

The Relationship of Motivation and Presence of Stress and Anxiety in Emerging Adults' Career and Romantic Exploration

Kyra Speegle Rosemary V. Barnett, Larry Forthun and Jeanna Mastrodicasa*

Keywords: social sciences

The Journal of Student Affairs Inquiry

Vol. 2, Issue 1, 2016

The domains of love, work, and psychological well-being are of chief concern during emerging adulthood. These interrelated domains were examined through quantitative survey-based measurement that assessed undergraduate students' motivation, anxiety, stress, career exploration, and romantic exploration choices. Quantitative analyses were conducted to test for correlations and potential moderating and mediating factors. Ultimately, relationships between these variables were clarified. Results indicate variables such as ruminative exploration in romance may relate to stress ($r=.180, p=.05$). This and other results are discussed with a specific focus on areas for further research and opportunities for collaboration between campus services in university settings. Implications in this area can inform higher education policy and programs as the need for student supports in these domains continue.

Emerging adulthood encompasses a developmental period (age 18-29) in which individuals explore the initial chapter of adulthood. Arnett (2000) defines emerging adulthood as a stage filled with exploration of multiple choices, possibilities, and opportunities, and he notes that this period of change mainly occurs in the areas of “work, love, and worldviews” (p. 469). Emerging adulthood stands distinct from adolescence, which is mainly marked by cognitive and physical changes during puberty and limited independence (Arnett, 2000). Emerging adulthood is also separate from young adulthood, a developmental period that denotes full acceptance and responsibility for adult roles (Arnett, 2000, p. 469-470). Traditionally, emerging adulthood is also the time in which many individuals pursue a college education. Though emerging adulthood is a unique time to explore and make decisions in multiple areas, including love, education, and career, it is also a developmental period that carries serious risks for adjustment, well-being, and mental health.

During this time, emerging adults deal with multiple transitions in different life domains, and these transitions may co-occur with intense stress, anxiety, or other mental health disorders. Three-fourths of all mental health disorders begin by age 24 (Kessler et al., 2005, p. 593). This timing places emerging adulthood and these topics at the forefront of student issues in higher

* **Institution:** University of Florida

Department: Family, Youth, and Community Sciences and the Institute of Food and Agricultural Sciences

education. According to the American College Health Association's National College Health Assessment (2013), a sizable portion of undergraduate students indicated their academic progress had been affected by anxiety (20.3%), depression (13.2%), or stress (30.7%). Directors of counseling centers also noted increases over the past five years in specific psychological issues (Gallagher, 2011). Seventy-eight percent of the directors report increases in crises requiring an immediate response, 77% with psychiatric medication issues, 49% with illicit drug use, 42% with alcohol abuse, and 25% with career planning issues in addition to increases in other specific crises (Gallagher, 2011). Suicide is also a chief mental health concern during the college years with many universities now implementing suicide prevention programs (DeAngelis, 2009). If professionals in higher education are to support students well as they navigate this season of development, then perhaps the first step in that goal must be to understand how emerging adults explore love and work, and how stress, anxiety, and motivation (a key catalyst in why individuals pursue certain tasks) related to these processes.

When examining emerging adulthood, one must recognize developmental trajectories in this period can vary widely in length and appearance. For example, one individual may pursue a college degree, take on full time work shortly after graduation, and ultimately marry within a few years of graduation, while another individual may move from job to job or through casual and committed relationships into their thirties. What contributes to the different trajectories between these two individuals? There are many factors to consider. Though Arnett (2000) identified key tasks or areas of exploration all emerging adults must negotiate, the specific actions or paths individual emerging adults choose may vary. Therefore, it is critically important to understand how emerging adults are negotiating this period and examine the choices of successful individuals, as well as the choices of those who struggle to progress. Some choices may follow healthy exploration of career options, potential romantic partners, and self-discovery; however, other choices may be accompanied by more pronounced risk behaviors, less overall well-being, and/or stagnant career growth (Nelson & Padilla-Walker, 2013).

EMERGING ADULT WORK & LOVE

The pursuit of education or vocation influences emerging adults (EAs), especially those who have delayed the immediate demands of young adulthood by pursuing higher education. Career readiness activities (e.g., applying to jobs, interviewing, setting professional goals) surface in adolescence and gain momentum in emerging adulthood when EAs are often in college and living outside of their parents' homes. This exploration of career paths can take many different turns. Some research has been able to group emerging adults into different primary occupational identities: Integrated (EAs who actively consider how occupational goals can affect their futures and carefully plan how to reach them); Supported (EAs who may be strongly drawn towards a goal or have a clear plan to reach it, but do not possess both elements); Clarified

(EAs who voiced a clear occupational goal continually in the interview but did not have a strong plan to reach it); Unresolved (EAs with no clear occupational goal but who still engage in career planning activities); and No Real Idea (EAs with no clear occupational goals or planning activities in place) (Malanchuk, Messersmith, & Eccles, 2010, p. 108).

Clearly, a significant amount of variety is present in EAs approaches to career planning. According to Malanchuk et al. (2010), adolescents surveyed at age nineteen and later at twenty-one illustrated patterns of non-linear career development, which means they did not stay on a specific professional course and jumped around between jobs and professions; however, those with the most developed career identities (Integrated) showed the most well-being on the study's mental health measures (p. 109).

Just as career trajectories develop differently in emerging adulthood, romantic relationships can vary greatly as emerging adults explore romantic options. Especially on college campuses or in university settings, some emerging adults engage in "hook-ups," physical interactions (ranging from kissing to having sexual intercourse) between partners in which no further commitment is expected (Glenn & Marquardt, 2001, p. 4). Claxton and van Dulmen (2013) define multiple "casual sexual relationships and experiences" emerging adults may explore during this time (p. 138). Additionally, female college students report multiple definitions for the term "dating" that range from intentional, committed relationships to less formal, "hang-out" understandings between members of the opposite sex (Glenn & Maquardt, 2001, p. 5). Emerging adults (EAs) also begin to cohabit with romantic partners during these years. EAs may choose cohabitation intentionally, or they may slide into cohabiting with their partners under ambiguous commitment terms (Stanley, Rhoades, & Markham, 2006, p. 507). Views on marriage also vary. Emerging adults hold different perspectives on marriage that can also be categorized as enthusiasts (EAs expressing eagerness and positivity toward marriage), delayers (EAs reporting delaying marital age or potentially skipping marriage altogether), and the hesitant (EAs in the middle who report valuing marriage but fall between the two other groups in their responses) (Willoughby & Hall, 2014). These views may change over time and influence how they approach marriage and commitment (Willoughby, Medaris, James, & Bartholomew, 2015). Though emerging adult romantic relationships may vary in appearance or length, the overall task in this domain for emerging adults is to find partners with whom they can build stable, interdependent lives in adulthood (Shulman & Connelly, 2013; Arnett, 2000).

