

What does it mean to belong? An in-depth look at the effects a sense of belonging
in emerging adulthood has on coping

by

Chelsey Nicole Torgerson

B.S., North Dakota State University, 2009

M.A., Appalachian State University, 2013

AN ABSTRACT OF A DISSERTATION

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Abstract

Belonging to groups has been found to lead to many positive outcomes, including acting as a buffer for maladaptive coping behaviors, in the lives of emerging adults. Less is known about how belonging may act as a protective factor to engaging in unhealthy behaviors, less is known in regards to how group coping norms of the groups emerging adults belong to impact the motivations for coping and subsequently coping mechanisms. Further, belonging is a necessary component to life; however, less is known about how emerging adults understand what it means to belong. This dissertation includes two studies focused on belonging in emerging adulthood. Both studies utilized participants recruited from Amazon Mechanical Turk (Mturk). In study 1, a quantitative study ($N = 438$) was conducted to further explore how group coping norms moderates the associations between group belonging and individual motives for coping. Additionally, coping behaviors were included to understand how belonging to groups is associated with coping motives and coping behaviors. Results from study 1 indicated that while belonging was not significantly predictive of motivations and functions of using specific behaviors, unhealthy group coping norms were positively predictive of motivations for and functions of behaviors for coping purposes. Moreover, the interaction term (belonging X unhealthy group norms) yielded one significant path indicating that belonging to groups may be protective of using sex to cope even when unhealthy group norms are present. Additionally, belonging was negatively associated with drug frequency and positively associated with healthy supportive and self-soothing coping. Further, several coping motives were positive predictors of both unhealthy and healthy coping behaviors. In study 2, a qualitative study ($N = 422$) using open-ended questions was conducted to hear from emerging adults about their experiences of belonging. A thematic analysis approach was used to code participant responses before

categorization and identifying themes. Participant responses indicate that emerging adults belong to groups based on personal identity, religious and spiritual affiliations, life stage and circumstances, educational group associations, professional association, significant relationships, social change initiatives, shared interests and activities, online connections. Moreover, themes outlining what it means to belong to emerging adults include embraced, increased self-confidence, greater life meaning, experience of a safety net, commonalities among group members, relationship component to group belonging, and fitting in and conformity. Before belonging to groups, results indicate that becoming a member of the group is necessary. Reasons for joining groups, group membership through intentionality, formal group entrance process, group membership as a natural process, group membership through identity formation, and group membership in an online context are all components of joining groups for emerging adults. Participants described the process of belonging with the following themes: building investment and intimacy, messages of inclusion, developing connection and community, mutual support, positive feelings that foster belonging, and individual growth and development and the process of belonging. Finally, participants identified what they get from belonging to groups which included a sense of belonging, feeling included and a part of something, personal growth needs, emotional needs, communal needs, work needs, and giving back and volunteering needs. The findings of this qualitative study indicate a need to further understand the belonging phenomenon in emerging adults across many populations. Research, clinical, and practical implications are outlined and provided.

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Approved by:

Major Professor
Dr. Amber Vennum

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Chapter 1 - Introduction

Human connection, an intrinsic human desire, is needed in order to thrive (Baumeister & Leary, 1995; Lieberman, 2013). Feeling as though one belongs to a group has been associated with reductions in stress (Mahmoud, 2012; Nuttman-Schwartz & Dekel, 2009) and mental health symptoms (Hagerty, Williams, Coyne, & Early, 1996; Kawachi & Berkman, 2001; Mahmoud, 2012; Torgerson, Love, & Vennum, In press). Moreover, the groups we belong to influence the ways we understand, identify, experience, make meaning, and interact with ourselves and the world (Tajfel & Turner, 1979). This is particularly salient during adolescence, when, in addition to rapid physical growth, strides in cognitive and emotional processing are occurring, moving identity development to the forefront of the adolescent experience (Erickson, 1950, 1968). The formation of identity, beliefs, values, and a sense of self are all occurring at once as adolescents gain autonomy from parents (Rice & Doglin, 2008), seek greater input and social support from peers (Buhrmester, 1996), and start forming their own understanding of the world around them.

This quest for self continues through emerging adulthood, the developmental period spanning from 18-29 (Arnett, 2007), when people focus on “examin[ing] the life possibilities open to them and gradually arrive at more enduring choices in love, work, and worldviews” (Arnett, 2000, p. 479). The five markers of emerging adulthood include identity exploration (especially in intimate/love relationships, world views, and future careers), instability, being self-focused but not in a selfish way, feeling in-between adolescence and adulthood, and having a sense of optimism for the future (Arnett, 2004). The many transitions during this time of life can be stressful and involve ongoing re-evaluation of identity (Arnett, 2004; 2007), leading emerging adults to rely on a variety of strategies to cope. Although research indicates that feeling as though one belongs to a group is associated with positive mental health (Hagerty, Williams,

Coyne, & Early, 1996; Kawachi & Berkman, 2001; Mahmoud, 2012; Torgerson, Love, & Vennum, In press), and reduced substance use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015; Torgerson, Love, & Vennum, In Press), there have been no known studies on what it means to belong, a necessary step for understanding how to foster a sense of belonging as a protective mechanism against maladaptive coping for adolescents and emerging adults.

Accordingly, it is important to understand what facilitates the process of identifying with a group and feeling as though one belongs as well as how group characteristics may influence how emerging adults view stressors and their options for coping with those stressors.

Chapter 2 - Review of Literature

Social identity has been described as “that part of an individual's self-concept which derives from his knowledge of his membership in a social group (or groups) together with the emotional significance attached to that membership” (Tajfel, 1974, p. 69). The more a person is attached to a group, the greater the influence of that group on the person’s self-identification process. We choose the groups we want to belong to based on how in-sync the group’s characteristics are with characteristics we see in ourselves (Jackson, Lemay, Bilkey, & Halberstadt, 2017). As humans come to identify with the groups they have chosen to belong to, the comparison of people and behaviors of the in-group and out-group (Turner, 1985) influences the ways they interact with the world (Tajfel & Turner, 1979). Self-categorization theory, an extension of social identity theory, posits that the categorization of others into in-group (“us”) and out-group (“them”) labels leads to an assessment of self based on this group identification process (Turner, 1985). Adolescents who report stronger identification to their in-group are less likely to struggle with coping with developmental tasks and are more likely to receive support from their peers (Palmonari, Pombeni, & Kirchler, 1990); however, less is known about this identity formation and coping process through groups during emerging adulthood.

In-group Belonging during Emerging Adulthood

The term friendship has been defined as “a relationship involving voluntary or unconstrained interaction in which the participants respond to one another...as unique individuals,” with mutual interest and concern (Wright, 1984, p. 119). Friendships are frequently categorized as casual, close, or best friends (Hays, 1988) with the progression of friendship intensity being linked to the breadth and depth of interactions between people (Hays, 1984). While gender differences typically exist in friendship formation and maintenance, both males

and females attach similar meanings and significance to close friendships (Zarbatany, Conley, & Pepper, 2004).

Friendship formation and in-group belonging often begins in childhood (Erickson, 1950; 1963). This process progresses as adolescents begin belonging to one core group of friends (Brown, 1990) before eventually identifying with many groups at once. This process of maintaining and finding groups one feels a sense of belonging to can often increase in complexity as adolescents transition into emerging adulthood (Oswald & Clark, 2003) due to the life transitions common during this period (e.g., going to college, moving away from home, selecting a career, deciding to settle down with a family). These transitions may cause some degree of stress and re-evaluation of identity (Arnett, 2004; 2007), leading emerging adults to rely on a variety of strategies to cope. Throughout this period, friends frequently become a source of support (Allan, 2008) and offer young adults connection, intimacy, emotional security, affection, companionship, validation, reliable alliance, and help (Barry, Madsen, & DeGrace, 2015).

People have a tendency to seek out friends and relationships based on perceived similarities to their own characteristics (Jackson et al., 2017). Feeling as though one belongs to a group of similar others has been linked to higher levels of happiness (Leung, Kier, Fung, Fung, & Sproule, 2011), increased confidence (Drolet, Arcand, Ducharme, & Leblanc, 2013), and a greater sense of life meaning (Lambert, Stillman, Hicks, Kamble, Baumeister, et al., 2013). Additionally, a sense of belonging has been associated with mental health symptom improvement (Hagerty, Williams, Coyne, & Early, 1996; Kawachi & Berkman, 2001; Mahmoud, 2012), reduced alcohol use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015, Torgerson, Love, & Vennum, In press), lower levels of distress (Mahmoud, 2012; Nuttman-

Schwartz & Dekel, 2009), and a decreased likelihood of experiencing internalized and externalized mental health problems (Newman, Lohman, & Newman, 2007).

Cultural Influences on Friendship and Belonging

Culture plays an important role in belonging, and whether or not individuals are willing to seek support from others in times of need (Kim, Sherman, & Taylor, 2008). College students' perceptions of belonging can be influenced by whether they belong to a dominant (i.e., privileged) population or a minority population (Vaccaro & Newman, 2016). More specifically, privileged students may identify a sense of belonging through feeling comfortable and fitting in, while minority students may find it more important to feel safe, respected, and as though they are not the only one in order to feel a sense of belonging (Vaccaro & Newman, 2016).

Racial background may impact peer group formation, therefore potentially influencing the process of belonging to peer groups. African Americans have been found to spend less time with their friendship networks and also rely on them less (Taylor, Chatters, Woodward, & Brown, 2013), perhaps because people of color tend to include more family than friends in their social circles (Ajrouch, Antonucci, & Janevic, 2001). African Americans have been found to experience kinship relationships – or relationships that are “like family” but do not include blood relation, more than Non-Hispanic White people (Taylor, Chatters, Woodward, & Brown, 2013). Moreover, African Americans have been found to utilize family and extended family as sources of reciprocal support than friendship groups or religious groups (Taylor, Mouzon, Nguyen, & Chatters, 2016).

Biological sex may also account for variance in the process of friendship development and maintenance. Specifically, females describe their friendships as having more positive affect, more frequent discussion and more activities than males (Pulakos, 1989). Research findings also

indicates that women are more likely to rely on friends for emotional support while men are more likely to build friendships around shared activities (Aukett, Ritchie, & Mill, 1988; Martinez-Hernaez, Carvellar-Maicas, DiGiacomo, & Ariste, 2016).

Additionally, gender and sexual minority college students are likely to find connection and belonging on college campuses through LGBTQ student or community organizations or online platforms such as Twitter (Nicolazzo, Pitcher, Renn, & Woodford, 2017). Moreover, the support LGBTQ people receive from their peer groups is especially important for working through experiences of systemic gender and sexuality oppression (Nicolazzo, Pitcher, Renn, & Woodford, 2017). Sexual minorities' feelings of belonging have been explored with high school (e.g., Kosciw, et al., 2016) and college (e.g., Nicolazzo, Pitcher, Renn, & Woodford, 2017) populations; however, less is known about the experiences of belonging of LGBTQ emerging adults who do not continue on to higher education. Experiences of belonging may become even more complicated when people's identities intersect (e.g. someone who identifies as both black and gay) (Christensen, 2009).

Class status has been found to be associated with involvement with friendship groups in adulthood; however, findings are mixed and not specific to emerging adulthood. For example, people with higher incomes have been found to belong to more groups (Stewart, Makwarimba, Reutter, Veenstra, & Raphael, et al., 2009) and be more involved in their friendship groups (Miche, Huzhold, & Stevens, 2013; Taylor, Mouzon, Nguyen, & Chatters, 2016). Moreover, previous research has indicated that African American adults reporting lower income were more likely to receive support from their friends than family members (Taylor, Mouzon, Nguyen, & Chatters, 2016). These findings indicate that the impact of socio-economic status on belonging varies in adults, suggesting the need to further understand this phenomenon in emerging adults.

Additionally, the continued development and advancement of technology, such as social media platforms (e.g., Facebook, Twitter, Instagram, Snap Chat) and online video gaming continue to change the way emerging adults make and maintain friends. In 2015, it was estimated that half of American adults used social media platforms daily, with 90% of young adults aged 18-29 reporting daily social media usage (Perin, 2015). Moreover, individuals aged 18-24 are more likely to use social media compared to individuals in their late twenties (Smith & Anderson, 2018). Interestingly, 83% of teens that use social media indicate that they feel more connected to their friends due to the information provided in online spaces (Lenhart et al., 2015); however, less is known about this dynamic for emerging adults. While the use of social media continues to rise in emerging adults, less is known about the sense of belonging facilitated in online platforms, and whether or not true belonging can be fostered in such ways.

The Current Investigation

Although previous research indicates the importance feeling a sense of belonging to a group has on mental health (Hagerty, Williams, Coyne, & Early, 1996; Kawachi & Berkman, 2001; Mahmoud, 2012; Torgerson, Love, & Vennum, In press), and reduced substance use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015; Torgerson, Love, & Vennum, In Press), there have been no known studies on what it means to belong, a necessary step for understanding how to foster a sense of belonging as a protective mechanism against maladaptive coping for adolescents and emerging adults. Therefore, two studies were conducted with the following purposes. First, since we need to better understand the ways in which a fostered sense of belonging to a group, as well as group coping norms, influence healthy or unhealthy coping strategies when dealing with life stress during emerging adulthood, the purpose of the first study is to identify the extent to which group belonging influences individual coping mechanisms

when dealing with life stress moderated by group coping norms. Moreover, this study seeks to understand how the degree to which a person uses a behavior to cope influences specific behavior frequencies. Additionally, in order to facilitate a sense of belonging for emerging adults, it is critical to hear from emerging adults how they came to belong to the groups they identify with, what motivated them to belong to these groups, and what benefits they derive from group membership. Therefore, the purpose of the second study was to gather preliminary qualitative data via open-ended responses from emerging adults to better understand the process of belonging in emerging adults and to inform future research.

Chapter 3 - Study 1

As emerging adults continue to explore their identity, experience multiple life transitions, and feel in-between a teenager and an adult (Arnett, 2004), it is not uncommon for emerging adults to feel stress, pressure, confusion, and uncertainty (Nelson, Willoughby, Rogers, & Padilla-Walker, 2015). Each task of emerging adulthood has been associated with various healthy and unhealthy patterns of behavior including substance use and issues in regulating emotions (Nelson, Willoughby, Rogers, & Padilla-Walker, 2015). Several destructive coping mechanisms arise during adolescents and grow in prevalence and severity throughout emerging adulthood: substance use (CBHSQ, 2016), casual sex (Halpern & Haydon, 2012), and non-suicidal self-harm (Nock & Prinstein, 2004). Although feeling as one belongs to a group can reduce the use of detrimental coping strategies such as alcohol use (e.g., Thorlindsson & Bernburg, 2006), feeling as though one belongs to a group or relationship has also been associated with *increased* externalized behaviors such as substance use in adolescents (Mayberry, Espelage, & Koenig, 2009) and risky sexual behaviors (Dewitte, 2012).

The Theory of Normative Social Behavior (Rimal & Real, 2005) suggests that behaviors endorsed by the group may lead individuals to adapt to group norms and begin enacting these behaviors (both healthy or unhealthy) to gain approval (Terry & Hogg, 1996). Such group norm experiences have the potential to impact how emerging adults define their identity and the behaviors associated with their sense of self (Terry & Hogg, 1996). Therefore, examining the ways in which a sense of belonging interacts with group norms to influence coping is an important next step in exploring strategies for increasing a sense of belonging and reducing unhealthy coping mechanisms such as substance use, sex, and non-suicidal self-harm in emerging adults.

Group Coping during Emerging Adulthood

Coping is an umbrella term used to describe the processes individuals go through when faced with stressful experiences (e.g., Beutler, Moos, & Lane, 2003). Additionally, the ways that individuals decide to deal with stress is determined by their assessment of the perceived threat or stressor (primary appraisal), and the assessment of available resources (secondary appraisal; Lazarous & Folkman, 1984). Due to the potential influence the groups individuals belong to can have on the ways people understand, identify, experience, make meaning, and interact with self and others (Tajfel & Turner, 1979), the processes emerging adults use to cope with these compounding stressors may be strongly impacted by the quality of their friendships, the coping strategies used by the groups they belong to, and to what extent they feel they belong to these groups. Although this process has been explored in adolescent peer group experiences (e.g., Palmonari, Pombeni, & Kirchler, 1990; Thorlindsson & Bernburg, 2006), less is known about how emerging adult peer group experiences influence coping.

Examples of coping strategies that have been found to result in effective management of stressors include mindfulness or meditation, grounding techniques, exercising, hobbies, relying on friends for emotional support, engaging in therapy services, using humor, or relying on spiritual or religious beliefs and practices (Carver, 1997). Unhealthy coping strategies might include alcohol and drug use, risky sexual behaviors, non-suicidal self-harm (i.e., cutting, burning), and eating disorders such as binge eating or restricting food intake among others. Additionally, males and females appear to cope with problems differently in that females are more likely to engage in support seeking coping behaviors while males are more likely to engage in problem-focused or avoiding coping (Tamres, Janicki, and Helgeson, 2002).

Using Groups to Cope

“Human beings of all ages are happiest and able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise” (Bowlby, 1979, p. 103). Throughout the animal kingdom it is evident that belonging to a group offers protective functions for those who belong (Ainsworth, 1989, p. 713). Belonging to a group affords the members a shared allocation and expansion of resources to deal with life stressors that can potentially reduce the negative experience of feeling overwhelmed by the perceived enormity of the stressors (Lyons, Mickelson, Sullivan, & Coyne, 1998). This process is referred to as communal coping and is defined as “the pooling of resources and efforts of several individuals (e.g., couples, families, groups, communities) to confront adversity” (Lyons, et al., 1998, p. 580). Communal coping occurs when someone in the group identifies a stressor as “our” problem rather than “my” problem or as “our” responsibility even if the problem may be only affecting an individual member (Afifi, Hutchinson, & Krouse, 2006; Berg, Meegan, & Deviney, 1998; Lyons, et al., 1998). The appropriate level of ownership and responsibility for coping with the stressor is determined by both the context/type of stressor as well as group norms, practices, behaviors, power, and shared understanding (Afifi, Hutchinson, & Krouse, 2006, p. 399). Group bonds may strengthen and cohesion may be experienced through the process of relationship maintenance and development whether communal coping occurs with significant others or in the context of the larger community (Lyons, et al., 1998). Finally, communal coping offers opportunities for social validation and the feelings associated with collectively overcoming adversity with others (Lyons, et al., 1998). Communal coping has been studied in the context of couple relationships (Lewis et. al., 2007) in communities that have collectively experienced natural disasters

(Kaniasty & Norris, 1997) and African American emerging adults coping with experiences of discrimination and oppression (Utsey, Adams, & Bolden, 2000); however, less research has been done on how emerging adults use the groups in which they belong to as they cope with stressors.

Group norms and coping. Belonging to a group may not always result in increases in constructive coping mechanisms and has been found to occasionally increase externalized behaviors such as substance use in adolescents (Mayberry, Espelage, & Koenig, 2009) and risky sexual behaviors (Dewitte, 2012). It is important to turn to the notion of peer group norms here. Motivated by the human desire to belong, people may choose to engage in the behaviors as a way to gain group membership while group members may choose to engage in in-group normative behaviors to maintain group membership. In fact, the Theory of Normative Social Behavior (Rimal & Real, 2005) posits that normative behaviors are established by social approval, the benefits to self and others, and group identity. Not surprisingly, the expression of group norms may be done through pressuring or coercive means (Amiot, Sansfacon, & Louis, 2013) when an individual group member is considering whether or not to ascribe to group behavioral. Previous behaviors endorsed by the group may lead individuals to adapt to group norms and begin enacting these behaviors (both healthy and unhealthy) to gain approval (Terry & Hogg, 1996). Such group norming experiences have the potential to impact how emerging adults define their identity and the behaviors associated with their sense of self (Terry & Hogg, 1996).

Healthy behaviors may also be shaped by normative social behaviors, although less is known about the situations in which group norms offer healthy coping alternatives for group members. Accordingly, continued investigation is needed in order to understand how group

norms interact with a sense of belonging to influence healthy and unhealthy coping during emerging adulthood.

Unhealthy Coping Mechanisms in Emerging Adulthood

Prevalence rates indicate that the initiation of using substances (CBHSQ, 2016) engaging in sexual activity (Halpern & Haydon, 2012), and practicing non-suicidal self-injury (Nock & Prinstein, 2004) is likely to happen in adolescence and continue through emerging adulthood. An important distinction must be made here that it is not simply the act of engaging in substance use and sexual behaviors that are risky; rather, it is the use of substances, displacing emotions into sexual relationships (e.g. confusing sex with love or intimacy), and using non-suicidal self-injury as coping mechanisms that can lead to deleterious outcomes. Therefore, the motivations of using substances and sex as well as the functions of self-harm are essential to understanding the coping processes of emerging adults. The following paragraphs provide an explanation of how substance use, sex, and non-suicidal self-harm can each serve as coping mechanisms in the lives of emerging adults.

