.

Table 2

Table 2 showed zero-order regression analyses and ordinary least squares regression analyses. At the zero-order level employment was negatively and significantly related to anxiety suggesting that those who are employed have lower levels of anxiety. Having broken up and gotten back together with a current or recent partner was positively associated with anxiety. However, education and living independently were neither significantly associated with anxiety at the bivariate level. Ambivalence was strongly and positively associated with anxiety, suggesting that as ambivalence increase, anxiety increases. Perceived control and feeling like an adult (subjective adulthood) were both significantly and negatively associated with anxiety at the bivariate level. That is, when a respondent felt like an adult, or felt like they were in control of their own life, they had lower levels of anxiety.

Women, and individuals who self-defined their race as White, reported higher levels of anxiety. Black, compared with White, young adults reported lower levels of anxiety. Not
surprisingly, prior anxiety was significantly related to later anxiety. Likewise, using medication to cope with stress was also very significantly, and positively related to anxiety. Respondent’s mother having a high school education was significantly and negatively related to anxiety, and having a college degree or more was positively related to anxiety.

At the multivariate level (model 1), the bivariate relationships between employment and anxiety, and gender and anxiety were no longer significant with the inclusion of other variables. Prior anxiety and medication use both remained positively related to anxiety. Respondent mother having some college or training, or college or more became positively and significantly related to anxiety.

Model 2 examined the association between anxiety and education. As at the zero-order level, education was not significantly related to anxiety. Age became significantly and negatively related to anxiety. That is, as expected, as respondent age increased, anxiety decreased. The only indicator to remain positively and significantly associated with anxiety was detailed in model 3, relationship churning. Model 4 added living independently, and similar to the zero-order, living independently was not associated with anxiety. Adding all indicators together in model 5, only relationship churning was still significant.

Ambivalence and social psychological processes were added in model 6, and ambivalence was very significant, and positively related to anxiety. That is, as feelings of ambivalence increased, symptomatic anxiety increased. Model 6 also included perceived control, which was negatively and significantly associated with anxiety. Subjective adulthood (model 6) was again extremely significantly and negatively associated with anxiety. All indicators and social psychological processes together maintain their significance, suggesting that none of the
three takes the significance from the others. In addition to social psychological processes remaining significant, relationship churning also remains significant in the final model.

In all models, identifying as Black was related negatively to anxiety (marginal in model 2 and 4). Black, compared with White, respondents reported lower levels of anxiety. Women reported higher levels of anxiety only in the model that included ambivalence (model 6), indicating that one or more of the variables was suppressing the initial relationship between gender and anxiety.

Prior anxiety, measured at the fourth interview, and medication use were both positively associated with current anxiety in all models. Age was either marginally significantly (models 1, and 5) or significantly (models 2, 3, and 4) related to anxiety. However, the coefficient age loses significance in the model (6) with ambivalence and mediating social psychological processes. Likewise, respondent mother having some college or training, or a college degree is marginally significant or significant in the same models 1 through 5, but loses significance in the final model with the addition of ambivalence and social psychological processes. Together, this suggests that the model with ambivalence may be taking away (mediating) some of the significance associated with age and mother’s education and anxiety. However, it should be noted that neither of these were significant at the bivariate level.
DISCUSSION

As demonstrated, anxiety is generally high in emerging adulthood. This supports the idea of emerging adulthood being a turbulent time of psychological risk (Arnett, 2013). Much of the sample appeared to have moderate completion of the markers of adulthood, and the majority viewed themselves as adults. However, I also found that respondents had modest levels of ambivalence, suggesting that those still in transition felt ambivalent about continuing in and deciding on adult roles.

The only main indicator that held significance at the multivariate level was relationship churning. I would suggest that not only are intimate relationships pivotal in emerging adulthood, but also that churning is more characteristic of non-choice, rather than the objective ‘yes or no’ markers of adulthood. That is, the ambivalence associated with choice that I have theorized is more in line with wavering (like churning), rather than simply not completing a key developmental task (such as full-time employment, education, and independent living).