EMERGING ADULT WELL-BEING

Beyond the exploration of love and work, the initial transition to college can be psychologically distressing for some emerging adults (Conley, et al., 2014). In particular, female students may experience greater stress and distress in the initial transition to college (Conley et al., 2014). This can be referred to as

the “flourishing and floundering” of emerging adults in college (Nelson & Padilla-Walker, 2013, p.67). Nelson and Padilla-Walker (2013) have grouped emerging adults into categories based on adjustment and other related factors: externalizers (higher levels of substance use, sexual partners, pornography, and video games as compared to the well-adjusted group), poorly adjusted (higher levels of substance use, sexual partners, depression, and anxiety with lower levels of self-worth), and well-adjusted (higher levels of religiosity and internal regulation, lower levels of substance use, sexual partners, and depressive or anxious symptoms) (p. 67). In the study, 28% (n=134) were classified as externalizers, and 8% (n=39) were in the poorly adjusted group (Nelson & Padilla-Walker, 2013, p. 72). This means over one-third of the sample indicated issues with substance use, depressive or anxious symptoms, and/or increased sexual partners. Such findings suggest that because emerging adults are taking multiple paths in their adjustment to adulthood, many may engage in risky behaviors or struggle with a lower sense of well-being.

THE JUGGLING ACT OF LOVE, WORK, AND WELL-BEING

As some of the previous findings highlight, the topics of love, work, and well-being do not remain separate throughout emerging adulthood, but rather co-occur and intermingle. Increasing research has been devoted to examining multiple developmental domains in emerging adulthood and their relationships because these domains carry such weight for emerging adults' adjustment and well-being in college and beyond. For example, fewer depressive symptoms and higher quality of life are associated with participation in higher education or full-time work (Aseltine & Gore, 2005). Further studies illustrate that assuming increased adult roles in residential situations (living independently) increased the responsibility assumed in romantic relationships (commitment) (Sneed et al., 2007). Other research also echoes the conclusions about increased earning levels and entrance into marriage or cohabitation for male students (Oppenheimer, 2003). These domains relate to one another, and some seem to be linked to positive outcomes. The question for researchers then becomes centered on which relationships between these domains are associated with the most well-being and how colleges, universities, and other service settings for emerging adults can encourage well-being in these multiple areas.

Perhaps the first step for higher education professionals to take is to better understand how emerging adults themselves are considering the interrelated domains of career, love, and well-being during this time period. Evidence exists to support that some emerging adults critically consider the relationships between these domains (love, work, and psychological well-being) and the multiple roles that accompany them, but one should note this is only a portion of emerging adults in specific circumstances. For example, some researchers have found that individuals actively engaged in planning for marriage and career contributed more effort and consideration for multiple role planning, especially women entering nontraditional careers, as compared to individuals in committed dating relationships and planning for careers (Peake & Harris,

2002). These individuals consider the demands and transitions of multiple life domains at once. This task is not without difficulty; a certain amount of conflict is present for some EAs as they determine how to balance future adult roles (Barnett, Gareis, James, & Steele, 2012). Other studies have found that students may more readily anticipate family relationships conflicting with work plans (rather than vice versa) because career goals are better understood by many emerging adults rather than marriage and parenthood (Cinamon, 2006). Marriage and parenthood feel somewhat unknown, but career goals are more comfortable to anticipate because after all, many emerging adults view the primary goal of attending college as establishing a career trajectory. Consequently, some EAs may focus more readily on one area, though both work and love are important.

In recent years, a large portion of research analyzing the domains of emerging adult work, love, and well-being together has taken place internationally. Recent research has sought to identify the most prominent goals and concerns among Finnish emerging adults in the areas of romantic relationships and careers (Ranta, Dietrich, & Salmela-Aro, 2013). From there, different goal and concern profiles were identified from the sample. Emerging adults' goals primarily focused on education and work, while personal goals related to romantic relationships ranked third (Ranta et al., 2013, p. 6). This means emerging adults had goals primarily surrounding professional growth, while personal goals in relationships fell in priority. There appears to be an emphasis on work and education, with personal relationships falling further behind, though both are important for well-being during this developmental stage. While anticipating goals and concerns has been one area of study, research has also focused on how experiences shape emerging adults' attitudes in multiple domains. Shulman, Laursen, and Dickson (2013) examined how Israeli emerging adults' negative work experiences influence future negative romantic experiences and vice versa. This means when emerging adults have bad experiences in love and work, it may affect future experiences and adjustment. Ultimately, these domains are interconnected in a way that affect emerging adults' present situations and well-being in higher education settings as well as future situations and adjustment. If higher education professionals seek to help college students pursue professional growth in addition to personal development, understanding how emerging adults explore love and work as well as which choices may relate to indicators of well-being (levels of stress and anxiety) could provide important insight.

CURRENT STUDY

With the recent trends in mental health occurrences and an increasing awareness of its importance during emerging adulthood, a deeper understanding of stress, anxiety, motivation, and exploration could benefit professionals as they examine emerging adults' romantic and professional pursuits. Stress and anxiety can be debilitating and may also co-occur with other mental health diagnoses. If individuals can better recognize which

exploratory paths in love and work lead to higher instances of stress and anxiety, as well as those that seem to hold less stress and anxiety, this may encourage individuals to choose healthier exploratory decisions in emerging adulthood and recognize potentially damaging exploratory patterns more quickly.