Substance use. The self-medication hypothesis of substance use posits that substance use is a disorder rooted in self-regulation- individuals use substances to cope with intense or negative emotions (Khantzian, 1997). More specifically,

“self regulation problems that are central to addictive vulnerability involve the following: an inability to recognize and regulate feelings; an inability to establish and maintain a coherent, comfortable sense of self and self-esteem; an inability to establish and maintain adequate, comforting, and comfortable relationships; and an inability to establish and maintain adequate control/regulation of behavior, especially self-care" (Khantzian, 2012, p.275).

Additionally, the self-medication hypothesis argues that using substances like alcohol and illicit drugs can help ease the symptoms associated with a lack of emotion regulation in times of stress. Interestingly, males have been found to be more likely than females to use substances as a coping strategy when dealing with stress (e.g., Esper & Furtado, 2013).

It is important to note that a person's drug of choice is a personal preference since each drug has different effects on the human body (i.e., stimulants vs. depressants) (Khantzian, 1997). The affect an individual is attempting to alter will likely determine which drug is used and for what reasons. Although using substances does not automatically lead to long-term addiction, using substances to cope has been found to be associated with an increased risk of problem drinking (Cooper, 1994) and substance abuse. Short and long-term consequences of substance use include dropping out of high school (Diego, Field, & Sanders, 2003; Vander Stoep et al., 2003) and therefore not advancing into higher education. Additionally, research has found that substance use is associated with a decrease in attention span and memory recall (Thoma, Monning, Lysne, Ruhl, & Pommy et. al., 2010), and brain development (NIDA, 2007). Social consequences of use including problems at work, issues with family members, financial stress, and legal issues are also widely known. Finally, alcohol use behaviors differ by sex with males being more likely than females to report greater binge drinking, heavy alcohol use, (SAMHSA, 2015).

Risky sexual behaviors. In order to examine sexual experiences as a coping strategy, we must continue this conversation through an attachment-based lens. Whether sex is being used to cope depends on the type of attachment style individuals possess. People with secure attachments are the least likely to use sex to cope and are best able to approach sexual experiences in a healthy and relaxed manner (Dewittle, 2012). Individuals with anxious or avoidant attachment

styles are more likely to use sex to soothe their own anxieties and emotions. Specifically, anxiously attached individuals are more likely to engage in sex as a way to “regulate fear of rejection, fear of abandonment, fear of being unloved, need for reassurance, and need for emotional closeness” (Dewittle, 2012, p. 118). In other words, people with anxious attachment styles are likely to engage in sex as a way to soothe their anxieties, and will likely displace feelings of love and confuse sex with love. People with avoidant attachment styles are more likely to use sex to cope with stress and to increase self-confidence (Dewittle, 2012). Sex to cope is evident in the adult population as discussed above; however, less is known about this phenomenon in the emerging adult population, which is unfortunate since initiation of sexual intercourse happens frequently during adolescence (Halpern & Haydon, 2012) and continues into emerging adulthood.

Self-harm. Non-suicidal self-injury is the only coping skill discussed here that is solely described as hazardous. Both males and females report engaging in non-suicidal self-harm and previous research indicates that biological sex is not a significant predictor of non-suicidal self-harm (Klonsky, 2011). While the intentions of people engaging in self-injurious behaviors frequently differ from individuals who wish to end their lives via suicide, the risk of accidental suicide still exists for individuals who engage in self-harm (Hawton et al., 2012). Cutting or scratching the skin is the most common form of self-harm, followed by burning, hitting, and biting (Klonsky, 2011). The purpose of non-suicidal self-harm differs for many; however, the most common reasons cited include: emotional release (Klonsky, 2011; Saraff, Trujillo, & Pepper, 2015), stopping bad feelings (Klonsky, 2011; Saraff, Trujillo, & Pepper, 2015), to feel something other than numb or empty (Klonsky, 2011; Saraff, Trujillo, & Pepper, 2015), to feel pain (Saraff, Trujillo, & Pepper, 2015), to punish self (Klonsky, 2011; Saraff, Trujillo, & Pepper,

2015), and to escape (Saraff, Trujillo, & Pepper, 2015). Short and long-term consequences of engaging in non-suicidal self-injury include poor interpersonal relationships for non-suicidal self-harmers with borderline personality tendencies (NIMH, 2017), as well as social isolation (Leibenluft et al., 1987). Additionally, there are several physical consequences of non-suicidal self-injury including scar tissue damage and injuries to nerves, blood vessels, and muscles (e.g., Mayo Clinic, 2017). While the motivation of non-suicidal self-injury is commonly not suicide, death by suicide remains a possibility (Zahl & Hawton, 2004).

Again, it is important to reiterate that the act of using substances or engaging in sex in adolescence and emerging adulthood is not necessarily risky. These behaviors become increasingly unhealthy and risky when these coping mechanisms, that at one point in time were purposeful and helpful, eventually become maladaptive and lead to long-term health consequences. In order to determine more reliable preventative measures, a better understanding of how group belonging and group norms, both malleable factors, influence the coping strategies used by emerging adults.

Present Study

The purpose of this study is to identify the extent to which group belonging influences individual coping mechanisms when dealing with life stress moderated by group coping norms. Moreover, this study seeks to understand how the degree to which a person's motivations to use a behavior to cope influences specific behavior frequencies. Additionally, since previous research has found significant associations between motivations of using substances and motivations for engaging in sex (Patrick & Maggs, 2010), it is important to assess the overlapping influence that the coping motives behind a specific behavior may have on the frequencies of diverse potential coping behaviors. The following hypotheses were explored:

- H1: Feeling as though one belongs to a group would be negatively associated with the motivations for unhealthy coping strategies (e.g., substance use, sex, and non-suicidal self-injury).
- H2: Feeling as though one belongs to a group would be directly negatively associated with risky coping behaviors such as risky sexual behaviors, alcohol use, drug use, and self-harm and directly positively associated with healthy coping mechanisms.
- H3: Feeling as though one belongs to a group would be negatively associated with risky coping behaviors such as risky sexual behaviors, alcohol use, drug use, and self-harm indirectly through increased motivations to use unhealthy strategies to cope (e.g. substance use, sex, and non-suicidal self-injury).
- H4: Feeling as though one belongs to a group would be positively associated with healthy coping behaviors indirectly through increased motivations to use unhealthy strategies to cope (e.g. substance use, sex, and non-suicidal self-injury).
- H5: Motivations to use unhealthy strategies to cope (e.g. substance use, sex, and non-suicidal self-injury) would be positively associated with risky coping behaviors and negatively associated with healthy coping mechanisms.
- H6: Perceived unhealthy group coping norms would moderate the association between belonging and the motivation to use unhealthy coping strategies engaged in by emerging adults.

Method

Procedure and Participants

450 participants were recruited using Amazon's Mechanical Turk (Mturk), an online crowd-surfing platform, due to the greater diversity of the sample as compared to other internet

or university samples (Buhrmester, Kwang, & Gosling, 2011). Moreover, previous studies have found that data collected via Mturk yields data that are at least as reliable as data using traditional methods (Buhrmester, Kwang, & Gosling, 2011). Participants were able to view a short description of the survey, including key words that represented included variables, on Mturk before taking the survey in Qualtrics. Qualification requirements for this survey included U.S. citizenship, living within the U.S., and being between the ages of 18 and 29. If participants indicated an age outside of this range, and therefore did not qualify, they were thanked for their time before exiting out of the survey. Participants meeting these qualifications continued with the survey, and were compensated \$1.00 upon the completion of the survey. The online survey had an estimated completion time of 20-40 minutes due to the number of measures used as well as the open-ended questions being asked of the participants. Typical reimbursement for Mturk HITs run between \$2.00-\$3.00 per hour (Amazon Mechanical Turk, 2017), making a compensation of \$1.00 for completing this survey an appropriate amount. The \$1.00 compensation amount is appropriate. To help ensure data quality, participants responded to a seriousness question prior to completing the survey (Aust, Diedenhofen, Ullrich, & Musch, 2013) and several attention check questions throughout the survey (Kittur, Chi, & Suh, 2008). Data from participants who responded to the seriousness question with anything other than “very” were deleted. Additionally, any participant who answered an attention-check question wrong was also deleted prior to data analyses resulting in a total of 438 participants in this study. Participants in this study were predominantly Caucasian, female, and heterosexual. See Table 1 for sample demographics.

[Table 1 about here]

Measures

Perceptions of belonging. The 16-item Perceived Group Inclusion Scale (Jansen, Otten, Van Der Zee, & Jans, 2014: Appendix C) assessed group membership, group affection, room for authenticity, and value in authenticity. Participants were asked to think of the group they associated with the most when answering items on a 5-point Likert Scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Belonging ($\alpha = .95$) was computed by averaging the group membership ($\alpha = .91$; example item: The group "... gives me the feeling that I belong") and group affection ($\alpha = .91$; example item: The group "...appreciates me") subscale items. Higher scores reflected of a stronger sense of belonging.

Unhealthy group coping norms. In order to assess unhealthy group coping norms, participants were asked to think about the group they identified with the most (Appendix D), and indicate how likely the group as a whole was to cope with stress by using substances such as alcohol, engaging in self-destructive behaviors (e.g., self-harm), or engaging in risky sexual behaviors on a 5-point Likert scale from 1 (*Very unlikely*) to 5 (*Very likely*). An exploratory factor analyses was conducted in SPSS which yielded factor loadings ranging from .79-.90. The three item responses were averaged and standardized with higher scores indicating increasingly unhealthy group coping norms ($\alpha = .80$).

Using substances to cope. The five-item coping subscale of the Motivations for Alcohol Use Scale (Cooper, 1994: Appendix E) was used to measure coping motives for substance use. Participants were asked to indicate how often they drink or use drugs "*to relax*" or "*to forget your worries*" on a 5-point Likert scale ranging from 1 (*Never/Almost Never*) to 5 (*Almost Always/Always*). Items were averaged with a higher score indicating a greater use of substances for coping ($\alpha = .94$).

Frequency of alcohol use. Participants were asked to identify their frequency of using alcohol (beer, wine, or liquor) over the course of the previous 30 days using a 6-point Likert scale (Appendix F) ranging from 0 (*Never*) to 5 (*Nearly Every Day*). This alcohol question was adapted from The National Longitudinal Study of Adolescent to Adult Health (AddHealth; Harris & Udry, 1994-2008). Alcohol frequency scores reflect a higher frequency of alcohol use.

Frequency of drug use. Participants were asked to identify drug use frequency over the previous 30 days using a 6-point Likert scale (Appendix F) ranging from 0 (*Never*) to 5 (*Nearly Every Day*). Substance options included “marijuana”, “psychotherapeutic drugs”, “pain killers”, “tranquilizers”, “stimulants”, “methamphetamines”, “sedatives”, “cocaine”, “heroin”, and “hallucinogens”. These frequency questions were adapted from The National Longitudinal Study of Adolescent to Adult Health (AddHealth; Harris & Udry, 1994-2008). Drug use frequency was computed by selecting the maximum endorsed frequency from the list of drugs. Higher scores are reflective of a higher frequency of drug use.

Using sex to cope. The 5-item coping subscale of the Motivations for Sex Scale (Cooper, Shapiro, & Powers, 1998: Appendix G) was used to measure coping purposes for engaging in sexual activities. Participants were first asked to indicate if they have or have not engaged in sexual intercourse (oral, anal, or vaginal). Only participants who indicated a history of sexual intercourse (oral, anal, or vaginal), completed this measure. Participants were asked to rate how frequently they have sex for reasons such as “*deal with disappointment*”, “*to feel better when lonely*”, and “*cheer self up*” on a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Almost always-always*). Items were coded and averaged such that higher scores reflected a stronger endorsement of coping motives for sex ($\alpha = .89$).

Risky sexual behaviors. Risky sexual behaviors were measured using 23 questions from the Sexual Risk Survey (SRS; Turchik & Garske, 2009: Appendix H). This questionnaire asked participants to provide the frequency of specified sexual behaviors over the previous six months. A definition of sex (oral, anal, vaginal) is provided unless otherwise noted in each specific question. Due to a lack of additional data to understand the context of sexual behavior engagement (i.e., engaging in sex without a condom is not risky if a couple is trying to conceive), seven questions were chosen to represent risky behavior, including: “*How many times have you gone out to bars/parties/social events with the intent of “hooking up” and engaging in sexual behavior but not having sex with someone?*”, “*How many times have you had a sexual encounter you engaged in willingly but later regretted?*”, and “*How many times have you or your partner used alcohol or drugs before or during sex?*” The creators of the SRS indicated the necessity of creating a variable based on participant responses (Turchik & Garske, 2009); therefore participants who indicated they had not engaged in any sexual activities before were coded to be zero. The researcher summed the frequencies of responses to the seven risky questions and then created the variable based on response frequency. For this study, due to the skewed response pattern, the risky sexual behaviors variable was coded as follows: 0 = 0 instances, 1 = 1-2 instances, 2 = 3-5 instances, 3 = 6-9 instances, 4 = 10+ instances.

Frequency of self-harm. The Inventory of Statements about Self-injury (ISAS; Klonsky & Glenn, 2009; Klonsky & Olino, 2008: Appendix H & Appendix I) is a two-part questionnaire designed to understand the frequency and functions of non-suicidal self-harm. The first question (Appendix H) in this measure asked participants to estimate the number of times they have performed each type of self-harm without suicidal intent (e.g., *cutting, burning, swallowing dangerous substances*). Participants who indicated they had not engaged in any self-harm

activities were coded as zero. The researcher summed the frequencies of responses to the self-harm frequency questions and, to normalize the variable, recoded them as: 0 = 0 instances, 1 = 1-2 instances, 2 = 3-5 instances, 3 = 6-9 instances, 4 = 10+ instances.

Intrapersonal and interpersonal functions of self-harm. The Inventory of Statements about Self-injury (ISAS; Klonsky & Glenn, 2009; Klonsky & Olino, 2008: Appendix H & Appendix I) was used to understand the functions of participant non-suicidal self-harm. Participants who indicated they had engaged in self-harm completed a 39-item questionnaire (Appendix I) on a 3-point Likert scale ranging from 1 (*not relevant for you at all*) to 3 (*very relevant for you*) to assess the 13 functions of self-harm that have been identified and grouped together as either intrapersonal functions ($\alpha = .95$) or interpersonal functions ($\alpha = .83$). Intrapersonal functions of self-harm included affect regulation, anti-dissociation, anti-suicide, marking distress, and self-punishment. Interpersonal functions include engaging in self-harm for reasons of autonomy, interpersonal boundaries, interpersonal influence, peer bonding, revenge, self-care, sensation seeking, and toughness. According to scale coring guidelines, scores were recoded so that 1 = 2, 2 = 4, and 3 = 6 and then averaged into subscale scores. Higher scores indicated higher interpersonal or intrapersonal functions of self-harm.

Supportive and self-soothing healthy coping. The 28-item Brief COPE (Carver, 1997: Appendix J) utilizes a 4-point Likert scale ranging from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). Fourteen subscales have been identified: self distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame.

Supportive coping. Healthy supportive coping ($\alpha = .87$) was computed by averaging the items that correspond with the emotional support ($\alpha = .79$) and instrumental support ($\alpha = .79$) subscales. Higher scores indicated greater supportive coping.

Self-soothing coping. Healthy self-soothing coping ($\alpha = .77$) was computed by averaging the items that correspond with the positive reframing ($\alpha = .79$), acceptance ($\alpha = .62$), and religion ($\alpha = .82$) subscales. The subscales used to create the self-soothing coping variable were identified by the scale developers (Carver, 1997). Higher scores indicated greater self-soothing coping.

Controls. Several demographic variables (Appendix K) were included due to their theoretical or empirically backed influence on belonging: age, sex (Aukett, Ritchie, & Mill, 1988; Pulakos, 1989), socioeconomic status, and sexual orientation. Additionally, the conformity subscale ($\alpha = .94$) of the Motivations to Use Scale (Cooper, 1994: Appendix E) was used to control for using substances for group conformity. Finally, the anxiety ($\alpha = .92$) and avoidance ($\alpha = .92$) subscales of the Experiences in Close Relationships-Revised Structures (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011; Appendix L) questionnaire were included to control for relational attachment in significant other relationships.

Analysis Plan

Bivariate correlations, descriptive statistics, and scale scores were computed in SPSS 22 (IBM Corporation, 2013) using listwise deletion. Results yielded a missingness ranging from 1% - 4%. Due to skip logic in the survey, participants only responded to questions relevant to them; therefore, only 75 participants responded to the functions of self-harm questions resulting in a large percent (83%) of missingness. A path analyses was conducted *Mplus* 6.11 (Muthén & Muthén, 2012) to examine the association of belonging with emerging adult coping mechanisms

and to explore whether unhealthy group coping norms moderated the proposed associations between the variables in the model. Due to the skewness and kurtosis of drug use frequency, risky sexual behavioral frequency, and non-suicidal self-harm frequency, MLR, a more robust estimator when data are non-normally distributed was used in the final model (Muthén & Muthén, 2012). Indices of adequate model fit suggested by Kline (2011) were used to assess the proposed associations in the model: non-significant chi-square value, root mean square error of approximation (RMSEA) less than .05, Bentler comparative fit index (CFI) greater than .95, and a standardized root mean square residual (SRMR) less than .08.

The mediating role of coping motivations for substance use, coping motivations for sex, and intrapersonal and interpersonal functions of self-harm, on the associations between group belonging and the frequency of substance use, risky sexual behaviors, self-harm, and healthy coping strategies was tested using indirect effects within the MLR estimation. The preferred method for testing mediation (bootstrapped confidence intervals; Hayes, 2009) cannot be applied in *Mplus* when using the MLR estimator. When using MLR, *Mplus* applies the Delta method (Sobel, 1987) to compute the standard error associated with indirect effects.

To assess for moderation, associations between unhealthy group coping norms (moderator), belonging (predictor), and coping motivations for substance use, coping motivations for sex, intrapersonal and interpersonal functions of self-harm, and healthy coping strategies (outcome variables) were first assessed to determine significant associations between variables (Baron & Kenny, 1986). The predictor and moderator were recoded into standardized z-scores prior to the computation of interaction terms between belonging and unhealthy group coping norms to be included in the model (Baron & Kenny, 1986).

Results

Preliminary Analyses

Bivariate correlations. All correlations are presented in table 2.

[Table 2 about here]

Indirect effects. Indirect paths from belonging to alcohol use frequency, drug use frequency, risky sexual behaviors frequency, and non-suicidal self-injury through and motivations of substance use, motivations of sex, functions of self-harm, and healthy coping strategies were non-significant. Indirect effects were excluded from the final model for parsimony.

Moderating effects of unhealthy group coping norms. A path analysis was first conducted with only the belonging variable predicting the mediating variables (coping motives) and outcome variables (behaviors) to ensure significant paths between the predictor and mediating variables before including the moderating variable in the model. This model displayed adequate fit to the data: $\chi^2(24) = 39.01, p < .05$; CFI = .98, RMSEA = .05 (90% CI .02-.07), SRMR = .08. Next, the moderating variable was included as a predictor in the model to assess for significance between unhealthy group coping norms and coping motivations for substance use, coping motivations for sex, and intrapersonal and interpersonal functions of self-harm. This model displayed adequate fit to the data: $\chi^2(31) = 63.53, p < .05$; CFI = .95, RMSEA = .06 (90% CI .04-.08), SRMR = .08. The paths between unhealthy group coping norms and using alcohol to cope ($\beta = .19, p < .01$), using sex to cope ($\beta = .17, p < .01$), and intrapersonal functions of non-suicidal self-harm ($\beta = .42, p < .01$), the interaction term was included in the model. Including the interaction term (belonging x unhealthy group coping norms) as a predictor of coping motives in the model yielded adequate fit to the data $\chi^2(38) = 64.87, p < .05$; CFI = .96, RMSEA

= .05 (90% CI .2 -.07), SRMR = .08 (See Figure 1). Unhealthy group coping norms were positively associated with using substances to cope ($\beta = .18, p < .01$), using sex to cope ($\beta = .19, p < .01$), and intrapersonal functions of self-harm ($\beta = .43, p < .01$). The interaction term was significantly associated with using sex to cope ($\beta = -.12, p < .05$), indicating that under circumstance of high unhealthy group coping norms, high belonging reduced youth's motivations to engage in sex to cope with stress (see Figure 2).

[Figure 1 about here]

[Figure 2 about here]

Belonging was positively associated with supportive ($\beta = .19, p < .01$) and self-soothing ($\beta = .21, p < .001$) coping behaviors indicating that individuals who felt as though they belonged to their groups were more likely to cope with stress through supportive and self-soothing strategies. A sense of belonging was also directly negatively associated with drug use frequency ($\beta = -.20, p < .05$). Using substances to cope was positively associated with alcohol use frequency ($\beta = .38, p < .001$), drug use frequency ($\beta = .31, p < .001$), and risky sexual behavior frequency ($\beta = .27, p < .001$), while engaging in sex to cope was positively related to supportive coping ($\beta = .23, p = .01$) and self-soothing coping ($\beta = .26, p < .01$). Intrapersonal functions of non-suicidal self-harm was positively associated with non-suicidal self-harm frequency ($\beta = .52, p < .05$) while interpersonal functions of non-suicidal self-harm was negatively associated with non-suicidal self-harm frequency ($\beta = -.80, p < .001$). Additionally, intrapersonal functions of non-suicidal self-harm was positively associated with drug use frequency ($\beta = .37, p < .01$).