The hypothesis that the objective markers of adulthood would be significantly associated with anxiety, and one or more of the psychological processes would work to mediate that relationship was largely not supported. Even in the case of churning, some unmeasured factor was accounting for the relationship churning and anxiety, other than the presented mediating factors. A slightly different story emerges here. All three social psychological processes held throughout the models, including the combined final model, suggesting that net of controls, perceived control, ambivalence, and subjective adulthood separately and together matter in terms of anxiety. Indeed, it is less about the objective completion of those markers of adulthood generating anxiety, and more about wavering and the subjective feeling associated with completion associated with anxiety. That is to say, perception of social psychological factors of
subjective ambivalence, feelings of control, and feelings of being an adult matter more in terms of anxiety than objective completion of developmental tasks.

Rather than the hypothesized mediating variables taking away the significance of the indicators, it was the mediating processes accounting for what would be considered demographic variables of age and mother’s education (class). It was the conjunction of the indicators, and ambivalence, which accounts for the relationship between respondent’s mother’s education and age and anxiety. Indeed, class differences in emerging adulthood cannot and should not be ignored. However, perhaps contrary to the notion that anxiety may differ more by material recourse, significance in higher levels of mother’s education suggests that as expectations of high adult attainment increase, so does anxiety. This relationship disappeared in the model with ambivalence (model 6), suggesting that ambivalence accounts for the multivariate significant relationship between mother’s better than average education and anxiety. Additionally, the mediating effect of ambivalence for age suggests that ambivalence accounts for the multivariate relationship between age and decreased anxiety. Indeed, this mediation supports the theoretical notion that ambivalence is a unique component of in the age period of emerging adulthood, and it generates greater anxiety in the tumultuous transition to adult roles.

Regarding sociodemographic characteristics, I found that Black respondents reported lower levels of anxiety. Indeed, other researchers have also reported that Black, compared to White, individuals generally experience lower rates of anxiety, at least partially due to factors like use of religion as a coping mechanism, and conscious awareness of structural factors like racism which may otherwise drive anxiety (Chapman & Steger, 2010; Hunter & Schmidt, 2010; Oates & Goode, 2013). As expected, experiencing prior anxiety was associated with having current anxiety. Similarly, those who used prescription medication to cope with stress reported
higher anxiety, suggesting that these medications are not fully and completely functional coping mechanism for emerging adults.
CONCLUSION

My goal was to connect psychological concepts of anxiety to the sociological concept of ambivalence during the life course stage of emerging adulthood. I tested the theory of paradox of choice (that choices generate psychological malaise) with regard to education, relationships, employment, and living independently. Drawing on wide array of literature to conceptualize anxiety in emerging adulthood and social psychological ambivalence I found that ambivalence in emerging adulthood lead to higher levels of anxiety.

It should be noted that the sample used was a community sample and not entirely representative of national demographics. Additionally, while I attempt to capture emerging adulthood, may sample only included those respondents ages 22 to 29, not 18 to 29. Drawing on a heavily theoretical basis, the issue is always in how to properly operationalize the concepts. Indeed, conceptualizing objective choice proved to be difficult, and alternative (yet still interesting) findings were generated as consequence. Likewise, though I believe it sufficient in my analysis, ambivalence is characteristically not easy to operationalize. Whether or not the concept was operationalized efficiently is open to discussion. Additionally, as in any statistical test, there is also the issue of unmeasured heterogeneity. That is, factors which account for relationships, which have not been added to the model.

I believe my research suggests a broader lesson about perception of choice in a capitalist society, which is obsessed with the idea of choosing. Knowing that ambivalence in choices of adulthood leads to higher levels of anxiety, not only tells of the hardship in choice and emerging adulthood, but perhaps also mental health of the culture and economic system which embraces choice. Following World War II, the GI bill and housing subsidies greatly benefitted young adults in choosing where to live. Social policies like housing subsidies do not currently exist for
young adults, causing an uphill battle to the road of adulthood. In showing a connection between ambivalence and anxiety, this research aids in granting information to institutions and practices that cater to young adults, and possibly promote social policy that gives young adults the resources and support they need in order to help in making choices in emerging adulthood.
REFERENCES


