## PEER CROWD AFFILIATIONS AS PREDICTIORS OF PROSOCIAL AND RISKY

## BEHAVIORS AMONG COLLEGE STUDENTS

A Thesis Submitted to the Graduate Faculty of the North Dakota State University of Agriculture and Applied Science

By

Vimbayi Sandra Chinopfukutwa

In Partial Fulfillment of the Requirements for the Degree of MASTER OF SCIENCE

Major Department: Human Development and Family Science

November 2018

Fargo, North Dakota

# North Dakota State University Graduate School

## Title

## PEER CROWD AFFILIATIONS AS PREDICTIORS OF PROSOCIAL AND RISKY BEHAVIORS AMONG COLLEGE STUDENTS

## By

Vimbayi Sandra Chinopfukutwa

The Supervisory Committee certifies that this disquisition complies with

North Dakota State University's regulations and meets the accepted

standards for the degree of

## **MASTER OF SCIENCE**

### SUPERVISORY COMMITTEE:

Joel Hektner

Chair

Heather Fuller

Rachelle Vettern

Approved:

12-11-18

Joel Hektner

Date

Department Chair

### ABSTRACT

College students often affiliate with similar peers, forming identity-based peer crowds. Research has shown that affiliations with certain peer crowds is associated with risky behaviors, thus derailing college success. This study examined whether college peer crowd affiliations predicted risky and prosocial behaviors. Participants were 527 students at a public university in the Midwest (aged 18 - 26). Hierarchical multiple regression analyses showed that Counterculture and Athletic/Social affiliations positively predicted risky behaviors. Arts/Ethnic and Scholastic affiliations positively predicted prosocial behaviors and negatively predicted risky behaviors. In addition, hierarchical multiple regression analyses showed that gender moderated the relation between peer crowd affiliation and prosociality. The results highlight the importance of college peer crowds and their implications for academic success. The discussion focuses on ways to promote positive behavior among college peer crowds using research.

#### ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Joel Hektner, for his exceptional guidance and timely support till the completion of this thesis. I would also like to thank my committee members, Dr. Heather Fuller and Dr. Rachelle Vettern for their support, invaluable feedback, and encouragement. Your guidance and expertise made this thesis a success.

Special thanks to my family in Zimbabwe, the *Nyamandes* and *Chinopfukutwas*, I would have never made it this far without their support and understanding. I would also like to thank my fellow graduate students for cheering me on and for the team spirit that we share.

Finally, I am thankful to and fortunate enough to get endless love and support from my husband and best friend, Anderson Nyamande. He helped me remember what I am working toward. To Thandi and Thabiso Nyamande, thank you for being a great source of motivation for excellence.

## DEDICATION

I dedicate this thesis to my husband, Anderson Nyamande and our children Thandi and Thabiso

Nyamande. Thank you for your unconditional love and support.

ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
INTRODUCTION AND LITERATURE REVIEW	1
Definitions of Terms	3
Emerging Adulthood and Identity Exploration	5
The Developmental Trend of Peer Crowd Affiliation	7
Peer Crowd Affiliations and Behaviors	
Gender and Behaviors	
METHOD	14
Participants	14
Procedure	14
Measures	14
Data Analysis	
RESULTS	
Peer Crowd Structures	
Main Effects of Peer Crowd Affiliations	
Testing Gender as a Moderator	
DISCUSSION	
Emerging Adulthood and Peer Crowd Affiliations	

## TABLE OF CONTENTS

Emerging Adult Peer Crowd Affiliations and Behaviors		
Gender and Behaviors		
Limitations and Future Direction	ons	
Conclusion		
REFERENCES		

## LIST OF TABLES

Tabl	le	Page
1.	Regression Analyses Predicting Risk-Taking Behavior among Peer Crowds	22
2.	Regression Analyses Predicting Prosocial Behavior among Peer Crowds	23

## LIST OF FIGURES

<u>Figu</u>	ire	Page
1.	Effects of Gender and Counterculture Peer Crowd Affiliation on Prosociality	24
2.	Effects of Gender and Arts/Ethnic Peer Crowd Affiliation on Prosociality	25
3.	Effects of Gender and Scholastic Peer Crowd Affiliation on Prosociality	25