Several control variables were included in this study. Income was negatively associated with using substances to but positively associated with belonging. Sexual minorities were less likely to report healthy self-soothing coping strategies than heterosexual emerging adults. Using

substances to conform was not associated with substance use frequencies but was positively associated with using substances to cope and engaging in sex to cope. Finally, the anxiety and avoidance subscales of the ECR-RS were significantly associated with many of the variables in the model. The anxiety subscale was negatively associated with using substances to cope, and engaging in sex to cope, and intrapersonal functions of non-suicidal self-harm, but positively associated with drug frequency. The avoidance subscale was negatively associated with interpersonal functions of non-suicidal self-harm but positively associated with supportive coping. All non-significant controls (race, age, biological sex) were excluded from the final model for parsimony.

Variance explained. For coping motives, the model explained 37.5% of the variance of using substances to cope, 35.7% of the variance of using sex to cope, 44.0% of the variance of intrapersonal functions of self-harm and 38.9% of the variance of interpersonal functions of self-harm. For behaviors, the model explained 17.2% of the variance of alcohol use frequency, 29.4% of the variance of drug use frequency, 18.4% of the variance of risky sex behaviors, 65.7% of the variance of self-harm frequency, 16.7% of the variance of supportive coping behaviors, and 114.7% of the variance of self-soothing coping behaviors.

Discussion, Implications, and Future Research

The purpose of this study was to examine to if group coping norms moderated the association between belonging to groups and individual coping mechanisms. Additionally, the study attempted to understand the relationship between coping motives and specific coping behaviors. Unhealthy group coping norms as a predictor yielded significant positive associations with using sex to cope, using substances to cope, and intrapersonal functions of non-suicidal self-harm which is in line with the Theory of Normative Social Behavior (Rimal & Real, 2005) as

well as the large body of literature that supports group norms as individual motivations for behaviors endorsement (Clapp & McDonnell, 2000; Martens et al., 2006; Page, Hammermeister, & Scanlan, 2000; Perkins, 2002).

Interestingly, when group coping norms was introduced to the model as an interaction term, only the path between belonging and using sex to cope was moderated. The findings indicate that individuals with higher reports of belonging to a group with high unhealthy group coping norms were found to be less likely to use sex to cope than individuals with lower levels of belonging to a group with high unhealthy group coping norms. In other words, belonging appears to be protective of using sex to cope, even when group coping norms are destructive. Moreover, individuals reporting lower belonging to groups with lower unhealthy group coping norms engage in sex to cope less than people with high belonging to groups with low unhealthy group coping norms. For these people, belonging to groups is not as protective against using sex to cope. It is well documented that people engage in sex to fulfill various psychological and physical needs (Cooper, Shapiro, & Powers, 1998; Leigh, 1989; Randolph & Winstead, 1988; Sprague & Quadagno, 1989) indicating that motives to engage in sex are complicated. Specifically, motivations for sex such as experiencing comfort, feeling valued, and the reciprocal experiences of affection have been found in college students (Hill, 2002; 1996). Individuals with higher levels of belonging may be fulfilling these psychological needs through belonging to groups. Moreover, people with lower reports of belonging to groups may be engaging in sex for motivations outside of coping. Future research is warranted to better understand this phenomenon. Something to consider here is that the group coping norm variable was created using questions asking about the extent to which groups are likely to use substances, use sex, or self-destructive behaviors (i.e. self-harm) as coping mechanisms. Future research would benefit

from examining which unhealthy group coping norm is associated with each of the motivations to use certain behaviors for coping as well as specific behavior frequencies to further understand how group dynamics and experiences in groups influence individual behaviors.

That only one path was moderated is surprising given the large body of literature that supports group norms as a motivator for individual behaviors (Clapp & McDonnell, 2000; Martens et al., 2006; Page, Hammermeister, & Scanlan, 2000; Perkins, 2002), although peer group norms and peer group coping norms may be different, warranting further research. One explanation for this could be that the needs being met through group belonging are not related to coping with stressors; therefore group coping norms of the groups emerging adults belong to could have minimal effects on individual coping. Moreover, individuals within a group may behave in similar ways, but not with motivation to endorse such behaviors. Another explanation could be that participants in this study were asked to think of the group they associate with most, which does not account for the influence of norms present in multiple groups emerging adults may belong to. It is not uncommon for emerging adult's experiences of group belonging to change as friend groups from high school either strengthen or begin to dissolve as emerging adults move from adolescence into college or the workforce (Oswald & Clark, 2003). Moreover, as friendship groups evolve for individuals as they transition from adolescence into emerging adulthood, different groups may serve different purposes in the lives of emerging adults, such that different needs are met through each group which subsequently might impact individual coping mechanisms. Further research is warranted to understand the various needs of emerging adults being met through belonging to groups and how these needs relate to individual coping mechanisms. Additionally, future research would benefit from understanding this process further by including multiple groups.

The associations between coping motivations for behaviors and the frequency of coping behaviors in this model indicates a need to broaden our understanding of the coping process. Specifically, several paths yielded significant positive associations indicating that coping motives predict behaviors; however, a majority of paths were found to be non-significant in this model. One way to broaden the understanding between coping motives and coping behaviors would be to include additional coping behaviors (both healthy and unhealthy) to understand how group dynamics are associated with diverse coping strategies used by emerging adults.

Results in the final model were fairly consistent with previous findings: the motivations for and functions of engaging in unhealthy coping behaviors were *mostly* positively predictive of behavior frequency. Not surprising, individuals who report using substances to cope were also more likely to engage in more frequent drinking and drug use. Moreover, using substances to cope was predictive of risky sex behavior frequency in this model, which is in line with previous findings (Patrick & Maggs, 2010). Interestingly, using sex to cope was found to be predictive of both healthy coping mechanisms. One explanation for this could be that individuals utilize both healthy and unhealthy methods of coping when the need arises; however, further research is warranted to understand this association better.

Individuals who reported intrapersonal functions of self-harm were more likely to endorse higher frequencies of non-suicidal self-harm while individuals who engaged in non-suicidal self-harm for interpersonal reasons were less likely to report higher frequencies of self-harm behaviors. Both of these findings are in line with previous findings (Chapman & Dixon-Gordon, 2007; Klonsky, 2007, Nock, Prinstein, & Sterba, 2009). Future research would benefit by breaking down the intrapersonal and interpersonal functions of non-suicidal self-harm into smaller subscales (e.g. affect regulation, self-punishment, peer bonding, self-care, etc.) and

including them in studies to better understand the functions of self-harm. This is especially true in future studies seeking to understand the associations between belonging to groups and self-harm functions and behaviors. Moreover, interpersonal functions of non-suicidal self-harm was found to be predictive of drug use frequency which is in line with previous findings (Haw & Hawton, 2009).

Contrary to expectations, findings in this study yielded no significant associations between belonging and motivations for coping. These results could be due to our lack of understanding how emerging adults define belonging, what emerging adults get from belonging to groups, and whether or not the quantitative measures used in research is actually measuring belonging appropriately. Further qualitative research is needed to understand these processes better. Additionally, participants in this study did not seem to endorse high frequencies of alcohol or drug use, risky sexual behaviors, or non-suicidal self-harm, signifying a need to examine the associations in a clinical sample with participants who do engage in these behaviors more frequently.

Moreover, a next logical next step in understanding coping mechanisms in emerging adults would be to include contextual factors such as daily life stresses, trauma exposure or mental health symptomology to aid in the explanation of how coping skill endorsement is related to reasons for coping. Additionally, it would be important to include experiences of systemic oppression in future research to better understand the group and individual coping processes of emerging adult minority populations. Given that social support impacts general well-being of emerging adults experiencing the effects of transition differently than emerging adults not experiencing a transition (Lane, Leibert, & Goka-Dubose, 2017), it is necessary to understand the coping process used while under stress. Including these variables in research may lead to a

more in-depth understanding of how belonging may act as a buffer or aid in resiliency when emerging adults are met with stressful transitions or moments in identity development. In order for the mental health field to ensure effective intervention and prevention strategies with emerging adults, professionals must understand how daily life stressors, trauma exposure, or other mental health symptomology is associated with specific coping mechanism motivations for emerging adults.

In line with expectations, belonging was negatively associated with drug use frequency and positively associated with healthy coping strategies. Previous findings indicate a negative association between belonging and alcohol use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015, Torgerson, Love, & Vennum, In press); however, less is known about this phenomenon with drug use. Perhaps the negative association between belonging and drug use frequency can be explained through the Theory of Normative Social Behavior (Rimal & Real, 2005), which states that group behaviors are recognized through social approval, benefits of the behaviors, and group identity. For example, the decreased likelihood of participants to use drugs more frequently could be due to the overall lack of social approval by peers in the group as well as group identity. Since this study did not include variables in line with the Theory of Normative Social Behavior (Rimal & Real, 2005), rather, this study included group coping norms which could be different from normative social behavior, it is recommended that future research include such variables to help understand this association clearly. In terms of healthy coping behaviors, college students that include mindfulness based coping practices such as journaling, deep breathing, grounding techniques or guided meditation practices in their lives were found to more effectively deal with daily life stressors (Ramasubramanian, 2017), pointing towards the need for

future research to include additional healthy coping skill behaviors to better understand coping process of emerging adults and how group belonging influences such practices.

As for controls, many of the demographic variables were not significant in the model and subsequently left out of the final model. One explanation of this, given that gender and sexual minorities (e.g., Nicolazzo, Pitcher, Renn, & Woodford, 2017) and people of color (e.g., Ajrouch, Antonuccie, & Janevic, 2001; Taylor, Chatters, Woodward, & Brown, 2013; Vaccaro & Newman, 2016) experience belonging differently, is that the sample yielded low representation of emerging adults from minority groups, which may have impacted non-significant results. Therefore, future research should include a more representative sampling of diverse participants to understand these dynamics further. Attachment in close relationships yielded significant results as a control in this model, indicating that further attention in coping research and belonging research should be given to understanding attachment dynamics within group settings and how attachment influences coping. Given that individual attachment needs of emerging adults are met through romantic or sexual partners (Hazen & Shaver, 1994) as well as interactions with groups and institutions outside of the family (Bowlby, 1969), future research is warranted. Moreover, whether an individual has a secure, anxious, or avoidant attachment style may influence how they choose to cope with life stressors (i.e., using substances, non-suicidal self-harm, or relying on peers for emotional support).

Implications for Practice

It has been well documented that college instructors are met with the task of increasing belonging in their classrooms to increase college retainment, student efficacy (Freeman, Anderman, & Jensen, 2007) and increased motivation in their students (Osterman, 2000). Moreover, previous research also states that in order for people to thrive in the workplace, social

and emotional well-being must be fostered (Lieberman & Eisenberger, 2008) through trust building, relationship development, and employee recognition (McClure & Brown, 2008). Therefore, it would benefit both universities and work places to continue to develop and integrate experiences that foster a sense of belonging in the people they serve.

Specific to the results of this study, the positive association between belonging and healthy supportive and self-soothing coping strategies points toward the importance of fostering a sense of belonging in emerging adult contexts. Including mindfulness-based coping practices in the classroom has been found to be associated with an increased ability to deal with life stressors (Ramasubramanian, 2017). Perhaps it would benefit colleges and universities to provide on-campus programming (both in the classroom and out) that fosters a sense of belonging while also teaching healthy coping skills (e.g. journaling, deep breathing, grounding techniques, mindfulness, meditation, etc.) to students to implement while stressed.

Moreover, our results also indicate that a fostered sense of belonging may act as a buffer for drug use frequency. These findings are important for professionals working with people in clinical settings (outpatient or inpatient) and prevention workers. Clinically speaking, while this sample was not a clinical sample, it may be beneficial for clinicians to include routine assessment of client belonging throughout treatment. Additionally, group leaders would benefit from attempting to foster a sense of belonging in substance use services as a component to the on-going recovery process as it appears feeling as though people belong to a group are less likely to use drugs. The need to foster belonging is especially important for individuals seeking treatment without positive or healthy supports in their lives. In terms of specific treatment modalities to be used that offer healthy coping strategy alternatives, Mindfulness-based relapse prevention (Bowen, Chawla, Marlatt, 2011) was developed for group therapy settings by

combining traditional relapse prevention (Marlatt & Gordon, 1985) with mindfulness based practices (Kabat-Zinn, 1990) to increase healthy self-soothing and emotion regulation coping and decrease substance use. Prevention workers would also benefit at examining current prevention methods and whether or not belonging is a component of them. This is especially true for young people as delaying first time of use may decrease the likelihood of developing problem use behaviors later in life (Chen, Storr, & Anthony, 2009; King & Chassin, 2007). Future longitudinal research is warranted to examine the long-term effects of belonging in early prevention methods on alcohol and drug use in emerging adults.

Given the mostly positive predictive associations between motivations of using certain behaviors and behavior frequencies, it would be beneficial for clinicians working with emerging adults to explore the functions of healthy and unhealthy behaviors. This is especially true given that certain motivations (e.g. substance use) were also predictive of multiple behavior frequencies (alcohol use, drug use, and risky sexual behaviors), indicating that coping in emerging adulthood is complex and needs further attention. Perhaps it would be beneficial for programming in elementary and middle school to include healthy coping skill development to increase the likelihood of healthy coping in emerging adulthood. Longitudinal research would be warranted to determine effectiveness of such a program.

Limitations

Although the findings from this paper contribute to the field, there are multiple limitations that need to be considered. First, participants in this study were predominantly heterosexual, white, female, and came from a cross-sectional sample, which limits generalizability of these results with minority populations. In line with this, since being a United States citizen and living within the United States were inclusion criterion to participate in this

study and, given the current broader socio-political culture within the United States, these results may not be generalizable to individuals who are not United States citizens, or people who live outside of the United States. Accordingly, the findings need to be repeated in diverse and clinical longitudinal samples. Moreover, although previous research indicates that MTurk data is just as reliable as other internet sampling methods (Buhrmester, Kwang, & Gosling, 2011), convenience sample limitations still exist.

In terms of measurement, one limitation that exists in this study is the group coping norms variable that was created by the researcher and not validated in previous studies, which could influence results. Including components of communal coping in future research may aid in the understanding of group coping processes as it relates to individual coping behaviors. Additionally, the risky sexual behaviors measure used to create the risky sex behaviors variable in this study included heteronormative questions, which could influence results. Future research would benefit from including a wider variety of sexual behaviors and experiences to further understand sex as a coping mechanism in people of all sexual orientations. Moreover, due to low drug use endorsement in this sample, the drug use variable was calculated by combining several drugs and determining the highest frequency to create the drug which aids in variance but complicates results in that these findings did not investigate how this process works for each individual drug. Given that

Conclusion

In conclusion, these findings point to the continued need to further understand the function of coping mechanisms and maladaptive coping behaviors. This study has laid groundwork for future studies to investigate the importance and process of belonging to groups as it relates to emerging adults. Moreover, the results indicate the need to further explore the

phenomenon of group belonging and individual healthy and unhealthy coping mechanisms in emerging adulthood. Finally, future studies are warranted to understand what needs are being met through group belonging to inform changes in workplace and school atmospheres.

Chapter 4 - Study 2

Connection to others is a fundamental human desire and necessary to flourish (Baumeister & Leary, 1995; Lieberman, 2013). In fact, Maslow (1943; 1954) included belonging in his hierarchy of needs motivational theory; however, he argued that in order for individuals to experience belonging, their basic physiological (food, shelter, water, air) and safety (security, employment, resources) needs were required first. This theory asserts that individuals are motivated by needs, and that once satisfied, our attention shifts to other unmet needs until people reach self-actualization, the highest level in the hierarchy which encompasses self-potential and the desire to be the best version of self (Maslow, 1943; 1954). While love and belonging is included in the hierarchy of needs and the impact belonging has on mental health (Torgerson, Love, & Vennum, In Press) and well being (e.g., Drolet, Arcand, Ducharme, & Leblanc, 2013; Lambert, et al., 2013) is evident, less is known about specific day-to-day needs of emerging adults that are met through belonging to groups.

Feeling as though one belongs to a group has been found to be associated with reduced alcohol use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015; Torgerson, Love, & Vennum, In Press) and other mental health outcomes. Conversely, the absence of, or a reduced sense of, belonging has been found to be a major predictor of suicide risk (Kuo, Gallo, & Eaton, 2004) and problem alcohol use (Woicik, Stewart, Pihl, & Conrod, 2009). Although these results indicate that interventions focused on increasing a sense of belonging may have a positive impact on emerging adult mental health, there is no universal understanding of what it means to belong, a necessary step for understanding how to foster a sense of belonging as a protective mechanism. In fact, each of the studies cited above used a different measurement of belonging. Moreover, the review of literature, and subsequent results of study 1, emphasize the importance of belonging to

emerging adults; however, questions still remain as to whether or not researchers are truly measuring belonging in these studies in ways congruent with emerging adults' experiences.

Current belonging research focuses on how the degree to which a person perceives they belong is associated with diverse outcomes, but what it means to belong, how emerging adults know they belong, how a sense of belonging is developed, and what needs are being met through belonging are still unexplored. Moreover, most research on this topic is not informed by the voices of emerging adults in understanding the phenomenon of belonging, but rather belongingness is often measured quantitatively with the researcher assigning meaning of belonging based on quantitative results. Exploring these additional facets of belonging and the mechanisms by which a sense of belonging is formed is a necessary step to understanding how to foster belonging in various settings for emerging adults.

Therefore, a next logical step is to hear from emerging adults how they understand their process of belonging to the groups they associate with and how belonging to groups meets their needs. Accordingly, the purpose of this study is to use qualitative methods to answer three research questions: 1) What does a sense of belonging mean to emerging adults?, 2) What is the process by which emerging adults come to feel they belong to a group?, and 3) What needs do emerging adults feel are being met by feeling as though they belong to the groups they associate with?

Methodological Framework

Procedure and Participants

Participants were recruited using Amazon's Mechanical Turk (Mturk), an online crowdsurfing platform. Mturk was used due to the diversity of demographics compared to other internet or university samples (Buhrmester, Kwang, & Gosling). Moreover, previous studies

have found that data collected via Mturk yields data that are at least as reliable as data using traditional methods (Buhrmester, Kwang, & Gosling). Participants were able to view a short description of the survey, including key words that represent variables of interest on Mturk before taking the survey in Qualtrics. Qualification requirements for this survey included U.S. citizenship, living within the U.S., and being between the ages of 18 and 29. If participants did not qualify, they were thanked for their time before exiting out of the survey. Participants meeting these qualifications continued with the survey, and were compensated \$1.00 upon the completion of the survey. The online survey had an estimated completion time of 20-40 minutes. Typical reimbursement for Mturk HITs run between \$2.00-\$3.00 per hour (Amazon Mechanical Turk, 2017), making a compensation of \$1.00 for completing this survey an appropriate amount due to survey length and estimated completion time. Participants in this study were predominantly Caucasian, female, and heterosexual.

[Table 3 about here]

Open ended questions were developed to gain insight from emerging adults on their experience of belonging to groups. First, participants were asked, “what does it mean to belong?” without additional prompts or information. By asking this question, emerging adults were able to respond with a brief definition of what it means to belong. Participants were then asked to list all of the groups that they currently associate with. Next, participants responded to the questions, “How did you become a member” and “What has fostered the process of belonging?” to better understand how emerging adults describe the process of becoming a member and belonging to the groups they associate with. Finally, in order to understand needs being met through group belonging, participants were asked, “What do you get out of being a part of these groups?”

Analysis Strategy

The open-ended responses were analyzed using thematic analysis (Mills, Durepos, & Wiebe, 2010; Braun & Clark, 2006). “Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data” (Braun & Clark, 2006, p. 79) in order to make meaningful interpretations of data (Boyatzis, 1998). Flexibility is essential when utilizing thematic analysis given there is no universal guideline for what constitutes a theme (Braun & Clark, 2006), leading the decision of data organization up to the researcher. Moreover, when analyzing data thematically, it is important to remember that quantity of a code does not automatically assume importance (Braun & Clark, 2006), meaning themes with lower frequencies in the data may still hold importance to answering the overall research question.

Microsoft Excel, version 14.7.7 was used to organize and analyze the data into codes, categories, and themes. One researcher, two undergraduate research assistants, and one PhD student research assistant, trained in thematic analysis techniques analyzed the open-ended responses. Participant responses were read and coded line-by-line (Gibbs, 2007) by each individual researcher/research assistant to best manage analysis bias and increase fidelity between participant responses. An ongoing codebook with a definition and data example of each code was used and shared between coders to increase reliability among coders. This codebook was not created ahead of time, rather it was continuously updated to include new codes used by coders so that all coders could see the codes being used, but not be able to see all of the participant responses coded. Questions were divided among the coders with each question being assigned to two coders. All initial coding took place independently and it was not until all questions had been coded that the entire research team saw the coded data done by other team members. Once each individual analyst identified initial codes for each question, the group met

together to cross code. Any differences in coded responses were discussed until a consensus was met between researchers in an attempt to strengthen reliability of the results (Baxter & Eyles, 1997). The researcher organized the final codes into categories, or groupings of codes, before organizing categories by underlying themes (Braun & Clark, 2006). This was done by writing out each code on a sticky note to organize like codes into piles. Each pile was assigned a category name before being organized into larger themes.