Institutions of higher education are at the forefront of organizations and groups that are equipped and able to reach emerging adults. College campuses represent environments of highly concentrated numbers of emerging adults, and these campuses offer a multitude of services related to career and relationship development for college students. Career resource centers, counseling centers, and courses all present promising options for students to receive guidance, resources, and support as they explore both professional development and romantic relationships. However, recent reports (Rosenthal & Wilson, 2008; Einsenberg, Gollerstein, & Gollust, 2007; Greene & Greene, 2008) have shown that some of these services are underutilized, students are not aware of the services available, and/or the students that may need these services the most are not using them. Consequently, the question of how emerging adults view the exploration and decision making process in love and work as well as the utility of these campus services arises. This study seeks to bridge the connection between how emerging adults are exploring key life domains (e.g., love and career), and how, if at all, anxiety, stress, and motivation may accompany certain exploratory choices.

The purpose of this study was to gain a better understanding of the relationship between love, work and well-being among emerging adults. The three primary research questions were as follows: 1) How does exploration in career relate to anxiety and stress levels in emerging adults? 2) Is there a relationship between levels of romantic exploration and anxiety and stress for emerging adults? 3) Do certain romantic relationship exploration choices relate to certain career exploration choices for emerging adults?

METHOD

SAMPLE

The population sampled in this study were emerging adults, specifically those in undergraduate programs at a large Southeastern university. Emerging adulthood now often encompasses ages 18-29 (Society for the Study of Emerging Adulthood, 2014, paragraph 1); therefore, undergraduate students within this age range were eligible to participate. Graduate students within this age range were not eligible to participate because the choice to begin a graduate program indicates these students have selected a more definitive vocational focus, whereas undergraduates may still be primarily exploring career options.

Of the 176 respondents of the survey, 18.7% ($n=33$) were male, 69.9% ($n=123$) were female, and 11.4% ($n=20$) were missing responses. Over sixteen percent were of Hispanic or Latino ethnicity ($n=29$), while 71% ($n=125$) were non-Hispanic or Latino and 12.5% ($n=22$) did not respond. The participants

also indicated the following racial backgrounds: four percent Asian ($n=7$); 1.1% ($n=2$) American Indian or Alaska Native ($n=2$); 15.3% ($n=27$) Black, Afro-Caribbean, or African American; 60.8% ($n=107$) were White/Caucasian; 5.1% ($n=9$) were Two or More Racial Groups; 2.3% ($n=4$) were Other; and 11.4% ($n=20$) did not indicate a response. The most frequent age range for participants was 20-21 (43.2%, $n=76$), followed by 18-19 (25.6%, $n=45$), 22-23 (14.8%, $n=26$), and 24-25 (4.5%). Less than one percent of the sample indicated their age as above 26, and 11.4% of the sample ($n=20$) did not indicate a response. However, since the survey was administered to undergraduate students and a recent survey of the undergraduate population indicated only roughly five percent of the total university population of undergraduate students' age as over 25, these responses were kept within the data set since it was likely that they fell within the age range of emerging adults.

Respondents indicated vocational interests in social science (42.6%), health science related fields (14.8%), business (5.7%), engineering (5.1%), agriculture (5.1%), communications-oriented (5.1%), science (5.1%), education (2.3%), and fine arts (1.7%). Of these participants, 11.4% did not indicate a response, and 1.1% indicated Other. Another significant detail about the population is that 26.1% ($n=46$) indicated status as a first generation student (e.g., the first member of their family to attend college). Relationship status was also examined due to the key topics being assessed in this study. These results are detailed in Table 1.

Table 1

Respondent Self-Report Relationship Status	Frequency	Sample Percent
Never been in romantic relationship	13	7.4
Single	61	34.7
In a casual, non-exclusive relationship	13	7.4
In an exclusive dating relationship (< 1 year)	17	9.7
In an exclusive dating relationship (1 year <)	40	22.7
In a domestic partnership	4	2.3
Engaged	3	1.7
Married	5	2.8
Total	156	88.6
Missing	20	11.4
Total	176	100

Descriptive summary for relationship status

DATA COLLECTION

To obtain the sample for this study, undergraduate course instructors from a variety of colleges at the university were contacted and asked if they would share the survey opportunity with their students. If the instructors agreed, the survey links were emailed to eligible undergraduate students through their courses. The letter attached to the email explained the purpose of the study

and instructions for completing the surveys. The consent form was the first page of the online survey so that participants could indicate their informed consent prior to any survey responses being collected. The consent stated that participation was completely voluntary. Students who chose to participate were offered an opportunity to participate in a gift card drawing or a combination of both the gift card drawing and extra credit. Additional information was provided in the informed consent, as per IRB guidelines.

Participants completed a self-completion questionnaire packet for this study. The packet included six main measurements: (1) the Life Role Salience Scale, (2) the Situational Motivation Scale, (3) the Depression Anxiety Stress Scales, (4) the Career Exploration Survey, (5) the Dimensions of Identity Development Scale, and (6) demographic questions. Table 2 lists measurement summary statistics.

Table 2. Descriptive statistics for study measurements

Measurement	n	M	SD	A
LRSS				
Occupation	125	3.64	0.666	0.732
Marital	125	3.46	0.648	0.615
SIMS				
IM-C	163	4.61	1.404	0.875
IR-C	161	5.41	1.044	0.762
EM-C	163	3.44	1.551	0.847
AM-C	166	2.14	1.280	0.863
IM-R	157	4.98	1.452	0.880
IR-R	153	4.90	1.401	0.820
EM-R	153	2.50	1.529	0.898
AM-R	157	2.24	1.429	0.878
CES				
EE	174	2.84	0.968	0.875
SE	172	3.60	0.977	0.85
ISE	175	2.61	1.035	0.798
DASS-21				
Anxiety	151	0.86	0.696	0.840
Stress	147	1.25	0.683	0.822
DIDS-R				
REB	160	3.72	0.759	0.752
REX	157	2.91	0.972	0.836
RED	160	3.41	0.813	0.728

EE – Environmental Exploration; SE – Self-exploration; ISE – Intended Systematic Exploration

AM-C – Amotivation in career; EM-C – Extrinsic in career; IR-C – Identified in career; IM-C – Identified in career

AM-R – Amotivation in romance; EM-R – Extrinsic in romance; IR-R – Identified in romance; IM-R – Intrinsic in romance

REB – Romantic exploration in breadth; RED – Romantic exploration in depth; REX – Ruminative exploration

LIFE ROLE SALIENCE SCALE (LRSS)

The Life Role Salience Scale (Amatea, Cross, Clark, & Bobby, 1986) measures

an individual's commitment to different life roles including occupational, marital, parental, and home roles. For the purposes of this study, only the Occupational Commitment (assessing commitment to work roles) and Marital Role Commitment (assessing commitment to marital roles as well as items customized to apply to long-term, committed relationships) subscales were the most relevant items for analysis. Example items for each subscale included: I expect to devote whatever time and energy it takes to move up in my job/career field (Occupational Commitment); I expect to work hard to build a good marriage or long-term, committed romantic relationship even if it means limiting my opportunities to pursue other personal goals (Marital Role Commitment). Each subscale had five items and respondents could select one of five response categories (1=Disagree, 5=Agree) when answering each item. Subscale scores were created by summing the item scores for that factor and averaging them (range = 1-5; see Table 1). The LRSS items were ultimately not used for analysis in this study because they assessed commitment rather than exploration; however, these items were still part of the measurement.