#### INTRODUCTION AND LITERATURE REVIEW

Peer crowds are defined as large reputation-based groups of individuals sharing values, attitudes, and behaviors (Brown, 1990). Typical peer crowds have labels they use to identify themselves such as 'Populars', 'Athletes', 'Brains',' Nonconformists', 'Loners', and 'Burnouts' (La Greca & Harrison, 2005). The Social Identity Theory suggests that peer crowds promote the process of identity development as individuals form a self-concept based on values and behaviors of the peer crowds they may identify with (Prinstein & La Greca, 2002). Furthermore, extensive research has been conducted on adolescents from ages twelve to nineteen highlighting that peer crowds facilitate social interactions, friendships, and support among peers (Brown, Eicher, & Petrie, 1986; La Greca, Prinstein, & Fetter, 2001). In addition, a few studies on peer crowds among college students show that peer crowds continue to play an important role in shaping their behaviors; for example, students' self-reported peer crowd affiliation with particular crowds such as the 'Populars' may be associated with increased drug and alcohol use, risky sexual behavior, and poor academic achievement (Bonsu, 2012, Sessa, 2007). Hopmeyer and Medovoy (2017), examining peer crowd dimensions in college, also found that the 'Social' and the 'Counterculture' peer crowd dimensions predicted high levels of risky behaviors. Risky behaviors are activities that individuals may engage in with a frequency or intensity that increases occurrences of injuries or diseases (Steptoe & Wardle, 2004). Moreover, these college participants were from different types of college institutions, including a small liberal arts college on the West Coast and a four-year commuter college in the Mid-Atlantic United States (Hopmeyer & Medovoy, 2017; Sessa, 2007). One goal of the present study was to examine whether the results replicate such that peer crowd affiliations predict college students' risky behaviors at a mid-sized residential state university in the Midwest.

Although a few studies on peer crowds among college students focus on risky behaviors, there remains a need to understand peer crowds in the context of prosocial behavior. Prosocial behaviors can be defined as actions intended to benefit others (Carlo & Randall, 2002). While previous studies on adolescent peer crowds refer to "prosocial peer crowds", their use of the term prosocial indicates an absence of negative behavior rather than the presence of positive behaviors. As one example, the 'Brains' have been reported to have the lowest levels of deviant behaviors, thus they are considered to be a prosocial peer crowd (Prinstein & La Grecca, 2002). The current study therefore demonstrated whether college peer crowds vary in positive social behaviors that benefit others (Carlo & Randall, 2002).

Finally, the current study explored potential gender differences in peer crowd affiliation among college students and college students' engagement in risky and prosocial behaviors. Studies on adolescents have shown that boys affiliate more with the 'Burnouts' who have high levels of risky behaviors, while girls affiliate more with the 'Nonconformists' who have lower levels of risky behaviors (La Greca et al., 2001). Additionally, studies on prosocial behavior show that girls typically report more prosocial behaviors consistent with their socialization to be caring whereas boys are socialized to be competitive (Nielsen, 2015). These gender differences in prosocial behaviors continue in emerging adulthood (Nielson, Padilla-Walker, & Holmes, 2017). Since gender differences in peer crowds' engagement in risky behaviors have been established only in adolescent research and no studies have been done to ascertain gender differences in peer crowds' engagement in prosocial behaviors among emerging adults, the current study showed whether each peer crowd dimension among college students was related to gender differences in their engagement in prosocial and risky behaviors.

The current study therefore aimed to replicate and extend the existing literature on peer crowds among college students by addressing the following research questions: First, does peer crowd affiliation predict risky behaviors among college students in the upper Midwest? Second, does peer crowd affiliation predict prosocial behavior among college students in the upper Midwest? Third, do college students' peer crowd affiliation and their engagement in prosocial and risky behaviors vary by gender?

### **Definitions of Terms**

The following terms for peer crowds are used as definitions throughout the study.