Results

Types of Groups Emerging Adults Associate With

Participants were first asked to identify all of the groups that they consider themselves to be a part of. The researcher did not provide a definition of groups; therefore, participant responses are reflective of their own definitions of what constitutes a group. Ten categories of groups were identified (see table 4) and described below: personal identity, religious and spiritual affiliations, life stage and circumstances, educational group associations, professional association, significant relationships, social change initiatives, shared interests and activities, online connections, and no group affiliation.

[Table 4 about here]

Group association based on social-personal identity. Participants listed groups that were reflective of their identity as a person. Participants listed groups that were reflective of their identity as a person, including membership identified by ethnicity, gender, sexual orientation, social identity, and American citizenship. For example, participants listed specific races or ethnicities such as “Asian American” or “African Americans.” Participants listed groups such as “female”, “male”, “Transgender”, “men”, “queer people”, “LGBTQ community”, “Gay men”, and “atypical or fluid sexual identities” to describe group affiliation related to gender or sexual

orientation identity. Participants also provided examples of group association based on social identity such as “nerds”, “feminist”, “BDSM culture” and “disabled.” Finally, participants also listed “American”, “Americans” or “American population” as a group they associated with indicating an identity with country of residence or origin.

Religious and spiritual affiliations. Responses included religious denominations, a specific house of worship, or the sole word of church to describe participant associations within their religious beliefs. Examples of religious or spiritual groups cited by participants include “Atheists”, “Agnostics”, “Good Shepard Lutheran”, “Christian secular community”, “InterVarsity”, “Jews”, “church group”, “LDS members”, and “Muslim.” Some participants indicated “church choir”, “youth group”, or “Bible study group” as well.

Life stage and circumstances group association. The life circumstances category includes groups that aligned with various life stages or life circumstances including age cohort/group, life stage, location/residency, being a parent, and parent groups. For example, in reference to their cohort, participants listed “Millennial’s,” “young adult”, “almost 30 something”, and “middle aged adults”. Additionally, participants provided “homeownership” or “homeowner” as examples of life-stage group association. Participants also listed states and cities indicating some emerging adults associate with being from or residing in a certain location or geographical region of the United States. Finally, being a “mother” or a “father” and various parent groups such as “MOPS”, “PTA”, “local mom group”, and “stay at home mom”, were also listed by participants. Being a parent and parent groups are separate codes because being a parent is not the same as being affiliated with a parent group.

Educational group association. Participants provided examples of either being currently affiliated with a college or university, or being an alumnus, indicating that emerging adults

associate with various experiences in their academic careers. The codes that emerged under this category included educational affiliations that occurred through being an alumni, listing college, Greek life affiliation, and school. Specific codes such as “FSU alumni” or “UGA grad” were examples of alumni groups listed. Additionally, participants currently attending school listed specific peer groups such as “law students”, “college students”, “my peers at grad school”, and “student medical groups” which are all examples of the college code. Finally, participants provided examples of Greek life affiliation by listing “sorority”, “fraternity”, or listing specific sorority or fraternity organizations. Participants listed “school” without providing additional details about what they associated with through these experiences; however, school remains a separate code to account for the possibility that some participants may not be insinuating college when they list school.

Professional association. The professional association category consists of work or career related groups such as professional identity, coworkers, professional organizations, and work. Examples of professional identity include, “economist”, “salespeople”, “military” or “preschool teacher”. Moreover, participants listed “coworkers” or “work group” as a group they associate with. Professional organizations such as “Aircraft Owners and Pilot Association”, “Geological Society of America”, and “Nursing Association”, were also identified by participants. Finally, participants only mentioned “work” without providing details about whether their work was a job, or a more long-term career.

Significant relationships. Participants listed “family” or “friends” as groups they associate with. Additionally, participants listed “my girlfriend”, “married”, “my fiancé”, and “my boyfriend” as specific significant other relationships they associate with.

Social change initiatives. Participants also identified groups that represented activism, politics, volunteering, or philanthropy. Specifically, participants listed “Black Lives Matter” and “Black Girls Run” that were coded as activism groups. Participants reported group association with specific political parties such as “Democrats”, “Republicans”, “Political Independents”, and “Libertarians” as well as involvement with local political groups such as the “Muskogee County Democratic Party”. Participants responded broadly with “volunteer group” or “volunteer” as an indication of volunteer involvement, or they provided specific groups that have a volunteering component such as “URI Service Corps (Volunteer Organization)”.

Shared interests and activities. Groups listed by participants were groups formed out of similar interests including hobbies, clubs, sports, and video and online gaming. For example, participants listed hobbies such as “poets”, “musicians”, “photography”, “gym membership” and “book club”. Examples of clubs mentioned include “Columbus club”, “Finance club”, “hunters club”, “bike club”, and “chess club”. Some participants only listed “club” without providing additional details. Participants also listed specific sports team fan bases they felt an association with such as “Ravens Fan Club” or “Cleveland Sports Fans”. Moreover, participants listed “athlete/s”, “sports”, or specific sports related clubs such as “Dodge club”, “weightlifters club”, “dancing”, “soccer team”, and “trail running club.” To describe their association to various gaming related groups, participants listed “online gaming”, “gaming”, and “gamers”.

Online connections. Groups within the online connection included online communities and social media. Online communities include “Tumblr”, “Reddit”, and various online gaming guilds which are online communities dedicated to specific online video games. Participants indicated some level of engagement with their social media friends and acquaintances through platforms such as “Twitter”, “Instagram”, and “Facebook friends and acquaintances”.

What it Means to Belong According to Emerging Adults

Participants responded to an open-ended question asking them to identify what it means to belong. Several themes emerged including embraced, increased self-confidence, greater life meaning, experience of a safety net, commonalities among group members, relationship component to group belonging, and fitting in and conformity. The themes are explained in more depth in the following paragraphs (see table 5).

[Table 5 about here]

Embraced. In organizing the data, participant responses indicated a sense of belonging included an experience of being embraced by the group or group members. The theme of embraced is made up of three categories including accepted, not judged, and inclusion. This process is explained further in the paragraphs below.

Accepted. The following codes were included in the accepted category: accepted, respect, understanding, and authenticity of self. Participants overwhelmingly stated that belonging to groups means to be accepted, which included being respected, understood, and the freedom to be authentic. Some participants used “to be accepted” to describe what it means to belong, while others broadly mentioned the importance of feeling accepted to belonging (“Belonging means acceptance as a member or part. Such a simple word for huge concept.”), or the reciprocal nature of acceptance (“The group accepts you for who you are, and you them.”). Another participant connected acceptance into a group with life purpose:

“When a person feels as if they belong, they feel accepted for who they are. To feel accepted as a member of a group can make a person feel better about their purpose in life, it makes a person feel important.”

Participants indicated that belonging “means that you are respected by others”, or that people are “respected by peers around them.” Moreover, participants stated that belonging also requires understanding. For example, “to be understood and to understand others in the group” and “you have someone understand you on a deeper level” are examples of the understanding code. Participants also mentioned being free to be whom they truly are (authenticity of self) when surrounded by their group members. For example, one participant stated that to belong means to be “free to be who your truly are and the space to grow as a person and accepted by those or place you decide to surround yourself with.”

Not judged. Along with being accepted, participants included the notion of not being judged in their responses to this question. For example, one participant stated that belonging means “to have loved ones to whom you interact with that doesn't belittle you, or make you feel ashamed in anyway.” Another participant stated, “Belonging means you feel ok to be yourself and feel like you won't be judged.” Finally, one participant indicated that belonging meant “To feel comfortable in what you say and do and know that you won't be judged for saying or doing it,” again highlighting the idea that not being judged is a component of belonging.

Inclusion. A sense of belonging also requires a sense of inclusivity which included feeling as if they were a part of something, that there was a place for them in the group or they are in the right place, wanted, and valued. For example, one participant described belonging as “To feel like you're included, that you are officially part of the group, that you can't be easily kicked out or replaced. To feel like it's a given that you be included in anything the group is doing.” Additionally, participants stated that belonging means “to be a part of something” or “a part of something with other people.” Other participants described belonging as a process of knowing you are in the right place at the right time or that you have a place you fit (place for

me). For example, one person said, “To belong is to feel like you are in the right place. When you feel like you belong, you feel like you are not out of place, like there is nowhere else that you’re supposed to be.” Moreover, another participant stated that, “to belong means to have a place among friends where one can make a meaningful difference in their lives while feeling appreciated for it.”

Other participants described a sense of being wanted or valued. Additionally, one participant described the feeling of being wanted in their definition of belonging: “feel[ing] that you matter to a group of people. Belonging means that you not only matter but you play a pivotal part in the group and that your voice and opinions matter.” Other participants defined belonging as being “wanted or needed by the people around you” indicating that being included into groups is more than just being invited to activities or events, but rather it is a deeper process with emotional investments. An example of the valued code included the following explanation of belonging, “it means that the people with whom you surround yourself see your value as an individual and continue to choose to associate with you.”

Increased self-confidence. Participants indicated that belonging is dependent on a feeling of self-confidence. For example, “I think what it means to belong is mostly how you feel. If you feel like you fit in, if you feel confident in yourself, I think you will feel like you belong anywhere. If you don't feel confident in yourself, it's easy to feel like you don't belong, no matter where you are.”

Greater life meaning. Not only did participants indicate that belonging meant being a part of something, they indicated that belonging to groups connected them to something bigger than themselves and gave them a sense of purpose. For example, one participant stated that,

“What it means ‘to belong’, in my perspective, is to be a part of something bigger than oneself. In my eyes, ‘to belong’ means to be an integral part to the significance of a community, environment, or something other than oneself, but not define itself in its entirety. ‘To belong’ means to be a defining part of something other than oneself, but have that other thing be a defining part of the individual, equally.”

Another participant stated, “to be a part of something that is greater than yourself and feel personal included in that entity” indicating that it is not just being a part of something greater that is important, but feeling included in the experience as well.

Participants connected group belonging with their greater purpose or life meaning. For example, one participant stated that belonging meant “to feel welcome among others and to do things that give you a sense of purpose.” Another participant stated, “To belong means that you have found your sense of purpose, and have the feeling that there is meaning in the things you do in the context of you living your life.” Other participants used phrases like “sense of purpose” and “purpose in this world” to describe what it means to belong.

Experience of a safety net. Experiencing a safety net emerged in the data through codes including the experience of feeling comfortable, feeling content, having a sense of security, and feeling there is trust in the group. Participants indicated that feeling “comfortable” was an important piece to belonging. For example, one participant stated,

“It means that you have a place where you feel like you fit, with others that are similar to you and/or make you feel at ease in their presence. It's either a place you can go for this feeling, or it is a state of mind that you are in anytime you're around certain people.”

Not only did this participant indicate a feeling of being at ease or comfortable, but they also highlighted the complexities in language used to describe belonging.

Participants also described feeling a sense of safety or security in their understanding of belonging. For example, “To belong is to feel safe in your environment. This includes physical safety (nothing is presenting immediate physical danger) as well as emotional safety and contentment.” Additionally, “Belonging gives someone a sense of security when being around those they feel they belong with.”

Participants also described belonging as being content as “at peace” or “content with life.” Finally, examples of trust include, “sharing trust with those people”, “it means that you have other people that you can trust”, and “To feel... trusted, and that you trust those around you.”

Commonalities among group members. There were instances that participants indicated that similarities among group members were an important component to belonging. Shared experiences, similar interests, similar personality traits, similar viewpoints and relate are all codes included in the theme of commonalities among group members. Examples of shared experiences include, “shared histories” or, “You have a historical connection with the group and endure in a common struggle.” Moreover, participants identified “common interests” or similar interests” in their responses. An example of similar personality traits includes, “similar attributes to yourself”. In line with similarities, participants also mentioned “similar values” and being with “like-minded people” as examples of similar viewpoints in their definition of belonging. A more in depth example of similar viewpoints is, “To belong means that you share a common belief or value with a group. This feeling intensifies the more in depth your core beliefs and values are in alignment with the other people in the group.” Additionally, another participant stated, “It's a feeling that your values and what you consider to be important are reflected by the people you

surround yourself with and the place you live is in harmony with that too.” Finally, participants also indicated that being able to “relate” to group members was important.

Relational component to group belonging. The following codes were found to make up the relational component to group belonging camaraderie, confidant, kinship, community, and connection. Participants included the ideas of “camaraderie”, “confidant”, and “kinship” in their understanding of belonging indicating that belonging encompasses a certain level of relational dynamics. Additionally, “a sense of community” was used as a response several times; although many people did not expand on their definition of what a sense of community means to them. Finally, participants identified “connection” or being “connected” to a group of people as a component to belonging.

Fitting in and conformity. Participants indicated that belonging to groups meant “fitting in” or “conforming.” One participant described belonging as “to feel as if you fit in somewhere or with someone (a specific group).” Another participant stated “to belong means to conform to a certain standard of a particular group, in a manner that depicts you as acceptable” indicating that some participants felt the need to conform in order to belong.

The Process of Joining Groups for Emerging Adults

Participants responded to two questions pertaining to how they became a member to the groups they previously identified as well as what fostered the process of belonging. Results were organized into the process of becoming a member the process of belonging as it appears one must become a member of the group before feeling as though they belong to it. The process of joining groups includes the following themes: reasons for joining groups, group membership through intentionality, formal group entrance process, group membership as a natural process,

group membership through identity formation, and group membership in an online context. The themes included in the process of joining groups are outlined below (see table 6).

[Table 6 about here]

Reasons for joining groups. Two categories emerged using several codes to make up the theme of reasons for joining groups. The two categories include commonalities with group members and knew other members. Participants provided examples of reasons for joining groups due to similarities among group members or because they knew a member of the group already.

Commonalities with group members. Participants described joining groups based on sharing similar beliefs or values, common interests, similar personality traits, having similar life goals, and commonalities. One participant stated, “I wanted to find like-minded people who like to read the same books as me” indicating that similar views and similar interests may be related for this participant. Other participants listed “like minded”, “similar beliefs”, “shared ideology”, “similar interests”, or “similar goals” as reasons they joined groups. Additionally, emerging adults in this sample looked for groups of people with common interests. For example, one participant indicated that they joined the gym due to their interest in working out, “I like to exercise and in the course of working out at my local gym I began to help others and they helped me and then we were friends”. One participant provided an explanation of how this process of finding like-minded people (similar viewpoints) might occur:

“The process is pretty much the same within all types of groups, because once you realize what you enjoy/believe/how you want to spend your time, you gravitate toward these things which leads you to people who feel and think the same as you do.”

Participants indicated that certain personality traits must be present such as “get along with anyone”, and “having a positive outlook on life despite any obstacles is a great start to

belonging to something greater.” Some participants joined groups due to similar goals in life. For example, one participant said, “I joined based on my career path”, “commonalities in goals or process”, and “through attribution.” Participant examples from the commonalities code include “having things in common.”

Knew other members. Results indicate that some participants joined groups due to knowing friends or family already in the group. For example, one participant discussed “I was introduced via another person who was already in the group” and others mentioned joining a group through “mutual friends” or “I met many people through my husband and made friendships there.” Other participants discussed having known their friends for a long period of time since “elementary” or “high school”; however, many did not indicate how they initially joined that group of friends.

Group membership through intentionality. Several codes and sub-codes were organized into two categories under the theme of intentionality. Categories include personal investment and initiative as well as industry. Before examining the categories, it is important to acknowledge that there appears to be different avenues by which emerging adults join groups. Participants indicated that they became a member of their groups “by joining” without providing further details about their process of joining. Moreover, the category of personal investment and initiative is explained below.

Personal investment and initiative. Joining groups required a need /desire or a choice on the part of the individual. For example, participants indicated that in order to belong to groups, there must first be a personal investment or a want to join the group such as “getting a job.” For example, one participant stated that becoming a member of a group required,

“A desire on my part to know others and to be with people who did some of the same things I did, and had some of the same interests as I did. I wanted to connect with people who knew the ins and outs of the same activities as I liked doing.”

Additionally, participants indicated that joining groups required a choice on their part. For example, “I am in them because I choose to be in them.” Other participants indicating that the choice was a “mutual choice” between individual and group members.

Industry. Becoming a group member required effort through participating, interactions with other group members, or asking the group to join. Joining groups takes “effort” on the part of the individual. More specifically, joining groups required “participating” in clubs or extracurricular activities such as the “athletic team” or “chess club on campus” resulted in group membership. Participating in volunteering activities through organizations in which they already belong, such as “Atheists Helping the Homeless” or “with Church” are also ways in which emerging adults have joined groups. Moreover, joining groups required “interaction” between members through meeting new people, socializing, or talking. An example of the meeting new people code, one participant stated that, ““I met people and we hit it off”, which led to becoming a group member. Moreover, participants indicated that “meeting new people” or “meeting other people” was required to join groups. Talking through “social interactions” or “communication” were also listed by participants as ways they joined groups. Finally, participants indicated that they “requested to join” or “asking to join” groups they associate with.

Formal group entrance process. Participant responses indicated that in order to become a member of some groups required a formal process of obtaining membership, including being invited or nominated, paying membership fees, applying, and pledging a fraternity or sorority.

For one participant, joining a group required being invited or being “chosen” or “asked” to join. Other examples of being invited include, “being invited to do things with a person or group” or “being invited into conversations then being invited to homes and then invited to do things outside of the groups activities” which led to group membership. Another participant reported being “nominated” into the group by current group members. Making a payment of some kind through “dues” or paying for fitness classes also resulted in group membership. Participants indicated that an application process was required for joining groups, while others stated that they “signed up” for a group and became a member. Finally, participants discussed pledging or “recruitment” for Greek life involvement through the formal rushing or pledging process.

Group membership is a natural process. Participants indicated that becoming a member of some groups is a natural process that occurs organically over time and due to chance or certain life circumstances. For example, one participant stated, “[I] made friends organically or through other friends/associations” while another participant stated that joining groups occurred “by default from growing up”. Participants indicated that joining groups “evolved over time” or that “time” was required to become a member. Other participants reported that joining groups occurred through “luck”, “fate”, or “chance meetings”.

Participants also reported that joining groups happens based on life circumstances such as “various turns in life”, “direction in life”, and “life decisions.” Moreover, in terms of life circumstances, participants also cited “events that happened as I was growing up” or “the events of my life placed me into these groups” were a component to belonging. Specifically, several participants indicated that being “born into” their groups, such as “family” was how they joined them. Additional examples of life circumstances include location (“where I live”), “marriage”, or a life role such as “dad” or “I gave birth to my children which made me a mom.” Moreover,

participants listed joining groups through “school”, “college”, or “becoming an alumni” as group membership through educational experiences. Finally, participants indicated that joining groups occurred through work experiences. Participants indicated that, “getting the job”, “seeing people at work”, “working together” and “we started going to lunch together at work then we started hanging out after work” were a part of the group membership process.

Group membership through identity formation. Participants also mentioned identity related experiences that influenced joining groups such as self-identity, ethnicity, sexuality, and gender. Participants indicated that their entrance into a group was based on “being myself” and “I naturally became part of these groups based on who I am” indicating that a sense of self or self-identity is needed in order to join certain groups. Participants also listed sexual orientation or gender related experiences that led to group association. For example, one participant stated,

“I was born gay, so I automatically became associated with being gay. Some people would argue being 'Gay' isn't a group, but in all honesty gay men really do get 'grouped' together by society.”

In line with this, participants discussed that the process of joining groups specific to sexual orientation and gender was initiated once that identity was formed. For example, one participant stated, “realized I was bi and started talking to other LGBT people” and another said they became a member of the group, “When I identified as Bisexual.” Others indicated that their group association began because of “gender identity” or because “I was born a woman.”

Finally, participants listed “race” or “my heritage” as a way they have come to join groups. One participant discussed that his ethnic identity influences the groups he “gravitates towards”.

Group membership in an online context. Surprisingly, emerging adults infrequently listed online gaming, online communities, and social media as modalities of group joining. In terms of online gaming and online communities, participants indicated that they “found” these groups or “played video games together” without providing details on the process of joining. Moreover, some participants referenced using social media such as “Facebook” as a modality of coordinating group meetings such as “play dates” for children or for finding groups to meet up with such as a “bicycling Facebook group”.

The Process of Belonging to Groups for Emerging Adults

Responses to the question about what fostered the process of belonging indicated that the process of belonging happens through various processes. There appears to be experiences that occur earlier in the process of belonging before actually belonging. Several themes emerged from the data in regards to the process of belonging including building investment and intimacy, messages of inclusion, developing connection and community, mutual support, positive feelings that foster belonging, and individual growth and development and the process of belonging. This process is described below (see table 7).