SITUATIONAL MOTIVATION SCALE (SIMS)

The SIMS (Guay, Vallerand, & Blanchard, 2000) asked respondents the degree to which they were motivated to pursue a certain activity. The SIMS was included twice within the study instrumentation, once for activities specific to career exploration and once for activities specific to romantic exploration. Of the sixteen items in the SIMS, four factors are identified when the respondent is asked why they engage in a specific activity: intrinsic motivation (IM), behavior and actions completed because of their value in and of themselves or the satisfaction comes from the behavior itself; identified regulation (IR), behaviors completed because of their value for the self; external regulation (ER), the purpose or intended goals of the task are based on factors outside of the task itself; and amotivation (AM), there is no clear direction for behavior or actions and no "expectations of rewards or possibility of changing the course of events" (Guay, Vallerand, & Blanchard, 2000, p. 177; Deci, 1971). Example items from this scale included: Because I think that this activity is interesting (IM); Because I am doing it for my own good (IR); Because I am supposed to do it (ER); I do this activity, but I am not sure it is a good thing to pursue it (AM). Respondents could select one of seven response categories (1=Corresponds Not at All, 7=Corresponds Exactly) when answering each item. Each scale was constructed by summing the item scores for that factor and averaging them for a mean score.

DEPRESSION ANXIETY STRESS SCALES (DASS-21)

The original DASS (Lovibond & Lovibond, 1995) assesses individuals' depression, anxiety, and stress in forty-two items, but the shortened version (the DASS-21) was used for this study. Each construct (depression, anxiety, and stress) has a separate item set within the DASS. The original DASS and DASS-21 sample scores have proven reliable in multiple studies, including both clinical and non-clinical samples (Antony et al., 1998; Brown, Chorpita,

Korotisch, & Barlow, 1997; Crawford & Henry, 2003; Henry & Crawford, 2005).

The DASS short form, DASS-21, asked respondents about anxiety and stress levels experienced in the past week. Of the fourteen items used from the DASS-21, only the anxiety scale (Example item: I felt I was close to panic) and stress scale (Example item: I found it hard to wind down) were utilized. Respondents could select one of four response categories (0=Did not apply to me at all, 3=Applied to me very much, or most of the time) when answering each item. Each subscale was created by calculating the mean of the item scores in order to assess the variable similarly to other study variables. In traditional DASS-21 scoring, these scores can be added and multiplied by two to yield the equivalent DASS score. The total DASS-21 score was not computed due to the depression scale items not being used for the purposes of this study.

CAREER EXPLORATION SURVEY (CES)

The CES (Stumpf & Collarelli, 1983) asked respondents the degree to which they were engaging in certain exploratory actions related to their career. Of the fourteen items used from the CES in this study's instrument, three factors are identified: environment exploration (EE; 1-6), the amount at which an individual over a three month period explores the occupations, jobs, and organizations for possible employment; self-exploration (SE; 7-11), the retrospection and introspection an individual completes over a three month period; and intended systematic exploration (ISE; 12-14), the degree to which an individual uses an intentional, systematic approach to gather information about the self and environment (Stumpf, Collarelli, & Hartman, 1983). Example items for this scale included: "Investigated career possibilities" (EE); "Reflected on how my past integrates with my future career" (SE); and "Tried specific work roles just to see if I liked them" (ISE). Respondents could select one of five response categories (1=Little, 5=A great deal) when answering each item. Each factor was examined by summing the item scores for that factor and averaging it.

DIMENSIONS OF IDENTITY DEVELOPMENT SCALE (DIDS) - ROMANTIC EXPLORATION

The DIDS was developed by Luyckx, Schwartz, Berzonsky, Soenens, Vansteenkiste, Smits, and Goossens (2008). The DIDS is a measurement of general identity exploration; however, the researchers sought permission from the instrument's primary author to customize items to focus specifically on romantic exploration. The primary author of the instrument graciously provided permission as well as a copy of the most recent English version of the instrument and feedback on the researcher's proposed revisions to the items. The reason these items were selected and modified is due to the lack of instrumentation available on romantic exploration. Many instruments focus on sexual exploration, romantic commitment, styles of attachment, or sexual behavior (e.g., Relationship Events Scale, King & Christensen, 1983;

Experiences in Close Relationships [ECR], Brennan, Clark, & Shaver, 1998; Experiences in Close Relationships – Revised, Fraley, Waller, & Brennan, 2000; Dating History Questionnaire, Furman & Wehner, 1992); however, the researchers were not able to locate a clear instrument focusing on romantic relationships and exploration/decision making. Consequently, a measurement on general exploration in late adolescence and emerging adulthood was located (the DIDS) and customized to be specific to romantic exploration (DIDS-R).