Raghunathan, R., & Pham, M. T. (1999). All negative moods are not equal: Motivational influences of anxiety and sadness on decision making. *Organizational behavior and human decision processes, 79*(1), 56-77.


n= 950
Source: Toledo Adolescent Relationship Study
Table 1. Descriptive Statistics for Anxiety, Markers of Adulthood, Social Psychological Processes, and Sociodemographic Characteristics (n=950)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety (W5)</td>
<td>1.64</td>
<td>.74</td>
<td>1-5</td>
</tr>
<tr>
<td>Log Anxiety</td>
<td>.41</td>
<td>.39</td>
<td>0 -1.61</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Developmental Tasks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>56%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Education</td>
<td>3.00</td>
<td>.92</td>
<td>1-4</td>
</tr>
<tr>
<td>Churning</td>
<td>37%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Living Independently</td>
<td>79%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td><strong>Mediating Social Psych Processes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambivalence Scale</td>
<td>2.47</td>
<td>.83</td>
<td>1-5</td>
</tr>
<tr>
<td>Perceived Control</td>
<td>3.51</td>
<td>1.02</td>
<td>1-5</td>
</tr>
<tr>
<td>Subjective Adulthood</td>
<td>92%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td><strong>Sociodemographic Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>55%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Male</td>
<td>45%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>66%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Black</td>
<td>21%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Age</td>
<td>25.41</td>
<td>1.83</td>
<td>22-29</td>
</tr>
<tr>
<td>Prior Anxiety</td>
<td>1.64</td>
<td>.68</td>
<td>1-5</td>
</tr>
<tr>
<td>Prior Log Anxiety</td>
<td>.42</td>
<td>.37</td>
<td>0-1.61</td>
</tr>
<tr>
<td>Medication Use</td>
<td>1.59</td>
<td>1.74</td>
<td>1-9</td>
</tr>
<tr>
<td>Mothers Education (W1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>11%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>High School</td>
<td>33%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Some College/ Training</td>
<td>33%</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>College +</td>
<td>23%</td>
<td></td>
<td>0-1</td>
</tr>
</tbody>
</table>

Source: *Toledo Adolescent Relationship Study*
Table 2. OLS Regression of Developmental Tasks and Social Psychological Processes on Anxiety (n= 950)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Zero Order Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>-.07**</td>
<td>-.03</td>
<td>-.03</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.02</td>
<td>-.00</td>
<td>.01</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Churning</td>
<td>.09**</td>
<td></td>
<td>.07**</td>
<td>.07**</td>
<td>.05*</td>
<td></td>
</tr>
<tr>
<td>Living Independently</td>
<td>-.01</td>
<td></td>
<td>.01</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
</tbody>
</table>

Mediating Social Psych Processes

| Ambivalence Scale      | .13***            |         | .07***  |         |         |         |
| Perceived Control      | -.06***           |         | -.03**  |         |         |         |
| Subjective Adulthood   | -.21***           |         | -.13**  |         |         |         |

Sociodemographic Characteristics

| Female                 | .07*              | .02     | .02     | .03     | .02     | .02     | .05*    |
| Race                   |                   |         |         |         |         |         |         |
| (White)                |                   |         |         |         |         |         |         |
| Black                  | -.11***           | .06*    | -.05†   | -.06*   | -.05†   | -.07*   | -.07*   |
| Hispanic               | -.05              | -.01    | -.00    | -.02    | -.01    | -.02    | -.01    |
| Other                  | .03               | .02     | .02     | .01     | -.01*   | -.01†   | -.01    |
| Age                    | -.01              | -.01†   | -.01*   | -.01*   | -.01*   | -.01†   | -.01    |
| Prior Anxiety          | .39***            | .31***  | .31***  | .31***  | .31***  | .30***  | .26***  |
| Medication Use         | .09***            | .07***  | .07***  | .07***  | .07***  | .07***  | .07***  |
| Mothers Education      |                   |         |         |         |         |         |         |
| Less than High School  | -.00              | .01     | .01     | .01     | .01     | .01     | .02     |
| (High School)          |                   |         |         |         |         |         |         |
| Some College/Training  | .05†              | .05*    | .05*    | .06*    | .05*    | .06*    | .04     |
| College +              | .09**             | .06*    | .06†    | .07*    | .06*    | .06†    | .06†    |
| R^2                    |                   | .25     | .24     | .25     | .24     | .25     | .30     |
| Adj R^2                |                   | .24     | .24     | .24     | .24     | .24     | .29     |