[Table 7 about here]

Building investment and intimacy. Participants indicated that group belonging was fostered by time, a mutual process of getting to know each other, learning, and shared experiences. Emerging adults in this sample reported that group belonging took “spending time” with other people and “getting to know” them, or it occurred “over time.” Participants also discussed that for some groups, their belonging occurred by “growing up together” indicating longevity might be a part of the process. Moreover, other participants indicated that it is through spending time “every day” together that has fostered belonging, perhaps especially in work-place

or family environments. Others talked about investing time in building belonging. For example, “I take time out of my day to check up on them and see how they are doing. I initiate spending time together doing things we all enjoy.”

Other participants indicated that the process of getting to know people is a mutual process in that it requires individuals to get to know the group but also for the group to get to know the individuals. For example, they stated that, “getting to know others and them getting to know me” is what fostered the process of belonging. Moreover, learning about group dynamics is an important component to belonging. For example, one participant described this process as, “getting to know others in the group, learning the values and priorities of the group, learning the traditions, schedules, and activities of the groups.” Another example of this process is,

“They took the time to greet me and then explain the previously established relationships that everyone held. Then they went and talked me through what each group "did" so I wouldn't feel left out and I knew the process of what happened within each group.”

Finally, participants also indicated that having shared experiences or shared struggles was necessary. For example, one participant stated that belonging is fostered through “experiencing the same struggles and achievements together” while another participant stated, “people going through similar experiences as me at the same time and place.”

Messages of inclusion. The fostering of ongoing belonging also required being “included” in the activities of the group, acceptance, not judged, and that there was a place for them in the group. Participants provided examples of inclusion such as “people interacting with me and including me” or “feeling accepted and included by my peers fosters a sense of belonging.”

Participants listed “acceptance by others in the group” and “the general acceptance of the group” as components of belonging. Moreover, one participant stated that belonging includes “my sense of knowing that I’ll be accepted if I decide to be in a group”, “In order to feel included and accepted, participants also indicated that not being judged was important. For example, one participant stated, “feeling like I could share my excitement/struggles/beliefs without being judged/criticized harshly” fostered the process of belonging. Another participant described the process of being accepted and not judged indicated that there might be an overlapping experience between being accepted and not being judged. For example,

“I felt like I belonged to the group when any other person involved in it that I associated with was nothing but accepting, non-judgmental, and kind. It made me feel like I did not have to act like a different person -- I could be myself.”

When describing belonging as a place for them, participants indicated that being “welcomed” and “wanted” fostered the process of belonging. For example, one participant stated that,

“I felt like I belonged because other people welcomed me in. They took the time to greet me and then explain the previously established relationships that everyone held. Then they went and talked me through what each group ‘did’ so I wouldn’t feel left out and I knew the process of what happened within each group.”

In line with this, participants also indicated that feeling as though “the sense that I feel involved and that I matter” is important to fostering belonging.

Developing connection and community. Connection with others and community also appears to be an important component to group belonging. Participants described connection as a social process and others indicated it was a deepening of relationships over time. For example,

one participant stated that group belonging was fostered by “making connections” while another participant described this process as “becoming close to people in those groups.”

Mutual support. Participants indicated that support was necessary to fostering the process of belonging. One participant stated, “being a part of a team and people counting on each other” while others stated group belonging was fostered by “helping each other out”, “giving to others and them giving back to me”, or “being able to rely on one another” Another example of mutual support included,

“I am loyal and honest, and I am always trying to do good for those I care about. If they are in need of someone to talk to, I listen to what they have to say or I help them work through solutions to their problems.”

Positive feelings that foster belonging. Additional feelings participants listed that fostered belonging included being “cared for”, “respected”, and “valued.” Participants also listed feelings such as “joy”, “happiness”, “kindness”, “love”, and “trust” as needed to foster group belonging. Finally, feeling “comfortable” in the group as well as having a sense of “safety” and “security” was also factors in fostering the process of belonging. Since participants answered multiple questions related to their experiences to belonging, these feelings were also listed under what it means to belong. More information is needed from emerging adults to distinguish between whether these feelings indicated to them that they belonged, or if it was a part of the process of fostered belongingness in their groups.

Individual growth and development and the belonging process. Examples of individual growth and development include personal growth, authenticity of self, identity, and personality traits. Participants indicated that individual growth and development influences the process of group belonging.

One participant indicated that belonging to groups was less about the group itself and more about them and their personal growth:

“Personally, it wasn't so much about others, it was more about myself. I found that these groups and hobbies sparked and inspired something so deep within me that passion it created and the feeling of "losing track of time" is what made me feel like I belonged.”

Additionally, participants indicated that a level of authenticity and of self and identity was required for belonging. Examples include, “knowing what I am”, “being honest with them about who you are” and “being myself” were needed to foster belonging. Moreover, another participant discussed being authentic in group settings “without withholding any part of myself” was necessary.

Moreover, participants indicated that personality traits they possess inform the belonging process. For example,

“I created positive interactions as I do with anyone that I come in contact with in my daily life. I feel that being positive and having a positive outlook on life despite any obstacles is a great start to belonging to something greater.”

Needs Being Met Through Group Belonging

Several themes emerged in the data in regards to needs being met through group belonging including a sense of belonging, feeling included and a part of something, personal growth needs, emotional needs, communal needs, work needs, and giving back and volunteering needs. It should be known that participant responses to the question of “*what do you get from belonging to groups*” appears to be overlapping with participant definitions of belonging as well as what was discussed as necessary to foster the sense of belonging.

[Table 8 about here]

A sense of belonging. Participants indicated that they get “a sense of belonging” from belonging to groups. This code was used only when participants specifically stated “a sense of belonging” or “belonging.” While participants did not expand on this in their responses, the researcher kept this category due to the frequency in which people provided it as a response.

Feeling included and a part of something. Participants described different experiences of feeling included and a part of something including, feeling not alone, a part of something, a part of something bigger, a place for me, inclusion, and wanted. Participants indicated that not feeling alone was something they got from being in groups. For example, “the feeling of not being alone”, “[to] know that you aren't alone in your thought processes”, and “it helps me feel less alone” were all examples of this code. Moreover, participants indicated that belonging to groups provides them with being “a part of a group” or a “part of something.” Moreover, participants also indicated that they get “a sense of being part of something bigger than myself.” Another participant stated, “I also have the general feeling of mattering in the grand scheme of things because I am a part of larger things that will be a part of history forever.” Additionally, participants are provided with “a home base of sorts” or “a place where I can be myself” through belonging to groups. Other participants indicated that being included was what they received from being a part of a group. For example, one participant stated, “I like being included in activities” while another stated, “a sense of inclusion in knowing that there are other people like me that exist.” Finally, participants indicated that “I feel wanted and that my opinion matters” or that “I feel a sense of being wanted as there is need for me to be a part of these groups” was what they got from belonging to groups. Participants did not elaborate on this process to explain what it is about feeling a part of something that fulfills a need in their lives.

Personal growth and sense of self needs. The theme of personal growth needs emerged with the categories of a sense of self and personal growth. These categories included participant discussion of self and the growth process that occurs through group belonging. Each category is discussed in depth below.

Sense of self. Participants indicated they received a sense of self-confidence, the ability to be authentic, and identity from belonging to groups. For example, participants listed “a sense of boosted self esteem”, “self-respect”, and “I feel like I gain confidence” through belonging to groups. Another participant said, “my self confidence has improved because I get to express myself more and I'm getting used to being myself more comfortably” indicating that self-confidence might evolve through group belonging. Moreover, a participant described the process of being able to “be myself” authentically:

“I know that I can always relax, have fun, and laugh when I'm with my friends. I feel like there are no restrictions on how I should act around friends, and the thought of restricting or checking my words or actions doesn't even cross my mind”

Finally, participants mentioned identity development in their responses. For example, one participant stated, “being a part of these groups contributes to my sense of identity” while another stated, “my identity is tied up with these groups”

Personal growth. Participants stated that belonging to groups gave them purpose and also contributed to their learning. For example, participants indicated belonging to groups “gives my life meaning” and it “helps give my life purpose.” Additionally, participants indicated that “learning”, “knowledge”, and “new ideas” were also provided through belonging to groups. Emerging adults in this study also said they received “personal enrichment”, “growth as a person”, and “a place to learn and grow” as a result of group belonging.

Emotional needs. Participants mentioned a number of emotional needs being met by belonging. Feeling a sense of “security”, “safety”, and “stability” was listed by participants as needs being met through group belonging. Additionally, “love”, “joy”, “kindness”, “pride”, “satisfaction”, “respect”, “fun”, “enjoyment”, “guidance” or “advice”, “comfort”, “contentment”, “accomplishment”, “achievement”, “recognition”, “care”, and “being important.” Moreover, one participant stated that they receive “a feeling of warmth and togetherness” through group belonging.

Communal needs. Participant responses indicate that there are several communal needs that are met through belonging to groups. These include social, relational, and support. The categories are outlined in the following paragraphs.

Social. In terms of social needs, participants discussed meeting new people, getting to know people, talking and socializing. Participants stated that belonging to groups allows them the experience of “meeting new people” or “getting to know people.” For others, they enjoyed being able to talk or socialize with other individuals. Talking and socializing remain separate codes because the processes described with each code appear to be different. For example, participants listed “chat and pass the time”, “people to talk to”, and “people to talk to and listen” as social needs being met. Additionally, participants listed group belonging provides them with “social interaction”, a “social life”, and time to “socialize” with other people.

Relational. Various relationship experiences were mentioned by participants as what they get from being a part of groups including friendship, companionship, camaraderie, community, connection, and kinship. Participants listed “friendship”, “friends”, “companionship” and “camaraderie” as what they get from belonging to groups indicating that there is a relational component to needs being met through belonging. Additionally, participants listed “a sense of

community”; however, they did not expand upon what this meant to them. Moreover, “feeling connected” and “lifelong connections” were listed as well. Participants also indicated a relational dynamic that occurs between group members that feel like family but are not necessarily related. For example, participants listed “kinship” and “a feeling of family” as what they get from belonging to groups.

Support. Participants provided examples of support that they receive through belonging to groups. For example, “emotional support”, “social support”, “a support network”, and “support system” were all listed. Additionally, one participant stated they experience “someone to talk to when I just need someone to listen” while another participant stated, “I have a group of people who will always be there to support me or whom I can go to for any questions or concerns that may be on my mind.”

Work needs. Participants indicated that “professional development”, “professional advice and support”, “career advancement”, and “networking opportunities” while others indicated that financial gains such as “money” or a “paying job” were work needs met through group belonging.

Giving back/volunteering needs. Participants indicated that their needs of giving back or volunteering were being met through belonging to their groups. For example, one participant stated, “I’m doing things that really matter to me. I’m reaching out and helping make a difference in other people’s lives and that makes me feel good” while another person said, ““I want to help and change lives of people both similar and different than myself.”

Discussion, Implications and Future Research

The purpose of this study was to hear from emerging adults what it means to feel as though they belong to the groups they associate with, how emerging adults form and maintain a

sense of group belonging, and what emerging adults get from belonging to groups. The large sample size of this study yielded a wide variety of results when answering the research questions, indicating that the definition of belonging, the process of belonging, and what emerging adults get from being a part of groups differs greatly across emerging adults.

The researcher purposefully left the definition of groups open to hear from emerging adults how they define the groups they belong to. Results yielded predictable responses such as friends, family, school, hobbies, and work. More surprisingly were the mentioning of group affiliations that centered around identity such as gender, sexual orientation, their generation (young adults), or indications of social status or life course (e.g., homeowners), indicating that group association goes beyond finite groups in close proximity, but may also include a sense of shared current or past life experiences in a more global sense. Continued research is warranted on this matter to better understand group association and the ways that professionals can help emerging adults connect to the diverse types of groups they associate with. This is especially true for individuals with diverse racial, ethnic, gender, and sexuality identities.

In attempting to define what it means to belong, emerging adults most frequently endorsed acceptance as a necessary component of belonging to groups. Moreover, emerging adults appear to feel a sense of belonging when they receive messages of inclusion, or as though there was a place for them to be who they are or that they fit in. Since people of color (Ajrouch, Antonucci, & Janevic, 2001; Taylor, Chatters, Woodward, & Brown, 2013), and gender and sexual minorities (Nicolazzo, Pitcher, Renn, & Woodford, 2017) experience belonging differently, future research should examine these experiences in people of color and gender and sexual minority emerging adult populations to understand this process of people with diverse identities. Specifically, it is important to include personal and racial identity formation and

development of racial minorities as their experienced membership of an oppressed group (Schwartz, Vignoles, Brown, & Zagefka, 2014) will likely impact experiences of belonging in various social contexts. This is especially important given the historical and intergenerational experiences of micro-aggressions and broader systemic oppressions experienced by minority populations, as their experiences of acceptance and inclusion would likely differ. This process of belonging could be further convoluted in people who have identities that intersect (e.g. people who identify as both black and gay) (e.g. Anthias, 2008), who may struggle to find acceptance and belonging in their groups. Further, these differences may become even more layered when considering emerging adults who chose to attend higher education and those who did not, or who did not have access to resources to attend school.

The remaining codes were fairly infrequently and inconsistently endorsed, indicating that for emerging adults, a sense of belonging may be defined in many different ways. Given the importance of human connection and belonging to healthy life outcomes (e.g. Drolet, Arcand, Ducharme, & Leblanc, 2013; Lambert, et al., 2013; Torgerson, Love, & Vennum, In Press), the complexities of belonging as a construct outlined in this study, researchers must use caution when including quantitative measures of belonging in research studies due to the complex experiences of belonging that may not be currently represented in current measures. Additional qualitative findings are needed to before testing validity of current belonging to see if measurements of belonging fully capture experiences of belonging given by emerging adults. Further, results from this study may help inform future belonging research utilizing in-depth data collection and data analyses practices with more diverse populations. Moreover, being able to assess how similar the experiences of belonging for emerging adults who attend Community

College, a four-year University, or go directly into the workforce given the potentially different lived experiences in all three circumstances.

The results for the process of joining groups indicated that this process largely depends on the type of group being discussed, further indicating that different groups have different joining processes. These findings highlight the importance of understanding the type of groups emerging adults belong to in order to best understand their processes of joining. This is potentially further complicated given the desire of emerging adults to feel accepted, included, and that there is a place for them when group approval or admission may be out of their control (i.e., formal joining process versus organic joining process).

Moreover, in terms of the process of group belonging, emerging adults provided an array of responses leading the researcher to believe that the process of group belonging is complex and diverse. Unfortunately, if there is great diversity across emerging adults in the process of feeling as though one belongs, professionals are met with the unique task of attempting to foster belonging – both at the University level and places of employment – when they may not know how best to do so. It is important for future research to begin to explore how the process of coming to feel as though one belongs to a group differs across sub-populations and across diverse contexts in order to increase the chances for effective programming to enhance belonging.

Personal growth and development was also a largely endorsed theme across research questions indicating that for some emerging adults, belonging to groups is an important (or at least present) component to continued identity formation. This is not surprising given Social Identity Theory (Tajfel, 1974) posits that belonging to groups influences the self-identification process. Moreover, given that friends and relationships are sought out and formed based on

characteristic similarities among members (Jackson et al., 2017), it appears that emerging adults are looking for groups with similarities to them, which may also impact the identity formation in this life stage. Specifically, perhaps participants are seeking groups who are similar, but not static, to aid in continued growth and development throughout the transitional experience of emerging adulthood. Moreover, if group members are on similar growth trajectories, group belonging could impact coping strategies utilized to cope with the transitions of this developmental stage.

Limitations

Although the findings from this paper make contributions to the field, there are also limitations that need to be addressed. With a sample size consisting mostly of heterosexual, white, females, the questions need to be asked to a more diverse sampling to hear from people in minority populations to better understand the phenomenon of belonging across cultures and experiences. Additionally, while the large sample size allowed for more emerging adult voices to be heard, the data did not provide the depth of information that an in-depth interview or focus group would. Moreover, because data was collected via online methods, the researcher was unable to ask follow-up questions, which could have been helpful to better understand participant responses. For example, the definition of family could vary for many people, which could influence results, and the researcher was unable to inquire further to get a more specific definition from participants. Therefore, it is advised that future research be conducted via in-depth interviews to obtain breadth to the data. Since participants were recruited utilizing Mturk, it is important to note that no assumptions can be made about participants' level of experience belonging to social groups, which may influence the qualitative findings of this study. Finally, the results of this study were organized by topic; therefore, future data analyses should include

separating results by age groups to determine if the variations between participants can be accounted for through age. Analyzing via race or sexual orientation would also be advised.

Conclusion

To conclude, the findings from this study indicate that further research is needed to further understand a sense of belonging in emerging adulthood. This study has laid groundwork for future analyses of the data, as well as future studies focused on the process of belonging in emerging adulthood.

Chapter 5 - Overall Discussion

Given the large body of research indicating the necessity of belonging (Baumeister & Leary, 1995; Lieberman, 2013) and the positive life outcomes associated with belonging including reduction in stress (Mahmoud, 2012; Nuttman-Schwartz & Dekel, 2009), mental health symptom improvement (Hagerty, Williams, Coyne, & Early, 1996; Kawachi & Berkman, 2001; Mahmoud, 2012; Torgerson, Love, & Vennum, In press), reduction in substance use (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015; Torgerson, Love, & Vennum, In Press), it is evident that belonging is important to human development and may act as buffer to negative outcomes. Research suggests the importance of belonging in the development and experiences of individuals, leading the researcher to believe that increasing belonging in the lives of emerging adults may lead to a better chance at healthy life trajectories; however, belonging is frequently studied in the context of high school students (e.g., Drolet, Arcand, Ducharme, & Leblanc, 2013; Kosciw, et al., 2016), colleges/universities (e.g., Freeman, Anderman, & Jensen, 2007; Hoffman, Richmond, Morrow, & Salomone, 2002-2003; Osterman, 2000), and occasionally in the workplace (e.g., McClure & Brown, 2008), limiting our understandings of belonging in the general population. Therefore, the purpose of this study was two-fold. The first aim of this study was to understand the extent to which group belonging in emerging adulthood influenced individual coping motives moderated by group coping norms. Additionally, a second goal of the first study was to understand how coping motives influences coping behaviors. The second aim of this study was to understand what it means for emerging adults to feel as though they belong to the groups they associate with, what fostered the process of belonging, and what emerging adults get from belonging to groups.

Interestingly, examining the moderating effects of group coping norms on the association between group belonging and individual coping strategies yielded surprising results given there was only one moderating effect. These findings were not expected given the large body of information surrounding group norms and behaviors (Rimal & Real, 2005); however, perhaps the influence of overall group norms and group coping norms are different. Given the one significant moderated path, it appears that belonging to groups may be protective to using sex as a coping strategy even when unhealthy group norms are present. One explanation for this could be that each coping behavior included in this study served different functions in people (e.g. self-harm may be used to feel pain, where sex may be used to feel connection), which may impact the motivations for engaging in such behaviors. Future research should include a more thorough investigation of the functions of coping behaviors in the lives of emerging adults before further understanding how belonging to groups and group coping norms influence such behaviors. Therefore, it is advised that future research examine differences between the impact of group norms versus group coping norms on group member behavior. Moreover, future research would benefit from examining group coping norms more thoroughly with validated and specified measures.

Belonging was found to be positively associated with healthy supportive and healthy self-soothing coping strategies, indicating that emerging adults belonging to groups they associate with may lead to healthier coping strategies. Further, all four coping motivations was significantly associated with at least one of the unhealthy coping behaviors and healthy coping outcomes, pointing towards the need to further understand how emerging adults come to cope with life stresses to develop appropriate intervention mechanisms to provide healthier alternatives. Given the markers of emerging adulthood (Arnett, 2000; 2004; 2007), these findings

are especially relevant to Colleges and Universities as well as employers. Moreover, clinicians working specifically with emerging adults would benefit from understanding the purpose and functions of coping in their clients for more effective treatment planning. Based on these findings, a logical next step at understanding coping motives in emerging adults would be to understand the association between life stressor, coping mechanism utilized, and the outcome. Additional information such as where coping skills were developed (i.e. family pattern, peer group norm, social learning, etc.) would aid in enhancing unhealthy coping prevention efforts as well as inform clinical practice. Additionally, including daily stressors in the model would perhaps provide a clearer understanding of the associations between belonging to groups and coping in emerging adults.

In study 2, the researcher qualitatively examined what it means to belong, the joining and belonging process, as well as what emerging adults get from being in groups. The same participants were used in both studies, which provided a large sample size to qualitatively analyze. Results yielded widespread inconsistency in participant responses when answering what it means for emerging adults to belong to the groups they associate with and further examining the process of belonging as well as what participants get from being in in the groups they associate with. This indicates that both the definition of belonging and the process of belonging may be unique and complex for each individual given certain life circumstances. These findings indicate that quantitative researchers use caution when measuring belonging, as participant responses of these measures may not fully capture their actual experience of belonging.