The DIDS-R asked respondents how they explored romantic relationships and decisions. The reasoning for using the DIDS to measure romantic exploration is due to the lack of an action-oriented scale equivalent to the CES for romantic exploration. Many measurements available assess attachment style or commitment level, but none found by the researchers examined romantic exploration items. Respondents were asked to think of their current romantic relationship or most recent romantic relationship (if not currently in one) while answering the questions. Of the fifteen items adapted from the DIDS, three factors are identified: Exploration in breadth (REB; 1, 2, 3, 4, 5), the extent to which individuals consider different alternatives in romantic relationships before making commitments; Ruminative exploration (REX; 6, 7, 8, 9, 10), exploration closely related to self-rumination, a “type of negative, chronic, and persistent self-attentiveness motivated by fear and perceived threats, losses of injustices to the self” (Luyckx et al., 2008); and Exploration in depth (RED; 11, 12, 13, 14, 15), the extent to which individuals consider choices and commitments in romantic relationships in depth. Some example items for these dimensions of romantic exploration included: I think about different things I might do in the future in my romantic relationship (breadth); I am doubtful about what I really want to achieve in my romantic relationship (ruminative); I think about whether my romantic relationship matches with what I really want (depth). Respondents could select one of five response categories (1=Strongly disagree, 5=Strongly agree) when answering each item. Each factor was examined by adding the mean of the item scores in a similar scoring format to other variables.

DATA ANALYSIS

Correlational analyses (using Pearson’s correlation coefficient) were run to determine if relationships exist between the variables (career exploration, romantic exploration, motivation, anxiety, stress, and demographic characteristics). When multiple ordinal items are used in a measurement or indexed together “consisting of sums across many items,” Pearson’s correlations are an appropriate and robust parametric test for assessing the items (Norman, 2010). The Pearson correlation values are detailed below.

RESULTS

Correlations between each of the measured variables are summarized in Table 3. The first research question assessed how environmental exploration related to anxiety and stress levels in emerging adults. Items for environmental

exploration from the CES (Stumpf & Collarelli, 1983) were analyzed along with the scores from the DASS-21 Anxiety and Stress items. A table illustrating environmental exploration's independence from other CES items can be provided upon request from the researchers. A Pearson's correlation was run, and the results indicated there was not a statistically significant correlation (Anxiety: $r=.100$; $p=.227$; Stress: $r=.072$, $p=.392$) between environmental exploration and anxiety or stress, which could point toward the nature of this developmental period. Specifically, exploration may be expected and readily anticipated in this domain during this period of time, especially for undergraduate students pursuing a degree of some kind.

Table 3. Summary of Correlations for Study Variables

	Anx.	Stress	REX	REB	RED	EE	ISE	SE	IM-C	IR-C	EM-C
Anx.	-	-	0.154	0.002	0.062	0.100	-	-	-0.055	-0.038	.236**
Stress	-	-	.180*	0.032	0.086	0.072	-	-	-0.041	0.021	.243**
REX	0.154	.180*	-	-	-	0.069	0.063	0.152	-	-	-
REB	0.002	0.032	-	-	-	0.098	.157*	.254**	-	-	-
RED	0.062	0.086	-	-	-	.206**	.181*	.329**	-	-	-
EE	0.100	0.072	0.069	0.098	.206**	-	-	-	.235**	-0.056	.228**
ISE	-	-	0.063	.157*	.181*	-	-	-	.221**	-0.001	.176*
SE	-	-	0.152	.181*	.329**	-	-	-	.387**	.164*	0.058
IM-C	-0.055	-0.041	-	-	-	.235**	.221**	.387**	-	-	-
IR-C	-0.038	0.021	-	-	-	-0.056	-0.001	.164*	-	-	-
ER-C	.236**	.243**	-	-	-	.228**	.176*	0.058	-	-	-
AM-C	.222**	0.079	-	-	-	0.102	0.118	-0.027	-	-	-
IM-R	-0.060	0.039	.161*	.341**	.382**	-	-	-	.206*	.174*	0.085
IR-R	-0.038	0.021	0.158	.477**	.359**	-	-	-	.692**	1.000***	.324**
EM-R	.289**	.207*	.365**	0.121	.230**	-	-	-	0.133	0.108	.374**
AM-R	.315**	.222**	.249**	-0.107	0.001	-	-	-	-0.120	0.061	.462**

*. Correlation is significant at the 0.05 level (2-tailed).

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

Note: EE – Environmental Exploration; SE – Self-exploration; ISE – Intended Systematic Exploration

AM-C – Amotivation in career; EM-C – Extrinsic in career; IR-C – Identified in career; IM-C – Identified in

career; AM-R – Amotivation in romance; EM-R – Extrinsic in romance; IR-R – Identified in romance; IM-R – Intrinsic in

romance; REB – Romantic exploration in breadth; RED – Romantic exploration in depth; REX – Ruminative exploration

Once the researchers had assessed career exploration and its dimensions' relationships to anxiety and stress, the second research question was examined. This research question focused on how romantic exploration dimensions relate to anxiety and stress in emerging adults. Items from the DIDS-R and the DASS Stress and Anxiety items (DASS-SA) were utilized for these correlational analyses. Ultimately, one dimension of romantic exploration, ruminative exploration, correlated with stress, though the size of the Pearson correlation is small ($r=.180$; $p=.031$) (Fitz-Gibbon & Morris, 1987). This relationship affirms other literature linking general rumination (not specific to a certain life domain) to potential issues like anxiety and depression (Wilkinson, Croudace, & Goodyer, 2013; McLaughlin & Nolen-Hoeksema, 2011).

The third research question focused on whether certain types of romantic exploration choices relate to certain career exploration choices for emerging adults (Table 3). These relationships were analyzed using items from the CES and the DIDS-R items. Intended systematic exploration correlated with romantic exploration in breadth ($r=.157, p=.047$), and self-exploration in career also correlated with romantic exploration in breadth ($r=.254, p=.001$); Table 3). Additionally, romantic exploration in depth correlated with all three of the career exploration factors assessed in this study (EE: $r=.206, p=.010$; ISE: $r=.181, p=.022$; SE: $r=.329, p<.001$); Table 3).

ADDITIONAL ANALYSES

Additional analyses not specifically related to the research questions were explored in the final portion of data analysis. The first component of these analyses assessed the relationship between motivation and other variables assessed in the study. Understanding the role of motivation through correlational analysis could better refine future directions for research related to longitudinal studies within these domains of emerging adulthood. Additional analyses in this study provided a number of statistically significant correlations (shown in Table 3): romantic exploration in breadth and romantic exploration in depth positively correlated with multiple forms of motivation, except amotivation. However, ruminative exploration correlated positively with extrinsic regulation ($r=.365, p<.001$) and amotivation ($r=.249, p=.002$) in romance. Multiple forms of career exploration also correlated with multiple types of motivation, except amotivation. In these initial results, amotivation appears to relate to only certain factors in the exploration process (specifically, ruminative exploration in romance), which could indicate important issues for professionals and researchers to examine further. Other relationships between motivation in career and romance were also explored, along with motivation in career and romance and their respective correlations with anxiety and stress (Table 3).