† p <.10 ; *p <.05; **p <.01; ***p <.001

Source: Toledo Adolescent Relationship Study
Table A1 Correlation Matrix

Anxiety, Markers of Adulthood, Social Psychological Processes and Sociodemographic Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anxiety</td>
<td></td>
<td>-0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employment</td>
<td></td>
<td></td>
<td>0.04</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.09</td>
<td>-0.07</td>
<td>-0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Relationship Churning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.01</td>
<td>0.14</td>
<td>0.05</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Independent Living</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.26</td>
<td>-0.09</td>
<td>-0.04</td>
<td>0.13</td>
<td>-0.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ambivalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Perceived Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Subjective Adulthood</td>
<td></td>
<td>-0.14</td>
<td>0.06</td>
<td>0.00</td>
<td>-0.02</td>
<td>0.13</td>
<td>-0.21</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Black</td>
<td></td>
<td>-0.08</td>
<td>-0.21</td>
<td>-0.16</td>
<td>0.14</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.03</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Hispanic</td>
<td></td>
<td>-0.03</td>
<td>-0.04</td>
<td>-0.17</td>
<td>0.09</td>
<td>0.03</td>
<td>-0.02</td>
<td>0.04</td>
<td>0.03</td>
<td>0.00</td>
<td>-0.49</td>
<td>-0.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Other Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Age</td>
<td></td>
<td>-0.03</td>
<td>0.14</td>
<td>0.15</td>
<td>-0.03</td>
<td>0.20</td>
<td>-0.08</td>
<td>0.06</td>
<td>0.02</td>
<td>-0.02</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.04</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Prior Anxiety</td>
<td></td>
<td>0.36</td>
<td>-0.09</td>
<td>0.03</td>
<td>0.04</td>
<td>-0.05</td>
<td>0.18</td>
<td>-0.08</td>
<td>-0.11</td>
<td>0.09</td>
<td>0.05</td>
<td>-0.07</td>
<td>0.02</td>
<td>-0.01</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Medication Use</td>
<td></td>
<td>0.41</td>
<td>-0.09</td>
<td>0.02</td>
<td>-0.07</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.09</td>
<td>0.11</td>
<td>-0.07</td>
<td>-0.06</td>
<td>-0.03</td>
<td>0.03</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Mom Less Than HS</td>
<td></td>
<td>-0.03</td>
<td>-0.09</td>
<td>-0.22</td>
<td>0.05</td>
<td>0.02</td>
<td>-0.03</td>
<td>0.02</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.23</td>
<td>0.06</td>
<td>0.26</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.04</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Mom High School</td>
<td></td>
<td>-0.07</td>
<td>0.02</td>
<td>-0.14</td>
<td>0.04</td>
<td>-0.01</td>
<td>-0.07</td>
<td>-0.04</td>
<td>-0.01</td>
<td>0.00</td>
<td>-0.03</td>
<td>0.01</td>
<td>0.03</td>
<td>0.01</td>
<td>-0.05</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.24</td>
<td></td>
</tr>
<tr>
<td>19. Mom Some College</td>
<td></td>
<td>0.02</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
<td>0.05</td>
<td>0.00</td>
<td>-0.04</td>
<td>0.00</td>
<td>-0.04</td>
<td>0.10</td>
<td>-0.07</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.04</td>
<td>-0.04</td>
<td>-0.25</td>
<td>-0.49</td>
</tr>
<tr>
<td>20. Mom College+</td>
<td></td>
<td>0.08</td>
<td>0.03</td>
<td>0.32</td>
<td>-0.08</td>
<td>-0.03</td>
<td>0.04</td>
<td>0.04</td>
<td>0.02</td>
<td>-0.02</td>
<td>0.24</td>
<td>-0.17</td>
<td>-0.15</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.19</td>
<td>-0.38</td>
</tr>
</tbody>
</table>

n=950

Source: Toledo Adolescent Relationship Study