Given that both studies utilized the same participants, a next logical step would be to include a mixed methods data analyses to include quantitative measures of belonging with qualitative understandings of participant experiences. Moreover, data analyses should include

examinations of responses from specific age groups (i.e., 18-22, 23-25, 26-29) within emerging adulthood to see how the experience of belonging varies across this developmental time period as belonging experiences and needs for a 22 year old college student may differ from a 29 year old parent to 4 children. In line with this, it is important that future research include more voices from gender and sexual minority populations (e.g., Nicolazzo, Pitcher, Renn, & Woodford, 2017) as well people of color (e.g., Ajrouch, Antonuccie, & Janevic, 2001; Taylor, Chatters, Woodward, & Brown, 2013), as their experiences of belonging will likely be influenced by perceived and experienced systemic oppression. Moreover, future research would benefit by including people who have physical or social disabilities as the belonging process may be influenced by these experiences. By understanding the process of belonging in multiple populations, researchers and clinicians will better be able to develop effective programming and interventions aimed at fostering a sense of belonging.

Additionally, it is important to consider that the process of belonging may be further complicated when people believe they belong to groups, but the groups they feel they belong to do not actually accept them as a member of the group. Future research is warranted to understand the differences between individual perceptions of belonging and reciprocal perceptions of belonging and how that influences the functioning of emerging adults. Specifically research is warranted to determine whether individual perceptions of belonging are enough to improve mental health symptoms and wellbeing, or if a reciprocal perception of belonging is needed. This process should be examined in the emerging adult population as well as in adolescents due to the identity formation taking place during these times of life-stage development (Arnett, 2000; 2004; Erickson, 1968).

Finally, inclusion criterion for both studies included being a United States citizen and living within the United States. The findings in these studies need to be replicated in populations of people living within the United States without citizenship to better understand their experiences of belonging. For example, someone who is living within the United States as a refugee fleeing their home country may have different perceptions of belonging than someone who grew up in the United States. Moreover, examining this phenomenon in populations outside of the United States would be beneficial to study if the belonging phenomenon remains stable across cultures.

Practical and Clinical Implications

The results of these studies lead to several practical implications. First, university instructors, on campus student organizations and workplace employers may be inclined to foster a sense of belonging in their classroom, organization, and workplace environments as a way to increase healthy coping strategies in emerging adults. Moreover, College or University administrators need to work diligently with on-campus entities such as the office of student life, on-campus LGBTQA resource center, international student services, and residence life to ensure University-wide initiatives are developed and appropriately implemented to increase belonging among all students.

Since there was a negative direct association between belonging and drug use frequency, practitioners need to assess current substance use prevention methods to ensure that belonging is a component of these programs. Many substance use prevention methods that promote healthy life skills are implemented in school classrooms (SAMHSA, 2017), so additional research may be warranted to understand the long-term effectiveness of including belonging in prevention efforts. Although this sample was not a clinical sample, it would still be beneficial for therapists

working with emerging adults to be routinely assessing for belonging throughout treatment and to offer resources for enhancing belonging and finding positive groups to belong to should drug use become an unhealthy coping mechanism. Moreover, it would be beneficial to examine the experiences of belonging within support or therapy groups and how belonging to such groups aids in the development and implementation of learned healthy coping skills.

Conclusion

In conclusion, these findings point to the continued need to further understand the function of coping mechanisms and maladaptive coping behaviors in emerging adults. Moreover, results also indicate that future research is warranted to understand the complexities of a sense of belonging to emerging adults. Both studies have laid groundwork for future studies as well as provided several suggestions for future research endeavors. Practical and clinical implications have been provided; however, further research is strongly advised before modifying practices

References

- Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S. R. Levy, M. Killen, S.R. Levy, & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood*, pp. 47–65. New York, NY: Oxford University Press.
- Afifi, T. D., Hutchinson, S., & Krouse, S. (2006). Toward a theoretical model of communal coping in postdivorce families and other naturally occurring groups. *Communication Theory, 16*, 378-409.
- Ajrouch, K. J., Antonucci, T. C., & Janevic, M. R. (2001). Social networks among blacks and whites: The interaction between race and age. *The Journals of Gerontology: Series B, 56*(2), S112-S118. <https://doi-org.er.lib.k-state.edu/10.1093/geronb/56.2.S112>
- Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist, 44*(4), 709-716.
- Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development, 41*, 49-67.
- Allan, G. (2008). Flexibility, friendship, and family. *Personal Relationships, 15*, 1-16. Doi: 10.1111/j.1475-6811.2007.00181.x
- Amazon Mechanical Turk. (2017). Amazon Mechanical Turk Pricing. Retrieved from <https://requester.mturk.com/pricing>
- Amiot, C. E., Sansfaçon, S. and Louis, W. R. (2013), Investigating the motivations underlying harmful social behaviors and the motivational nature of social norms. *Journal of Applied Social Psychology, 43*, 2146–2157. doi:10.1111/jasp.12167
- Anthias, F. (2008). Thinking through the lens of translocational positionality: an intersectionality frame for understanding identity and belonging. *Translocations, 4*(1), 5-20.

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press.
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for?". *Child Development Perspectives*. 1, 68–73. [doi:10.1111/j.1750-8606.2007.00016.x](https://doi.org/10.1111/j.1750-8606.2007.00016.x).
- American Psychological Association (APA). (2014). *Stress in America: Are teens adopting adults' stress habits?* Retrieved from <http://www.apa.org/news/press/releases/stress/2013/stress-report.pdf>
- Aukett, R., Ritchie, J., & Mill, K. (1988). Gender differences in friendship patterns. *Sex Roles*, 19(1-2), 57-66.
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. *Behavior research methods*, 45(2), 527-535.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173. doi:10.1037/0022-3514.51.6.1173
- Barry, C. M., Madsen, S. D., & DeGrace, A. (2015). Growing up with a little help from their friends in emerging adulthood. In J. J. Arnett (Ed.) *The oxford handbook of emerging adulthood*. DOI: 10.1093/oxfordhb/9780199795574.013.008
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.

- Berg, C. A., Meegan, S. P., & Deviney, F. P. (1998). A social-contextual model of coping with everyday problems across the lifespan. *International Journal of Behavioral Development*, 22(2), 239-261.
- Beutler, L. E., Moos, R. H., & Lane, G. W. (2003). Coping, treatment planning, and treatment outcome: Discussion. *Journal of Clinical Psychology*, 59(10), 1151-1167. DOI: 10.1002/jclp.10216
- Bowen, S., Chawla, N., & Marlatt, G. A. (2011). Mindfulness-based relapse prevention for addictive behaviors: A clinician's guide. New York, NY: The Guilford Press
- Bowlby, J. (1969). *Attachment and loss: Volume 1*. New York: Basic Books. Reprinted 1982.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock Publications
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>
- Brown, B. B. (1990) Peer groups and peer cultures. In: S.S Feldman, & G.R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp.171-196), Cambridge, MA: Harvard University Press.
- Buhrmester, D. (1996). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *Cambridge studies in social and emotional development. The company they keep: Friendship in childhood and adolescence* (pp. 158-185). New York: Cambridge University Press.

- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6, 3–5. doi:10.1177/1745691610393980
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- Center for Behavioral Health Statistics and Quality (CBHSQ). (2016). 2015 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD.
- Chapman, A. L., & Dixon-Gordon, K. L. (2007). Emotional antecedents and consequences of deliberate self-harm and suicide attempts. *Suicide and Life-Threatening Behavior*, 37, 543-552.
- Charmaz, K. (2014). *Constructing grounded theory*, 2nd Edition. Thousand Oaks, CA: SAGE
- Chen, C. Y., Storr, C. L., & Anthony, J. C. (2009). Early-onset drug use and risk for drug dependence problems. *Addictive Behaviors*, 34(3), 319-322. doi: 10.1016/j.addbeh.2008.10.021
- Christensen, A. D. (2009). Belonging and unbelonging from an intersectional perspective. *Gender, Technology and Development*, 13(1), 21-41. DOI: 10.1177/097185240901300102
- Clapp, J. D., & McDonnell, A. L. (2000). The relationship of perceptions of alcohol promotion and peer drinking norms to alcohol problems reported by college students. *Journal of College Student Development*, 41(1), 19-26.
- Cooper, M. L. (1994). Motivations for alcohol use among adolescents: Development and validation of a four-factor model. *Psychological Assessment*, 117-128.

- Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and sexual behavior among adolescents and young adults: A functional perspective. *Journal of Personality and Social Psychology*, *75*, 1528–1558.
- Dewitte, M. (2012). Different perspectives on the sex-attachment link: Towards an emotion-motivational account. *The Journal of Sex Research*, *49*(2-3), 105-124. DOI: 10.1080/00224499.2011.576351
- Diego M. A, Field, T. M., & Sanders, C. E. (2003). Academic performance, popularity, and depression predict adolescent substance use. *Journal of Adolescence*, *38*(149), 35–43.
- Drolet, M., Arcand, I., Ducharme, D., & Leblanc, R. (2013). The sense of school belonging and implementation of a prevention program: Toward healthier interpersonal relationships among early adolescents. *Child and Adolescent Social Work Journal*, *30*, 535-551. doi:10.1007/s10560-013-0305-5
- Erickson, E. H. (1950). *Childhood and society*. New York, NY: Norton.
- Erickson, E. H. (Eds.). (1963). *Youth: Change and challenge*. Basic Books.
- Erickson, E. H. (1968). *Identity, youth, and crisis*. New York, NY: Norton.
- Esper L. H., & Furtado, E. F. (2013) Gender differences and association between psychological stress and alcohol consumption: A systematic review. *Journal of Alcoholism & Drug Dependence*, *1*(3), 1-5. doi: 10.4172/2329-6488.1000116
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*, 615-625.

- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education*, 75(3), 203-222. <https://doi.org/10.3200/JEXE.75.3.203-220>
- Gibbs, G. R. (2007). Thematic coding and categorizing. In *Qualitative research kit: Analyzing qualitative data* (pp. 38-55). London, England: SAGE Publications Ltd. doi: 10.4135/9781849208574.n4.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Hagerty, B. M., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing*, 10(4), 235-244. doi:10.1016/S0883-9417(96)80029-X
- Halpern, C. T., & Haydon, A. A. (2012). Sexual timetables for oral-genital, vaginal, and anal intercourse: Sociodemographic comparisons in a nationally representative sample of adolescents. *American Journal of Public Health*, 102(6), 1221-1228.
- Harris, K. M., & Urdry, J. R. (1994-2008). *National Longitudinal Study of Adolescent to Adult Health (Add Health)* [Data file]. Retrieved from <https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/21600?sortBy=&searchSource=revise&q=addhealth>
- Haw, C., & Hawton, K. (2009). Problem drug use, drug misuse and deliberate self-harm: trends and patient characteristics, with a focus on young people, Oxford, 1993-2006. *Social Psychiatry and Psychiatric Epidemiology*, 46(2), 85-93.
- Hawton, K., Bergen, H., Kapur, N., Cooper, J., Steeg, S., Ness, J., & Waters, K. (2012). Repetition of self-harm and suicide following self-harm in children and adolescents:

- Findings from the Multicentre Study of Self-harm in England. *The Journal of Child Psychology and Psychiatry*, 53(12), 1212-1219. doi:10.1111/j.1469-7610.2012.02559.x
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408–420.
doi:10.1080/03637750903310360
- Hays, R. B. (1984). The development and maintenance of friendship. *Journal of Social and Personal Relationships*, 1, 75-98.
- Hays, R. B. (1988). Friendship. In S. Duck et al. (Eds.), *Handbook of personal relationships: Theory, research and interventions* (pp. 391-408), Oxford: Wiley.
- Hazen, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquire*, 5(1), 1-22
- Hill, C. A. (2002). Gender, relationship stage, and sexual behavior: The importance of partner emotional investment within specific situations. *Journal of Sex Research*, 39, 228–240.
- Hill, C. A., & Preston, L. K. (1996). Individual differences in the experience of sexual motivation: Theory and measurement of dispositional sexual motives. *Journal of Sex Research*, 33, 27–43
- Hoffman, M., Richmond, J., Morrow, J., Salomone, K. (2002-2003). Investigating “sense of belonging” in first-year college students. *Journal of College Student Retention*, 4(3), 227-256.
- IBM Corp (2013). *IBM SPSS statistics for Windows* (Version 22.0.). Armonk, NY: IBM Corp.
- Jackson, J. C., Lemay Jr., E.P., Bilkey, D., & Halberstadt, J. (2017). Beyond "birds of a feather": A social inference approach to attachment-dependent grouping. *Journal of Experimental Social Psychology*, 73, 216-221.

- Jansen, W. S., Otten, S., Van Der Zee, K. I., Jans, L. (2014). Inclusion: Conceptualization and measurement. *European Journal of Social Psychology, 44*, 370-385, DOI: 10.1002/ejsp.2011
- Kabat-Zinn, J. (1990). Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. United States: Jon Kabat-Zinn
- Kaniasty, K. & Norris, F. H. (1997). Social support dynamics in adjustment to disasters, in S. W. Duck (Ed.). *Handbook of personal relationships*, pp. 595-619. Chichester, UK: Wiley.
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental. *Journal of Urban Health, 78*(3), 458-467. doi:10.1093/jurban/78.3.458
- Khantzian, E. J. (2012). Reflections on treating addictive disorders: A psychodynamic perspective. *The American Journal on Addictions, 21*, 274-279. DOI: 10.1111/j.1521-0391.2012.00234.x
- Khantzian, E. J. (1997). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry, 4*(5), 231-244. doi:10.3109/10673229709030550
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist, 63*(6). 518-526. DOI: 10.1037/0003-066X.
- King, K. M., & Chassin, L. (2007). A prospective study of the effects of age of initiation of alcohol and drug use on young adult substance dependence. *Journal of Studies on Alcohol and Drugs, 68*(2), 256-265.
- Kittur, A., Chi, E. H., & Suh, B. (2008). Crowdsourcing user studies with Mechanical Turk. In M. Czerwinski & A. Lund (Eds.), *Proceeding of the Twenty-Sixth Annual SIGCHI Conference on Human Factors in Computing Systems* (pp. 453–456). New York: ACM.

- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd. ed.). New York, NY: The Guilford Press.
- Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review, 27*, 226-239.
- Klonsky, E. D. (2011). Non-suicidal self-injury in United States adults: Prevalence, sociodemographics, topography and functions. *Psychological Medicine, 41*. 1981-1986. doi:10.1017/S0033291710002497
- Klonsky, E. D. & Glenn, C. G. (2009) Assessing the functions of non-suicidal self-injury: Psychometric properties of the Inventory of Statements About Self-injury (ISAS). *Journal of Psychopathology and Behavioral Assessment, 31*, 215-219.
- Klonsky, E. D. & Olino, T. M. (2008). Identifying clinically distinct subgroups of self-injurers among young adults: A latent class analysis. *Journal of Consulting and Clinical Psychology, 76*, 22-27.
- Kosciw, J. G., Greytak, E. A., Giga, N. M., Villenas, C., & Danischewski, D. J. (2016). *The 2015 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools*. New York: GLSEN.
- Kuo, W-H, Gallo, J. J., & Eaton, W. W. (2004). Hopelessness, depression, substance disorder, and suicidality: A 13 year community-based study. *Social Psychiatry and Psychiatric Epidemiology, 39*(6), 497-501.
- Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belongingness enhances meaning in life. *Personality and Social Psychology, 39*(11), 1418-1427. doi:10.1177/0146167213499186

- Lane, J. A., Leibert, T. W., Goka-Dubose, E. (2017). The impact of life transition on emerging adult attachment, social support, and well-being: A multiple-group comparison. *Journal of Counseling & Development, 95*(4), 378-388. <https://doi-org.er.lib.k-state.edu/10.1002/jcad.12153>
- Lazarus, R. S., & Folman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer
- Leigh, B. C. (1989). Reasons for having and avoiding sex: Gender, sexual orientation, and relationship to sexual behavior. *Journal of Sex Research, 26*, 199–209.
- Lenhart, A., Smith, A., Anderson, M., Duggan, M., & Perrin, A. (2015). Teens, technology and friendships: Video games, social media and mobile phones play an integral role in how teens meet and interact with friends. Retrieved from <http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>
- Leung, A., Kier, C., Fung, T., Fung, L., & Sproule, R. (2011). Searching for happiness: The importance of social capital. *Journal of Happiness Studies, 12*, 443. doi:10.1007/s10902-010-9208-8
- Lewis, M. A., McBride, C. M., Pollak, K. I., Puleo, E., Butterfield, R. M., Emmons, K. M. (2006). Understanding health behavior change among couples: An interdependence and communal coping approach. *Social Science and Medicine, 62*, 1369-1380. doi:10.1016/j.socscimed.2005.08.006
- Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. New York, NY: Crown Publishing Group.
- Lieberman, M. D., & Eisenberger, N. I. (2008). The pains and pleasures of social life: A social cognitive neuroscience approach. Retrieved from <http://www.scn.ucla.edu/pdf/Pains&Pleasures%282008%29.pdf>

- Lyons, R. F., Mickelson, K. D., Sullivan, M. J. L., & Coyne, J. C. (1998). Coping as a communal process. *Journal of Social and Personal Relationships, 15*(5), 579-605.
- Mahmoud, J. S. R. (2012). The relationship among young adult college students depression, anxiety, stress, demographics, life satisfaction, and coping styles. *Issues in Mental Health Nursing, 33*, 149-156. DOI: 10.3109/01612840.2011.632708
- Marlatt, G. A. & Gordon, J. R. (Ed.). (1985). *Relapse Prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.
- Martens, M. P., Page, J. C., Mowry, E. S., Damann, K. M., Taylor, K. K., & Cimini, M. D. (2006). Differences between actual and perceived student norms: An examination of alcohol use, drug use, and sexual behavior. *Journal of American College Health, 54*(5), 295-300. doi:10.3200/JACH.54.5.295-300
- Martinez-Hernaez, A., Carceller-Maicas, N., DiGiacomo, S. M., & Ariste, S. (2016). Social support and gender differences in coping with depression among emerging adults: A mixed-methods study. *Child & Adolescent Psychiatry and Mental Health, 10*(2), 1-11. <https://doi.org/10.1186/s13034-015-0088-x>
- Maslow, A. H. (1943). [A Theory of Human Motivation](#). *Psychological Review, 50*(4), 370-96.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- Mayberry, M. L., Espelage, D. L., & Koenig, B. (2009). Multilevel modeling of direct effects and interactions of peers, parents, school, and community influences on adolescent substance use. *Journal of Youth and Adolescence, 38*, 1038-1049. DOI 10.1007/s10964-009-9425-9
- Mayo Clinic. (2017). Self-injury/cutting. Retrieved from <https://www.mayoclinic.org/diseases-conditions/self-injury/symptoms-causes/syc-20350950>

- McClure, J. P., & Brown, J. M. (2008). Belonging at work. *Human Resource Development International, 11*(1), 3-17. DOI: 10.1080/13678860701782261
- Meriam-Webster. (2017). Group. Retrieved from <https://www.merriam-webster.com/dictionary/group>
- Miche, M., Huxhold, O., & Stevens, N. L. (2013). A latent class analysis of friendship network types and their predictors in the second half of life. *The Journals of Gerontology. Psychological Sciences and Social Sciences, 68*(4), 644–652.
- Mills, A. J., Durepos, G. & Wiebe, E. (2010). *Encyclopedia of case study research*. Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412957397.
- Muthén, L. K., & Muthén, B. O. (1998 – 2012). *Mplus user's guide* (5th ed.). Los Angeles, CA: Authors.
- National Institute on Drug Abuse (NIDA). (2007). Bringing the power of science to bear on drug abuse and addiction. Retrieved from <https://www.drugabuse.gov/publications/teaching-packets/power-science/section-iii/1-drugs-have-long-term-consequences>
- National Institute of Mental Health (NIMH). (2017). Borderline personality disorder. Retrieved from <https://www.nimh.nih.gov/health/topics/borderline-personality-disorder/index.shtml>
- Nelson, L. J., Willoughby, B. J., Rogers, A. A., & Padilla-Waler, L. M. (2015). “What a view!”: Associations between young people’s views of the late teens and twenties and indices of adjustment and maladjustment. *Journal of Adult Development, 22*, 125-137 DOI 10.1007/s10804-015-9206-5
- Newman, B. M., Lohman, B. J., & Newmann, P. R. (2007). Peer group membership and a sense of belonging: Their relationships to adolescent behavior problems. *Adolescence, 42*(166), 241-263.