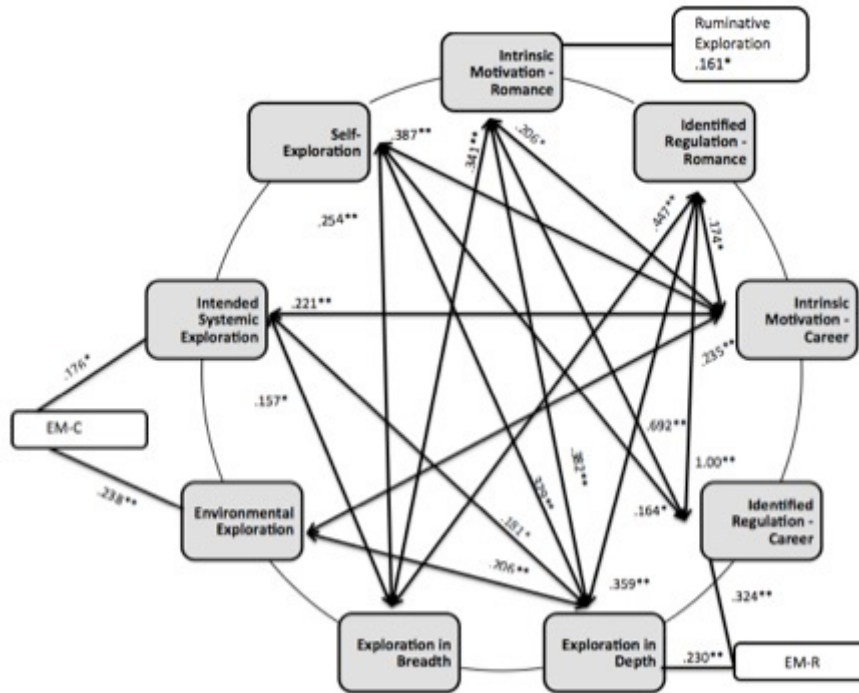


Figure 1
Correlations between potentially adaptive factors

Figure 1 provides a visual model of the numerous positive correlations between variables. Ultimately, the researchers identified two key correlational visuals to assist professionals in viewing the positive correlations between variables. First, a potentially optimal exploratory approach emerged through examining how intrinsic motivation correlates with a number of other variables in this study. As shown in Figure 1, intrinsic motivation in both domains (career and romance) correlates with intrinsic motivation and identified regulation in the other respective domain (career and romance) as well as with the optimal exploratory factors in career exploration (EE, ISE, and RE) and romantic exploration (RED and REB). In addition, intrinsic motivation does not relate to ruminative exploration in romance or anxiety and stress. Fostering development in intrinsic motivation and the relevant factors in career and romantic exploration may be a potential area of emphasis for programs and professionals working with emerging adults.

that exploration may help relieve anxiety and stress as emerging adults navigate choosing a career. These caused the researchers to examine correlations between the other factors of career exploration and anxiety and stress, detailed in the additional analyses section. Ultimately, though a statistically significant relationship was not shown, this finding still provides an insight into the exploration process for emerging adults and anxiety and stress. Environmental exploration in itself may not appear to relate negatively to the well-being variables being assessed. Since anxiety and stress are significant issues for this population, these results indicate that investigation of other variables and/or potential mediating influences as well as examining exploration in a more positive light may be more productive in future research.

In the second research question (Is there a relationship between types of romantic exploration and anxiety and stress in emerging adults?), correlational analyses were run to assess these relationships, and ruminative exploration did relate to stress. Since romantic exploration is a construct newly operationalized through this study, previous literature does not specifically address the relationship between these two variables. However, the findings correspond to some of the conclusions from research on general identity development (Luyckx et al., 2008). The researchers for this study had hypothesized that intense breadth of exploration in this personal domain (romance) may provoke more anxiety than in general identity exploration, but the results of this study did not align with that finding (Anxiety: $r=.002$, $p=.985$; Stress: $r=.032$, $p=.705$). This caused the researchers to examine correlations between the other facets of romantic exploration and anxiety and stress. Ruminative exploration correlated positively with stress and was the only romantic exploration factor to do so ($r=.180$, $p=.031$). Due to the significance of anxiety and stress for this population, these results indicate that investigation of ruminative exploration and other variables or potential mediating influences may be other potential directions for future research.

The study's third research question (Do certain types of romantic exploration relate to certain career exploration paths for emerging adults?) assessed how dimensions of career exploration relate to dimensions of romantic exploration. First, intended systematic exploration correlated with romantic exploration in breadth ($r=.157$, $p=.047$). Second, self-exploration in career correlated with romantic exploration in breadth ($r=.254$, $p=.001$). Romantic exploration in depth also correlated with all three of the career exploration factors assessed in this study (EE: $r=.206$, $p=.010$, ISE: $r=.181$, $p=.022$, and SE: $r=.329$, $*p<.001$). These results support previous research that identifies these domains as being interconnected and interrelated. Multiple correlations were found within these analyses, which prompted the researchers to investigate the larger picture of relationships between all study variables (as shown in Table 3, Figure 1, and Figure 2).

LIMITATIONS

Due to the design and nature of this study, several limitations were present. First, the study was correlational; therefore, relationships could not be assessed over time. The longitudinal exploration actions of the emerging adults as well as long-term changes in anxiety, stress, or motivation could not be ascertained from the single time point of data. Also, correlational studies do not allow for causal relationships to be established between variables. Relationships between variables can be determined, but cause and effect conclusions cannot be known from this type of study design.

Also, respondents may inaccurately answer the measurement questions due to the potentially sensitive nature of the questions and subject matter (e.g., topics such as anxiety, stress, and romantic history). Similarly, due to the online format of the study, some respondents did not fully complete the study or choose to answer each item, which resulted in missing data.