- Nicolazzo, N., Pitcher, E. N., Renn, K. A., & Woodford, M. (2017). An exploration of trans* kinship as a strategy for student success. *International Journal of Qualitative Studies in Education*, 30(3), 305-319. DOI: 10.1080/09518398.2016.1254300
- Nock, M. K., & Prinstein, M. J. (2004). A functional approach to the assessment of self-mutilative behavior. *Journal of Clinical Psychology*, 72(5), 885-890. DOI: 10.1037/0022-006X.72.5.885
- Nuttman-Shwartz, O., & Dekel, R. (2009). Ways of coping and sense of belonging in the face of a continuous threat. *Journal of Traumatic Stress*, 22(6), 667-670. DOI: 10.1002/jts.20463
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367
- Oswald, D. L., & Clark, E. M. (2003). Best friends forever?: High school best friendships and the transition to college. *Personal Relationships*, 10(2), 187-196. DOI: 10.1111/1475-6811.00045
- Page, R. M., Hammermeister, J. J., & Scanlan, A. (2000). Everybody's not doing it: Misperceptions of college students' sexual activity. *American Journal of Health Behavior*, 24(5), 387-394. doi: 10.5993/AJHB.24.5.7
- Palmonari, A., Pombeni, M. L., & Kirchler, E. (1990). Adolescents and their peer groups: A study on the significance of peers, social categorization processes and coping with developmental tasks. *Social Behavior*, 5, 33-48.
- Patrick, M. E., & Maggs, J. L. (2010). Profiles of motivations for alcohol use and sexual behavior among first-year university students. *Journal of Adolescence*, 33(5), 755-765. doi: [10.1016/j.adolescence.2009.10.003](https://doi.org/10.1016/j.adolescence.2009.10.003)

- Perin, A. (2015). Social media usage: 2005-2015. Retrieved from <http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>
- Perkins, H. W. (2002a). Social norms and the prevention of alcohol misuse in collegiate contexts. *Journal of Studies on Alcohol, 14*, 164-172.
- Pulakos, J. (1989). Young adult relationships: Siblings and friends. *The Journal of Psychology, 123*(3), 237-244.
- Randolph, B. J., & Winstead, B. (1988). Sexual decision making and object relations theory. *Archives of Sexual Behavior, 17*, 389–409
- Ramasubramanian, S. (2017). Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: A mixed methods approach. *International Journal of Adolescence and Youth, 22*(2), 308-321. DOI: 10.1080/02673843.2016.1175361
- Reis, H. T., Lin, Y., Bennett, M. E., & Nezlek, J. B. (1993). Change and consistency in social participation during early adulthood. *Developmental Psychology, 29*, 633-645.
- Rice, F. P. & Doglin, K. G. (2008). *The adolescent: Development, relationships, and culture* (12th ed.), Boston, MA: Pearson Education
- Rimal, R. N., & Real, K. (2005). How behaviors are influenced by perceived norms: The test of the theory of normative social behavior. *Communications Research, 32*(3), 389-414. DOI: 10.1177/0093650205275385
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2015). 2015 National Survey on Drug Use and Health (NSDUH). Table 2.46B—Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2014 and 2015. Available

at: <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab2-46b>.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2017). Prevention of substance abuse and mental illness. Retrieved from <https://www.samhsa.gov/prevention>,

Sani, F., Madhok, V., Norbury, M., Dugard, P., & Wakefield, J. R. (2015). Greater number of group identifications is associated with healthier behaviour: Evidence from a Scottish community sample. *British Journal of Health Psychology*, *20*(3), 466-481.

doi:10.1111/bjhp.12119

Saraff, P. D., Trujillo, N., & Pepper, C. M. (2015). Functions, consequences, and frequency of non-suicidal self-injury. *Psychiatry Quarterly*, *86*, 385-393. DOI 10.1007/s11126-015-9338-6

Schwartz, S. J., Vignoles, V. L., Brown, R., & Zagefka, H. (2014). The identity dynamics of acculturation and multiculturalism: Situating acculturation in context. In V. Benet-Martínez & Y.-Y. Hong (Eds.), *Oxford handbook of multicultural identity* (pp. 57–93). Oxford, UK: Oxford University Press.

Smith, A., & Anderson, M. (2018). Social media use in 2018. Retrieved from <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>

Sobel, M. E. (1987). Direct and indirect effects in linear structural equation models. *Sociological Methods & Research*, *16*(1), 155-176.

Sprague, J., & Quadagno, D. (1989). Gender and sexual motivation: An exploration of two assumptions. *Journal of Psychology & Human Sexuality*, *21*, 57-77.

Tajfel, H. (1974). Social identity and intergroup behavior. *Social Science Information*, *13*(2), 65-93

- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. W. Montergy (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-47). Monterey: Brooks-Cole.
- Tamres, L. K., Janicki, D., & Helgeson, V. S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review*, 6(1), 2-30.
- Taylor, R. J., Chatters, L. M., Woodward, A. T., & Brown, E. (2014). Racial and ethnic differences in extended family, friendship, fictive kin and congregational informal support networks. *Family Relations*, 62(4), 609-624. DOI: [10.1111/fare.12030](https://doi.org/10.1111/fare.12030)
- Taylor, R. J., Mouzon, D. M., Nguyen, A. W., & Chatters, L. M. (2016). Reciprocal family, friendship, and church support networks of African Americans: Findings from the National Survey of American Life. *Race and Social Problems*, 8(4), 326-339. doi: [10.1007/s12552-016-9186-5](https://doi.org/10.1007/s12552-016-9186-5)
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22, 776-793.
- Thorlindsson, T., & Bernburg, J. G. (2006). Peer groups and substance use: Examining the direct and interactive effect of leisure activity. *Adolescence*, 41(162), 321-339.
- Thoma, R. J., Monning, M. A., Lysne, P. A., Ruhl, D. A., Pommy, J. A., Bogenschutz, M., Tonigan, J. S., & Yeo, R. A. (2010). Adolescent substance abuse: The effects of alcohol and marijuana on neuropsychological performance. *Alcoholism: Clinical & Experimental Research*, 35(1), 39-46. DOI: [10.1111/j.1530-0277.2010.01320.x](https://doi.org/10.1111/j.1530-0277.2010.01320.x)

- Torgerson, C. N., Love, H. A., & Vennum, A. (In Press). The buffering effect of belonging on the negative association of childhood trauma with adult mental health and risky alcohol use. *Journal of Substance Abuse Treatment*,
- Turchik, J. A., & Garske, J. P. (2009). Measurement of sexual risk taking among college students. *Archives of Sexual Behavior*, 38(6), 936–48. DOI 10.1007/s10508-008-9388-z
- Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Eds.), *Advances in group processes: Theory and research, volume 2*, pp. 72-122.
- Utsey, S. O., Adams, E. P., & Bolden, M. (2000). Development and initial validation of the Africultural Coping Systems Inventory. *Journal of Black Psychology*, 26(2), 194-215.
- Vaccaro, A., & Newman, B. M. (2016). Development of a sense of belonging for privileged and minoritized students: An emergent model. *Journal of College Student Development*, 57(8), 925-942. DOI: <https://doi.org/10.1353/csd.2016.0091>
- Vander Stoep, A., Weiss, N. S., Kuo, E. S., Cheney, D., & Cohen, P. (2003). What proportion of failure to complete secondary school in the U.S. population is attributable to adolescent psychiatric disorder? *Journal of Behavioral Health Services and Research*, 30(1), 119–194.
- Woicik, P. A., Stewart, S. H., Pihl, R. O., & Conrod, P. J. (2009). The substance use risk profile scale: A scale measuring traits linked to reinforcement-specific substance use profiles. *Addictive Behaviors*, 34(12), 1042-1055. <https://doi.org/10.1016/j.addbeh.2009.07.001>
- Wright, P. H. (1984). Self-referent motivation and the intrinsic quality of friendship. *Journal of Social and Personal Relationships*, 1, 115-130.

Zahl, D. L., & Hawton, K. (2004). Repetition of deliberate self-harm and subsequent suicide risk: long-term follow-up study of 11,583 patients. *The British Journal of Psychiatry*, 185(1), 70-75. DOI: 10.1192/bjp.185.1.70

Zarbatany, L., Conley, R., & Pepper, S. (2004). Personality and gender differences in friendship needs and experiences in preadolescence and young adulthood. *International Journal of Behavioral Development*, 28(4), 299-310. DOI: 10.1080/0165025034400

Appendix A - Tables

Table 1. *Belonging, coping motives, and coping behaviors: Descriptive Statistics (N = 438)*

Variables	<i>M</i> or <i>n</i>	<i>SD</i> or %	<i>Range</i>	<i>α</i>
Belonging	4.36	0.74	1 - 5	.95
Unhealthy group coping norms	2.23	1.02	1 - 5	.80
Using substances for coping	2.40	1.25	1 - 5	.94
Engaging in sex for coping	1.39	1.05	1 - 5	.89
Intrapersonal functions of NISSI	4.39	1.34	2 - 6	.95
Interpersonal functions of NISSI	2.84	1.32	2 - 6	.83
Healthy supportive coping	2.80	0.87	1 - 4	.87
Healthy self-soothing coping	2.64	0.74	1 - 4	.77
Alcohol use frequency	1.61	1.34	1 - 5	
Drug use frequency	0.31	0.73	1 - 5	
Risky sexual behaviors frequency ^a	2.16	1.72	0 - 5	
NISSI frequency ^b	0.63	1.43	0 - 6	
ECR-SR Anxious	5.22	1.82	1 - 7	.92
ECR-SR Avoidance	5.80	1.30	1 - 7	.92
Using substances to conform	1.88	1.16	1 - 5	.94
Age	25.25	3.06	18 - 29	
Biological Sex				
Male	181	41.3%		
Female	247	56.4%		
Transgender FtM	3	0.7%		
Sexual Orientation				
Heterosexual	348	79.5%		
Gay	9	2.1%		
Lesbian	7	1.6%		
Bisexual	59	13.5%		
Queer	4	0.9%		
Relationship Status				
Single	140	32.0%		
Dating/partnered	117	26.7%		
Cohabiting	42	9.6%		
Engaged	24	5.5%		
Married	108	24.7%		
Divorced	2	0.5%		
Education Level				
Completed high school	31	7.1%		
Some college	134	30.6%		
Associate/technical degree	55	12.6%		

Bachelor's degree	163	37.2%
Master's degree	42	9.6%
Doctoral degree or higher	6	1.4%
Race		
Caucasian	315	71.9%
African American/Black	43	9.8%
Asian/Pacific Islander	37	8.4%
Latino/Hispanic	33	7.5%
Native American or Alaskan	11	2.5%
Middle Eastern	1	0.2%
Household Income (SES)		
< \$25,000	99	22.6%
\$25,000-\$50,000	167	38.1%
\$50,000-\$100,000	120	27.4%
> \$100,000	44	10.0%

Note: ^aSexual behaviors frequency ranged from 0 – 1,750. ^bNSSI frequencies ranged from 0 = 20,141. Both variables were recoded to be 0=0 instances, 1=1-2 instances, 2=3-5 instances, 3=6-9 instances, 4=10+ instances

Table 2. Correlations between Belonging, Coping Motives, and Coping Behaviors (N = 438)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Belonging	-																
2. Unhealthy group coping norms	-.12**	-															
3. Using substances to cope	-.09	.41**	-														
4. Using sex to cope	-.15**	.39**	.57**	-													
5. Intrapersonal functions of NSSI	-.03	.29*	.36**	.53**	-												
6. Interpersonal functions of NSSI	-.31**	.37*	.39**	.57**	.49**	-											
7. Healthy supportive coping	.20**	.01	-.02	.15**	.04	.05	-										
8. Healthy self-soothing coping	.10	.01	.09*	.20**	.07	.37**	.53**	-									
9. Alcohol use frequency	-.04	.29**	.39**	.18**	.25*	.15	-.04	-.01	-								
10. Drug use frequency	-.19**	.29**	.38**	.34**	.32**	.48**	.07	.07	.27**	-							
11. Risky sex behavior frequency	-.02	.25**	.28**	.10*	.09	.10	-.08	-.05	.41**	.24**	-						
12. NSSI frequency	.04	.10*	.11*	.04	-.48**	.04	.05	.03	.06	.17**	.09*	-					
13. ECR Anxiety	.15*	-.24**	-.38**	-.41**	-.29*	-.20	.05	-.04	-.14**	-.08	-.20**	.16**	-				
14. ECR Avoid	.19**	-.29**	-.36**	-.43**	-.34*	-.64**	.14*	-.09	-.14**	-.17**	-.14*	.06	.67**	-			
15. Using substances to conform	-.12*	.38**	.57**	.56**	.30**	.62**	.04	.17**	.18**	.20**	.07	-.08	-.40**	-.50**	-		
16. Sexual Orientation	-.07	.09	.02	.03	-.03	-.22	.00	-.11*	.06	.04	.13**	.25**	-.14*	.05	-.07	-	
17. Income	.16**	-.01	-.12*	-.10*	-.11	.19	.04	.03	.03	-.07	-.03	-.16**	.16**	.13*	.04	-.14**	-

* $p < .05$, ** $p < .01$, two-tail.

Table 3. What does it mean to belong: Descriptive Statistics (N = 422)

Variables	<i>M</i> or <i>n</i>	<i>SD</i> or %	<i>Range</i>
Age	25.25	3.07	18-29
Biological Sex			
Male	169	40.0%	
Female	244	57.8%	
Transgender FtM	3	0.7%	
Sexual Orientation			
Heterosexual	334	79.5%	
Gay	10	2.4%	
Lesbian	7	1.7%	
Bisexual	59	14.0%	
Queer	4	0.9%	
Relationship Status			
Single	132	31.3%	
Dating/partnered	112	26.5%	
Cohabiting	44	10.4%	
Engaged	23	5.5%	
Married	105	24.9%	
Divorced	2	0.5%	
Education Level			
Completed high school	29	6.9%	
Some college	131	31.0%	
Associate/technical degree	56	13.3%	
Bachelor's degree	155	36.7%	
Master's degree	39	9.2%	
Doctoral degree or higher	6	1.4%	
Race			
Caucasian	303	71.8%	
African American/Black	42	10.0%	
Asian/Pacific Islander	37	8.8%	
Latino/Hispanic	32	7.6%	
Native American or Alaskan	9	2.1%	
Middle Eastern	1	0.2%	
Household Income (SES)			
< \$25,000	96	22.7%	
\$25,000-\$50,000	159	37.7%	
\$50,000-\$100,000	117	27.7%	
> \$100,000	43	10.2%	

Table 4. Group make-up themes, categories, and codes (N=422)

Groups that Emerging Adults Associate With	<i>n</i>	%
Group association based on personal identity.		
Ethnicity	34	8.0%
Gender	41	9.7%
Sexuality	22	5.2%
Social identity	26	6.1%
American citizenship	14	3.3%
Religious and spiritual affiliations.	85	20.1%
Life stage and circumstances group associations.		
Age cohort/group	9	2.1%
Life stage	7	1.7%
Location/residency	11	2.6%
Being a parent	25	5.9%
Parent groups	11	2.6%
Educational group associations.		
Alumni	19	4.5%
College	36	8.5%
Greek life	10	2.4%
School	30	7.1%
Professional association.		
Professional identity	33	7.8%
Coworkers	81	19.2%
Professional organizations	11	2.6%
Work	41	9.7%
Significant relationships.		
Family	122	28.9%
Friends	110	26.0%
Social change initiatives.		
Activism	10	2.4%
Politics	20	4.7%
Volunteering	12	2.8%
Shared interests and activities.		
Hobbies	95	22.5%
Clubs	29	6.9%
Sports	52	12.3%
Gaming	44	10.4%
Online connections.		
Online communities	27	6.3%
Social media	11	2.6%
No group affiliation.	3	0.71%

Table 5. RQ1 themes, categories, and codes (N=422)

What it Means to Belong According to Emerging Adults	<i>n</i>	%
Embraced.		
<i>Accepted.</i>	110	26.0%
Respect	6	1.4%
Understanding	7	1.7%
Authenticity of self	30	7.1%
<i>Not judged.</i>	7	1.7%
<i>Inclusion.</i>	31	7.3%
Part of something	71	16.8%
Place for me	48	11.4%
Wanted	36	8.5%
Valued	11	2.6%
Increased self-confidence.	4	0.95%
Greater life meaning.		
Part of something bigger	21	5.0%
Purpose	18	4.3%
Experience of a safety net.		
Comfort	38	9.0%
Security	12	2.8%
Content	8	1.9%
Trust	8	1.9%
Commonalities among group members.		
Shared experiences	4	.95%
Similar interests	19	4.5%
Similar personality traits	4	0.95%
Similar viewpoints	15	3.6%
Relate	7	1.7%
Relational component to group belonging.		
Camaraderie	1	0.2%
Confidant	5	1.2%
Kinship	5	1.2%
Community	7	1.7%
Connection	32	7.6%
Fitting in and conformity.		
Fitting in	52	12.3%
Conformity	8	1.9%

Table 6. RQ2a themes, categories, and codes (N=422)

The Process of Joining Groups for Emerging Adults		<i>n</i>	<i>%</i>		<i>n</i>	<i>%</i>
Reasons for joining groups.				Formal group entrance processes.		
<i>Commonalities with group members.</i>				Invited		
Similar viewpoints	50	11.8%		Nominated	1	0.2%
Similar interests	12	2.8%		Paid membership	5	1.2%
Similar personality traits	5	1.2%		Application process	12	2.8%
Similar life goals	16	3.8%		Pledged Greek life	6	1.4%
Commonalities	18	4.3%		Group membership is a natural process.		
<i>Knew other members.</i>				Organically		
Mutual friends/friends	35	8.3%		Time	2	0.5%
Family	7	1.7%		Chance	9	2.1%
Group membership through intentionality.				Life circumstances		
Joining	21	5.0%		Born into	108	25.6%
<i>Personal investment and initiative.</i>				Location	21	5.0%
Need or desire	20	4.7%		Married into	9	2.1%
Choice	32	7.6%		Role	18	4.3%
<i>Industry.</i>				Educational Experiences		
Effort	19	4.2%		School	46	10.9%
Participating	22	5.2%		College	52	12.6%
Activities	10	2.4%		Alumni	1	0.2%
Club	6	1.4%		Work	113	26.8%
Extracurricular activities	8	1.9%		Group membership through identity formation.		
Volunteering	9	2.1%		Self-identity		
Interactions	6	1.4%		Ethnicity		
Meeting new people	7	1.7%		Sexuality		
Talking	27	6.4%		Gender		
Asking to join	5	1.2%		Group membership in an online context.		
				Online gaming		
				Online communities		
				Social media		

Table 7. RQ2b themes, categories, and codes (N=422)

The Process of Belonging to Groups for Emerging Adults	<i>n</i>	%
Building investment and intimacy.		
Time	50	11.8%
Getting to know each other	15	3.6%
Learning	3	0.71%
Shared experiences	17	4.0%
Messages of inclusion.		
Inclusion	8	1.9%
Acceptance	43	10.2%
Not judged	6	1.4%
Place for me	14	3.3%
Developing connection and community.		
Connection	18	4.3%
Community	2	0.47%
Mutual support.	21	5.0%
Positive feelings that foster belonging.		
Cared for	7	1.7%
Respected	4	0.95%
Valued	2	0.47%
Joy	1	0.2%
Kindness	4	0.95%
Love	1	0.2%
Trust	6	1.4%
Comfortable	11	2.6%
Security	5	1.2%
Individual growth and development and the process of belonging.		
Personal growth.	1	0.2%
Authenticity of self/identity	6	1.4%
Personality traits	4	0.95%

Table 8. RQ3 themes, categories, and codes (N=422)

Needs Being Met Through Group Belonging	<i>n</i>	%		<i>n</i>	%
A sense of belonging.	56	13.3%	Communal needs.		
Feeling included and a part of something.			<i>Social.</i>		
Not alone	16	3.8%	Meeting new people	3	.71%
Part of something	6	1.4%	Getting to know others	1	0.2%
Part of something bigger	7	1.7%	Talking	8	1.9%
Place for me	3	.71%	Socializing	25	5.9%
Inclusion	3	.71%	<i>Relational.</i>		
Wanted	3	.71%	Friendship	10	2.4%
Personal growth needs.			Companionship	72	17.1%
<i>Sense of self.</i>			Camaraderie	4	.95%
Self-confidence	12	2.8%	Community	29	6.9%
Authenticity of self	2	.47%	Connection	12	2.8%
Identity	12	2.8%	Kinship	4	.95%
<i>Personal growth.</i>	8	1.9%	<i>Support.</i>	91	21.6%
Purpose	13	3.1%	Work needs.		
Learning	21	5.0%	Professional development	3	.71%
Emotional needs.			Professional networking	5	1.2%
Security	13	3.1%	Financial gains	11	2.6%
Love	19	4.5%	Giving back/volunteering needs.		
Joy	43	10.2%	Giving back	10	2.4%
Kindness	1	0.2%	Volunteering	1	0.2%
Pride	9	2.1%			
Satisfaction	12	2.8%			
Respect	1	.2%			
Comfortable/At ease	12	2.8%			
Fun	6	1.4%			
Enjoyment	18	4.3%			
Guidance/Advice	12	2.8%			
Contentment	1	0.2%			
Accomplishment/Achievement	11	2.6%			
Recognition	1	0.2%			
Care	4	.95%			
Valued	3	.71%			

Appendix B - Figures

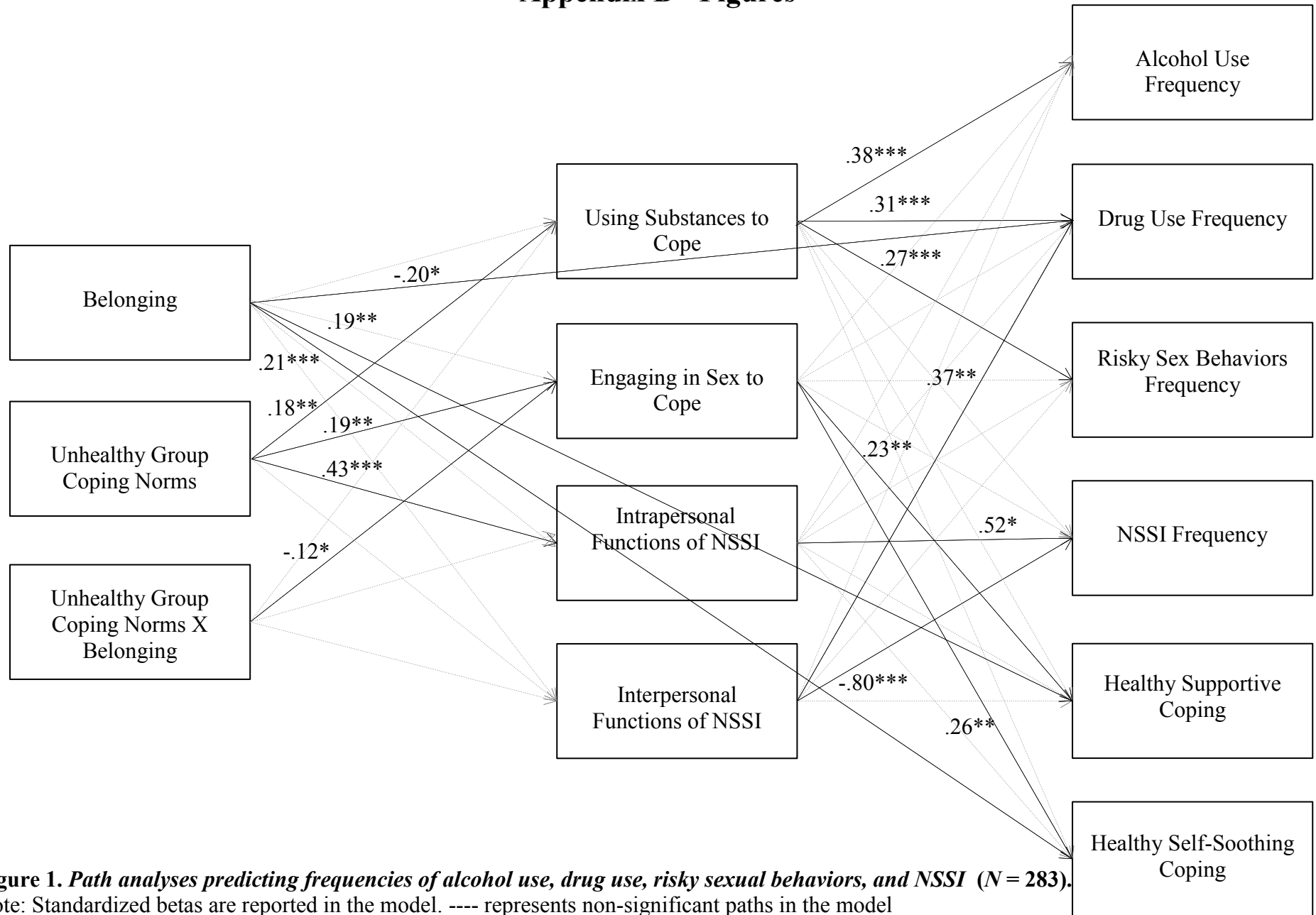


Figure 1. Path analyses predicting frequencies of alcohol use, drug use, risky sexual behaviors, and NSSI (N = 283).

Note: Standardized betas are reported in the model. ---- represents non-significant paths in the model

Income, sexual orientation, ECR-RS Anxiety and ECR-RS Avoidance (not shown) are controlled.

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

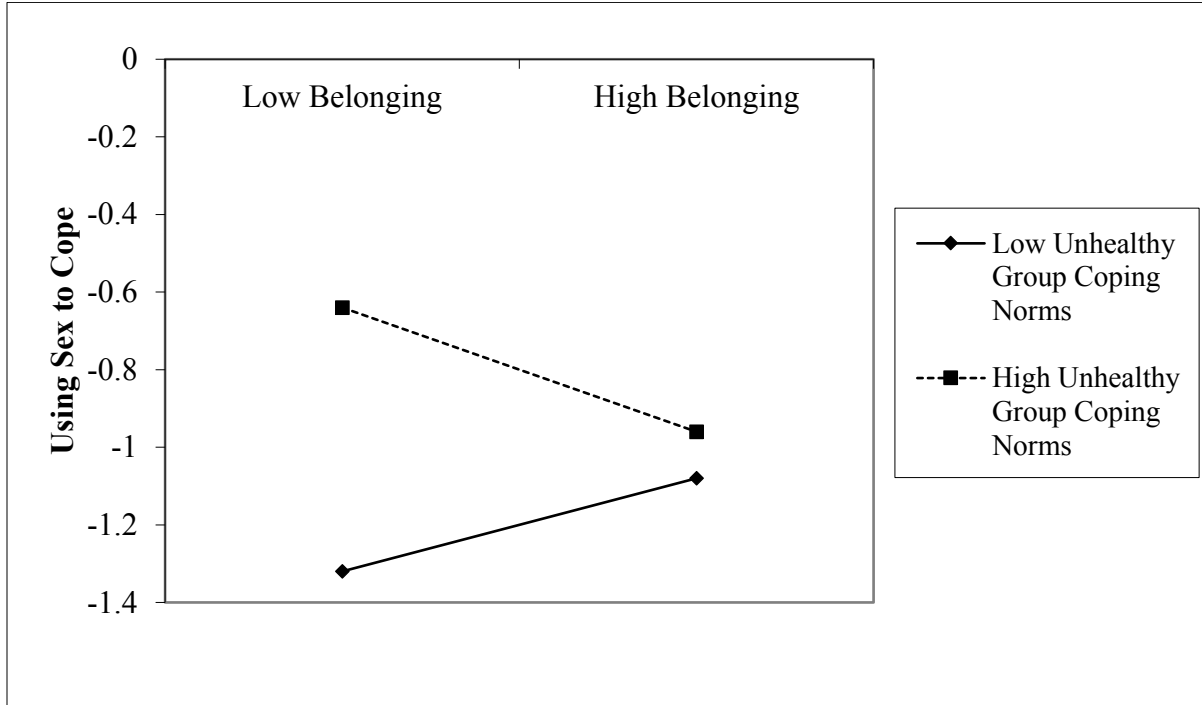


Figure 2. *Unhealthy group coping norms moderating the association between belonging and using sex to cope (N = 283).*

Appendix C - The Perceived Group Inclusion Scale

Instructions: Think of the group you associate the most with when answering the following questions.

1 = Strongly disagree; 2 = disagree; 3 = Neutral; 4 = agree; 5 = Strongly agree

This group...

1. ...gives me the feeling that I belong
2. ...gives me the feeling that I am part of this group
3. ...gives me the feeling that I fit in
4. ...treats me as an insider
5. ...likes me
6. ...appreciates me
7. ...is pleased with me
8. ...cares about me
9. ...allows me to be authentic
10. ...allows me to be who I am
11. ...allows me to express my authentic self
12. ...allows me to present myself the way I am
13. ...encourages me to be authentic
14. ...encourages me to be who I am
15. ...encourages me to express my authentic self
16. ...encourages me to present myself the way I am

Scoring: 1–4: group membership subscale; 5–8: group affection subscale; 9–12: room for authenticity subscale; 13–16: value in authenticity subscale. The composite scale scores for the higher-order components of belonging and authenticity are computed by averaging the mean scores of the corresponding subscales. That is, belonging is computed by averaging the score mean score of the group membership subscale and the mean score of the group affection subscale. Authenticity is computed by averaging the mean score of the room for authenticity subscale and the mean score of the value in authenticity subscale.

Appendix D - Group Coping Norms

Instructions: For each group you have identified in the previous question, please indicate how likely the group, as a whole, is to cope with stresses. (1 = Very unlikely; 2 = Unlikely; 3 = Neutral; 4 = Likely; 5 = Very likely)

1. Seeking emotional support from others in the group
2. Seeking emotional support from others outside of the group
3. Using substances such as alcohol
4. Engaging in self-destructive behaviors (i.e. self-harm)
5. Engaging in risky sexual behaviors
6. Deal with stressors individually

Appendix E - Motivations for Substance Use

Instructions: The following are a list of reasons people sometimes give for drinking alcohol or using drugs. Thinking of all the times you drink or use, how often would you say that you drink or use for each of the following reasons? (0 = Never; 1 = Some of the time; 2 = Half of the time; 3 = Most of the time; 4 = Almost always – always).

1. Because it helps you enjoy a party
2. To be sociable
3. Because it makes social gatherings more fun
4. Because it improves parties and celebrations
5. To celebrate a special occasion with friends
6. To relax
7. To forget your worries
8. Because it helps you when you feel depressed or nervous
9. To cheer up when you are in a bad mood
10. Because you feel more self-confident and sure of yourself
11. To forget about your problems
12. Because you like the feeling
13. Because it's exciting
14. To get high
15. Because it gives you a pleasant feeling
16. Because it's fun
17. Because your friends pressure you to drink
18. So that others won't kid you about not drinking
19. To fit in with a group you like
20. To be liked
21. So you won't feel left out

Coping Subscale: Questions 6-11

Conformity Subscale: Questions 17-21

Appendix F - Frequency of Substance Use

Instructions: During the past 30 days, how many times did you use any of these types of legal and illegal drugs? (0 = Never; 1 = Once or twice; 2 = 2 or 3 days a month; 3 = Once or twice a week; 4 = 3 to 5 days a week; 5 = Nearly every day)

1. Drink beer, wine, or liquor
2. Get drunk
3. Marijuana
4. Psychotherapeutic drugs (non-medically)
5. Pain killers (non-medically)
6. Tranquilizers
7. Stimulants
8. Methamphetamines
9. Sedatives
10. Cocaine
11. Heroin
12. Hallucinogens

Appendix G - Motivations for Sex Scale

Instructions: Listed below are different reasons why people have sexual intercourse. Think about the times when you have had sex with your most recent partner. Please select the response which best describes how frequently you engage in sex for the following reasons. If you have NEVER had sex, please answer these items trying to imagine how frequently you might engage in sex for each reason. (0 = Never; 1 = Almost never; 2 = Some of the time; 3 = Most of the time; 4 = Almost always/Always)

Please indicate:

I have engaged in sexual behaviors (anal sex, oral sex, sexual intercourse)

I have never engaged in sexual behaviors (anal sex, oral sex, sexual intercourse)

1. Because I feel horny
2. To cope with being upset
3. For excitement
4. Because people will think less of me if I don't have sex
5. To satisfy my sexual needs
6. To be more intimate with my partner
7. To prove my attractiveness
8. To make an emotional connection to my partner
9. To be closer to my partner
10. To deal with disappointment
11. To express love
12. To feel more interesting
13. Because my friends are having sex
14. Because I am afraid my partner would be angry if we don't have sex
15. To reassure myself of my desirability
16. Because it feels good
17. To feel emotionally closer to my partner
18. To feel better when I'm lonely
19. I have sex so others won't put me down
20. To cheer myself up
21. Because I am afraid my partner won't love me if we don't have sex
22. To feel more self-confident
23. Because I worry people will talk about me if I don't have sex
24. Because I am afraid my partner will leave me if we don't have sex
25. To feel better about myself
26. For the thrill of it
27. Because others will kid me if I don't have sex
28. Because I worry my partner won't want me if we don't have sex
29. To feel better when I'm feeling low

Coping Subscale: Questions 2, 10, 18, 20, 29

Peer Approval Subscale: Questions 4, 13, 19, 23, 27

Appendix H - Sexual Risk Survey

Instructions: Please read the following statements and record the number that is true for you over the past 6 months for each question on the blank. If you do not know for sure how many times a behavior took place, try to estimate the number as close as you can. Thinking about the average number of times the behavior happened per week or per month might make it easier to estimate an accurate number, especially if the behavior happened fairly regularly. If you've had multiple partners, try to think about how long you were with each partner, the number of sexual encounters you had with each, and try to get an accurate estimate of the total number of each behavior. If the question does not apply to you or you have never engaged in the behavior in the question, put a "0" on the blank. Please do not leave items blank. Remember that in the following questions "sex" includes oral, anal, and vaginal sex and that "sexual behavior" includes passionate kissing, making out, fondling, petting, oral-to-anal stimulation, and hand-to-genital stimulation. Please consider only the last 6 months when answering and please be honest.

In the past six months:

1. How many partners have you engaged in sexual behavior with but not had sex with?
2. How many times have you left a social event with someone you just met?
3. How many times have you "hooked up" but not had sex with someone you didn't know or didn't know well?
4. How many times have you gone out to bars/parties/social events with the intent of "hooking up" and engaging in sexual behavior but not having sex with someone?
5. How many times have you gone out to bars/parties/ social events with the intent of "hooking up" and having sex with someone?
6. How many times have you had an unexpected and unanticipated sexual experience?
7. How many times have you had a sexual encounter you engaged in willingly but later regretted?

Instructions: For the next set of questions, follow the same direction as before. However, for questions 8–23, if you have never had sex (oral, anal or vaginal), please put a "0" on each blank.

8. How many partners have you had sex with?
9. How many times have you had vaginal intercourse without a latex or polyurethane condom?
Note: Include times when you have used a lambskin or membrane condom.
10. How many times have you had vaginal intercourse without protection against pregnancy?
11. How many times have you given or received fellatio (oral sex on a man) without a condom?
 12. How many times have you given or received cunnilingus (oral sex on a woman) without a dental dam or "adequate protection" (please see definition of dental dam for what is considered adequate protection)?
13. How many times have you had anal sex without a condom?
14. How many times have you or your partner engaged in anal penetration by a hand ("fisting") or other object without a latex glove or condom followed by unprotected anal sex?

15. How many times have you given or received anilingus (oral stimulation of the anal region, “rimming”) without a dental dam or “adequate protection”(please see definition of dental dam for what is considered adequate protection)?
16. How many people have you had sex with that you know but are not involved in any sort of relationship with (i.e., “friends with benefits”, “fuck buddies”)?
17. How many times have you had sex with someone you don’t know well or just met?
18. How many times have you or your partner used alcohol or drugs before or during sex?
19. How many times have you had sex with a new partner before discussing sexual history, IV drug use, disease status and other current sexual partners?
20. How many times (that you know of) have you had sex with someone who has had many sexual partners?
21. How many partners (that you know of) have you had sex with who had been sexually active before you were with them but had not been tested for STIs/HIV?
22. How many partners have you had sex with that you didn’t trust?
23. How many times (that you know of) have you had sex with someone who was also engaging in sex with others during the same time period?

Appendix I - Inventory of Statements about Self-Injury Behavior

This questionnaire asks about a variety of self-harm behaviors. Please only endorse a behavior if you have done it intentionally (i.e., on purpose) and without suicidal intent (i.e., not for suicidal reasons).

1. Please estimate the number of times in your life you have intentionally (i.e., on purpose) performed each type of non-suicidal self-harm (e.g., 0, 10, 100, 500):

- Cutting
- Severe Scratching
- Biting
- Banging or Hitting Self
- Burning
- Interfering w/ Wound Healing (e.g., picking scabs)
- Carving
- Rubbing Skin Against Rough Surface
- Pinching
- Sticking Self w/ Needles
- Pulling Hair
- Swallowing Dangerous Substances
- Other: _____

Appendix J - Inventory of Statements about Self-Injury-Functions

Instructions: This inventory was written to help us better understand the experience of non-suicidal self-harm. Below is a list of statements that may or may not be relevant to your experience of self-harm. Please identify the statements that are most relevant for you: (0 if the statement not relevant for you at all, 1 if the statement is somewhat relevant for you, 2 if the statement is very relevant for you)

“When I self-harm, I am ...

1. ... calming myself down
2. ... creating a boundary between myself and others
3. ... punishing myself
4. ... giving myself a way to care for myself (by attending to the wound)
5. ... causing pain so I will stop feeling numb
6. ... avoiding the impulse to attempt suicide
7. ... doing something to generate excitement or exhilaration
8. ... bonding with peers
9. ... letting others know the extent of my emotional pain
10. ... seeing if I can stand the pain
11. ... creating a physical sign that I feel awful
12. ... getting back at someone
13. ... ensuring that I am self-sufficient
14. ... releasing emotional pressure that has built up inside of me
15. ... demonstrating that I am separate from other people
16. ... expressing anger towards myself for being worthless or stupid
17. ... creating a physical injury that is easier to care for than my emotional distress
18. ... trying to feel something (as opposed to nothing) even if it is physical pain
19. ... responding to suicidal thoughts without actually attempting suicide
20. ... entertaining myself or others by doing something extreme
21. ... fitting in with others
22. ... seeking care or help from others
23. ... demonstrating I am tough or strong
24. ... proving to myself that my emotional pain is real
25. ... getting revenge against others
26. ... demonstrating that I do not need to rely on others for help
27. ... reducing anxiety, frustration, anger, or other overwhelming emotions
28. ... establishing a barrier between myself and others
29. ... reacting to feeling unhappy with myself or disgusted with myself
30. ... allowing myself to focus on treating the injury, which can be gratifying or satisfying
31. ... making sure I am still alive when I don't feel real
32. ... putting a stop to suicidal thoughts
33. ... pushing my limits in a manner akin to skydiving or other extreme activities
34. ... creating a sign of friendship or kinship with friends or loved ones
35. ... keeping a loved one from leaving or abandoning me
36. ... proving I can take the physical pain

- 37. ... signifying the emotional distress I'm experiencing
- 38. ... trying to hurt someone close to me
- 39. ... establishing that I am autonomous/independent

ITEMS COMPRISING EACH OF 13 FUNCTIONS SCALES

Affect Regulation – 1, 14, 27

Interpersonal Boundaries – 2, 15, 28

Self-Punishment – 3, 16, 29

Self-Care – 4, 17, 30

Anti-Dissociation/Feeling-Generation – 5, 18, 31

Anti-Suicide – 6, 19, 32

Sensation-Seeking – 7, 20, 33

Peer-Bonding – 8, 21, 34

Interpersonal Influence – 9, 22, 35

Toughness – 10, 23, 36

Marking Distress – 11, 24, 37

Revenge – 12, 25, 38

Autonomy – 13, 26, 39

Scores for each of the 13 functions range from 0 to 6.

Appendix K - Healthy Coping – Brief COPE

Instructions: These items deal with ways you've been coping with the stress in your life since you found out you were going to have to have this operation. There are many ways to try to deal with problems. These items ask what you've been doing to cope with this one. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

(1 = I haven't been doing this at all; 2 = I've been doing this a little bit; 3 = I've been doing this a medium amount; 4 = I've been doing this a lot)

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Scales are computed as follows (with no reversals of coding):

Self-distraction: items 1 and 19

Active coping: items 2 and 7

Denial: items 3 and 8

Substance use: items 4 and 11
Use of emotional support: items 5 and 15
Use of instrumental support: items 10 and 23
Behavioral disengagement: items 6 and 16
Venting: items 9 and 21
Positive reframing: items 12 and 17
Planning: items 14 and 25
Humor: items 18 and 28
Acceptance: items 20 and 24
Religion: items 22 and 27
Self-blame: items 13 and 26

Appendix L - Demographics

1. What is your age? _____
2. What race do you identify as? Caucasian, Black/African American, Asian or Pacific Islander, Latino/Hispanic, Native American or Alaskan Native, Middle Eastern, Other

3. What is your current romantic relationship status: Single, dating/partnered, cohabitating, engaged, married, divorced, widowed
4. What is your gender? Male, female, intersex, transgender MtF, transgender FtM, other

5. What is your sexual orientation? Heterosexual, gay, lesbian, bisexual, queer, other _____
6. What best describes your approximate annual household income? Less than \$24k, \$25k-\$50k, \$50k-\$100k, \$100k or more
7. What is the highest level of education you have completed? 12th grade or less (no diploma), high school diploma, some college/no degree, associate or technical degree, bachelor's degree, master's degree, doctoral degree or higher
8. Have you moved away from where you lived as a teenager?
 - a. If so, how far away do you live now?

Appendix M - ECR-RS

Instructions: Please answer the following questions about your dating or marital partner:

1. It helps to turn to this person in times of need.
2. I usually discuss my problems and concerns with this person.
3. I talk things over with this person.
4. I find it easy to depend on this person.
5. I don't feel comfortable opening up to this person.
6. I prefer not to show this person how I feel deep down.
7. I often worry that this person doesn't really care for me.
8. I'm afraid that this person may abandon me.
9. I worry that this person won't care about me as much as I care about him or her.

Avoidance: 1-6 (Reverse code 1-4)

Anxiety: 7-9