Finally, certain eligible participants may have been missed due to not being in the courses approached for participation. Also, though college is a promising environment to study emerging adulthood due to the time period it affords for individuals to explore career and romantic options, emerging adults take multiple paths after high school. Thus, a certain portion of emerging adults' responses will not be able to be captured for the purposes of this study. However, this specific sample (undergraduate students) was chosen intentionally, as it represents a large cohort of emerging adults who are in a setting that requires continual career and relationship decisions. The time period that college affords for the exploration process in emerging adulthood is distinct and pivotal in the lives of many emerging adults. Graduate school also provides a period of time prior to entrance in the professional world, but entering a graduate program requires specificity and decisiveness on the part of the student to choose a definite vocational track. Since this study is primarily concerned with the explorational process and initial experiences in work and love, graduate students were excluded from this study. In turn, undergraduate students comprised this sample, as they are at a distinct time point and setting in which the initial exploration and decision-making processes in work and love are prioritized.

FUTURE RESEARCH

The constructs of love and work are clearly related during emerging adulthood, as indicated by previous research and this study. This study shed light on how specific explorational factors of both of these domains relate to one another. Future research could examine these relationships using larger sample sizes and more intensive statistical procedures, such as exploratory factor analysis, in order to identify more patterns related to adaptive and maladaptive variables or other relationships between variables. Further research into how commitment in these areas appears could also help clarify certain patterns in the exploration/commitment process. This research could also involve creating a complete

version of the DIDS-R (both exploration and commitment items rather than only exploration) to support this complete scale as a measurement of identity in these life domains with reliable scores. Further research should also assess the factor structure of the measurement and how revisions of the items affect factor structure.

Additionally, while the respondents in this study indicated anxiety and stress levels, the depression items from the DASS-21 were not included, as depression was not being assessed in this study. The researchers chose to approach the issues in this study through examining anxiety and stress because these symptoms may be precursors of depression that may potentially lead to future depressive and anxiety disorders. Consequently, if the relationships between anxiety, stress, and exploration in romance and career can be identified, this may allow programs and professionals to address these issues prior to emerging adults experiencing more significant concerns with depression. Future research could examine depression's relationship with the other variables being assessed in this study, and longitudinal studies with larger sample sizes assessing these relationships would provide the most insight on these issues, as well as how and when programs could target interventions for emerging adults in college before issues progress.

CONCLUSION

This correlational study could not provide causal inferences for the variables it assessed, but it can help clarify the relationships between anxiety, stress, romantic exploration, career exploration, and motivation in emerging adults. As previous research has shown, love and work are interrelated domains (Arnett, 2000). This study can support a programmatic approach for universities that prioritizes offering resources in both of these domains in a streamlined and connected manner. For example, counseling and wellness centers could offer assistance in navigating exploration and healthy reflection in both domains, perhaps with the assistance of career resource centers. These organizations could partner in tandem to promote healthy exploration in these areas and address more serious issues of ruminative exploration in romance, amotivation, anxiety, and stress before they lead to more significant episodes of struggle or crises during emerging adults' collegiate careers. These services cannot work in isolation and effectively address the relationships between both domains.

Along those same lines, programs in higher education need to address the professional and personal aspects of the individual in both domains of love and work. This study affirms those conclusions and helps explain the interrelationships between these domains. Emerging adults may view work as a calling in addition to a vocation (Hunter, Dik, & Banning, 2010, p. 178). This approach ties much personal significance to the process of exploring a career. Undergraduate programs need to coordinate resources within each major department to catch students in the exploration process and assist them in

navigating and, ultimately, choosing a career that is both vocation and calling, if that is what the emerging adult seeks. This process blends personal and professional reflection in the exploration process.

Students may feel reluctant to report feelings of significant stress or anxiety. However, indicators that correlate with these factors, such as ruminative romantic exploration, may be used to help identify students in need of potential support, resources, and engagement in order to prevent larger issues concerning mental health. Topics like romantic and career exploration can easily be broached in first year seminars or college courses interspersed throughout the four years focusing on interpersonal and personal development. These topics relate to the exact tasks that emerging adults are negotiating and consequently, if emphasized in tandem in college programs, offer an opportunity for thoughtful discussion and preventative identification of students who may need more support. Consequently, these topics may need to be broached and assessed together more frequently in college programs as a way to help students before significant mental health and motivation issues arise.

Ultimately, the results of this study provide potential characteristics for professionals to look for when working with emerging adults, such as ruminative romantic exploration, as a way to recognize issues with anxiety and stress before they potentially turn into more serious issues. The correlational analysis also provided potential groups of related variables that indicate further study is needed to understand potentially adaptive and maladaptive explorational processes for career and romance domains for emerging adults.

ABOUT THE AUTHORS:

*Kyra Speegle is a former employee and graduate student in the Family, Youth, and Community Sciences department at the University of Florida. Rosemary V. Barnett serves as a professor of youth development and public policy in the Family, Youth, and Community Sciences department at the University of Florida. Larry Forthun serves as an associate professor of human development also within the Family, Youth, and Community Sciences department at the University of Florida. Jeanna Mastrodicasa is the Associate Vice President for Operations with the University of Florida's Institute of Food and Agricultural Sciences, and is the co-chair of the NASPA Assessment, Evaluation, and Research Knowledge Community.

REFERENCES

Amatea, E. S., Cross, E. G., Clark, J. E., & Bobby, C. L. (1986). Assessing the work and family role expectations of career-oriented men and women: The life role salience scales. *Journal of Marriage and Family*, 48(4), 831-838.

American College Health Association (2013). Reference group undergraduate executive summary. *American College Health Association – National College*

Health Assessment II. Spring 2013. Hanover, MD: American College Health Association, 1-18.

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the depression anxiety stress scales in clinical groups and a community sample. *Psychological Assessment, 10*(2), 176-181.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens to early twenties. *American Psychologist, 55*(5), 469-480.

Aseltine, R., & Gore, S. (2005). Work, postsecondary education, and psychosocial functioning following the transition from high school. *Journal of Adolescent Research, 20*(6), 615-638.

Barnett, R. C., Brennan, R. T., Gareis, K. C., Ertel, K. A., Berkman, L. F., & Almeida, D. M. (2012). Conservation of resources theory in the context of multiple roles: An analysis of within- and cross-role mediational pathways. *Community, Work & Family, 15*(2), 131-148.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson, & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 113-133). New York, NY: Guilford Press.

Brown, T. A., Chorpita, B. F., Korotitsch, W., & Barlow, D. H. (1997). Psychometric properties of the depression anxiety stress scales (DASS) in clinical samples. *Behaviour Research and Therapy, 35*(1), 79-89.

Cinamon, R. G. (2006). Anticipated work-family conflict: Effects of gender, self-efficacy, and family background. *The Career Development Quarterly, 54*(3), 202-215.

Claxton, S. E., & van Dulmen, M. H. (2013). Casual sexual relationships and experiences in emerging adulthood. *Emerging Adulthood, 1*(2), 138-150.

Conley, C. S., Kirsch, A. C., Dickson, D. A., & Bryant, F. B. (2014). Negotiating the transition to college: Developmental trajectories and gender differences in psychological functioning, cognitive-affective strategies, and social well-being. *Emerging Adulthood, 2*, 195-210.

Crawford, J. R., & Henry, J. D. (2003). The depression anxiety stress scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology, 42*(2), 111-131.

DeAngelis, T. (2009). Life-saving outreach: University counseling centers are launching creative campaigns and retooling student services to prevent student suicides. *Monitor on Psychology, 40*(8), 62.

Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and

- access to mental health care in a university student population. *Medical Care*, 45(7), 594-601.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350-365.
- Furman, W., & Wehner, E. A. (1992). *Dating History Questionnaire*. Unpublished measure, Denver, Colorado: University of Denver.
- Gallagher, R. (2011). National Survey of Counseling Center Directors. *American College Counseling Association*. The International Association of Counseling Services, Inc., 1-50.
- Glenn, N. & Marquardt, E. (2001). Hooking up, hanging out, and hoping for Mr. Right: College women on dating and mating today. *Institute for American Values Special Report*. Retrieved from http://fmmh.ycdsb.ca/teachers/fmmh_mcmanaman/pages/mfhook.pdf
- Greene, H., & Greene, M. (2008, October 1). A considered life: Helping students make deliberate career choice. *University Business*. Retrieved from: <http://www.universitybusiness.com/article/considered-life>
- Guay, F., Vallerand, R., and Blanchard, C. (2000). On the assessment of situational intrinsic and extrinsic motivation: The situational motivation scale (SIMS). *Motivation and Emotion*, 24(3), 175-213.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *The British Journal of Clinical Psychology*, 44, 227-239.
- Hunter, I., Dik, B. J., & Banning, J. H. (2010). College students' perceptions of calling in work and life: A qualitative analysis. *Journal of Vocational Behavior*, 76(2), 178-186.
- King, C. E., & Christensen, A. (1983). The relationship events scale: A Guttman scale of progressing in courtship. *Journal of Marriage and Family*, 45(3), 671-678.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the depression anxiety stress scales (DASS) with the beck depression and anxiety inventories. *Behaviour Research and Therapy*, 33(3), 335-343.
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, 42, 58-82.

- Malanchuk, O., Messersmith, E. E., & Eccles, J. S. (2010). The ontogeny of career identities in adolescence. *New Directions for Child & Adolescent Development*, 2010(130), 97-110.
- McLaughlin, K. A. & Nolen-Hoeksema, S. (2011). Rumination as a transdiagnostic factor in depression and anxiety. *Behaviour Research and Therapy*, 49, 186-193.
- Nelson, L. J., & Padilla-Walker, L. M. (2013). Flourishing and floundering in emerging adult college students. *Emerging Adulthood*, 1(1), 67-78.
- Norman, G. (2010). Likert scales, levels of measurement, and the "laws" of statistics. *Advances in Health Sciences Education*, 15(5), 625-632.
- Oppenheimer, V. K. (2003). Cohabiting and marriage during young men's career development process. *Demography*, 40(1), 127-149.
- Peake, A., & Harris, K. L. (2002). Young adults' attitudes toward multiple role planning: The influence of gender, career traditionality, and marriage plans. *Journal of Vocational Behavior*, 60(3), 405-421.
- Ranta, M., Dietrich, J., & Salmela-Aro, K. (2014). Career and romantic relationship goals and concerns during emerging adulthood. *Emerging Adulthood*, 2, 17-26.
- Rosenthal, B., & Wilson, W. C. (2008). Mental health services: Use and disparity among diverse college students. *Journal of American College Health*, 57(1), 61-68.
- Shulman, S., & Connolly, J. (2013). The challenge of romantic relationships in emerging adulthood: Reconceptualization of the field. *Emerging Adulthood*, 1(1), 27-39.
- Shulman, S., Laursen, B., & Dickson, D. J. (2013). Gender differences in the spillover between romantic experiences, work experiences, and individual adjustment across emerging adulthood. *Emerging Adulthood*, 2, 36-47*. *
- Sneed, J., Hamagami, F., McArdle, J., Cohen, P., & Chen, H. (2007). The dynamic interdependence of developmental domains across emerging adulthood. *Journal of Youth Adolescence*, 36, 351-362.
- Society for the Study of Emerging Adulthood. (2014) About SSEA. Retrieved from <http://ssea.org/about/index.htm>
- Stanley, S. M., Rhoades, G. K., & Markman, H. J. (2006). Sliding versus deciding: Inertia and the premarital cohabitation effect*. *Family Relations*, 55(4), 499-509.
- Stumpf, S. A., Colarelli, S. M., & Hartman, K. (1983). Development of the career exploration survey (CES). *Journal of Vocational Behavior*, 22(2),

191-226.

Vignoli, E., Croity-Belz, S., Chapeland, V., de Felipis, A., & Garcia, M. (2005). Career exploration in adolescents: The role of anxiety, attachment, and parenting style. *Journal of Vocational Behavior, 67*(2), 153-168.

Wilkinson, P. O., Croudace, T. J., & Goodyer, I. M. (2013). Rumination, anxiety, depressive symptoms and subsequent depression in adolescents at risk for psychopathology: a longitudinal cohort study. *BMC Psychiatry, 13*(1), 250.

Willoughby, B. J., Medaris, M., James, S., & Bartholomew, K. (2015). Changes in marital beliefs among emerging adults: Examining marital paradigms over time. *Emerging Adulthood, 3*(4), 219-228.

Willoughby, B. J., & Hall, S. S. (2014). Enthusiasts, delayers, and the ambiguous middle: Marital paradigms among emerging adults. *Emerging Adulthood, 3*(2), 123-135.