'Jocks' – Individuals participating in sports (Hopmeyer & Medovoy, 2017; La Greca et al., 2001).

'Academics' – Individuals who enjoy, spend much of their time, and excel in academics Hopmeyer & Medovoy, 2017). They are also referred to as 'Brains' (La Greca et al., 2001).

**'Slackers'** – Individuals who often break rules and do not attend school regularly (Hopmeyer & Medovoy, 2017). They are also referred to as **'Burnouts'** (La Greca et al., 2001).

**'Populars'** – Individuals engaging in a lot of social and school activities (La Greca et al., 2001). They are also highly image oriented (Hopmeyer & Medovoy, 2017).

**'Partiers'** – Individuals who are highly social and who frequently host or attend parties (Hopmeyer & Medovoy, 2017).

'Athletes' – Students who are very physically active and/or highly involved in university or club sports (Hopmeyer & Medovoy, 2017).

**'Hipsters'**– Individuals who often rebel against the norms of clothing or ideas and dress fashionably (Hopmeyer & Medovoy, 2017; Prinstein & La Greca, 2002). They are also referred to as **'Nonconformists'** (Prinstein & La Greca, 2002).

'Greeks' – Members of fraternities or sororities (Hopmeyer & Medovoy, 2017).

**'Performing Arts'** – Individuals who spend most of their time dancing, singing, and playing instruments (Hopmeyer & Medovoy, 2017).

**'Elites'** – Individuals who excel in academics or extracurricular activities, have high self-esteem, and high self-competence (Hopmeyer & Medovoy, 2017).

**'Loners'** – Individuals who keep to themselves (Hopmeyer & Medovoy, 2017; La Greca et al., 2001).

**'Druggy/Stoners'** – Individuals engaging in frequent drug use including marijuana, alcohol, and controlled substances (Hopmeyer & Medovoy, 2017).

**'Student Leaders'** – Individuals demonstrating high commitment to leadership positions on campus (Hopmeyer & Medovoy, 2017).

**'Foreign/ Exchange'** – Individuals who left their home country to study in the United States, that is, exchange, international, and study abroad students (Hopmeyer & Medovoy, 2017). In the current study, they will be referred to as **'International Students'**.

**'Racial/Ethnic Groups'** – Individuals who identify strongly with their own racial/ethnic group (Hopmeyer & Medovoy, 2017).

**'Goth/Punk/Metal Heads'** – Individuals who typically wear dark or tattered clothing, wear gothic make-up, and have a strong preference and enjoy listening to punk/metal music (Hopmeyer & Medovoy, 2017).

Hopmeyer and Medovoy (2017) used exploratory factor analysis to show that the peer crowds in college can be described by four peer crowd dimensions:

'Athletic' – Students participating in sports (for example, 'Jocks')

**'Scholastic'** – Students with high academic achievement and who participate in the cultural and political aspects of college (for example, 'Academics').

'Counterculture' – Students with deviant lifestyles (for example, 'Slackers').

'Social' - Students engaging in recreational and school activities (for

example, 'Populars').

#### **Emerging Adulthood and Identity Exploration**

Contrary to earlier research suggesting that most identity formation takes place primarily during adolescence, contemporary research states that identity formation may be fully resolved during emerging adulthood, which is an age range of eighteen to twenty-nine years, thus prolonging the transition to adulthood (Arnett, 2000; Côté, 2006). The majority of young people postpone their identity formation because they spend a long time pursuing education and training required for most jobs; thus the transition from education to work takes longer than in the past (Arnett, 2007). Emerging adulthood, which is characterized by identity exploration, is a period in which issues related to identity experienced in adolescence are tested for fit with new experiences that may be due to unique experiences such as financial responsibilities and establishing careers (Arnett, 2000, Phinney, 2006). Thus, college may provide opportunities for emerging adults to explore various options before they make commitments regarding important identity domains (Phinney, 2006).

The current study explored peer crowd affiliation from the Social Identity Theory perspective. This theory suggests that an element of the self-concept may be related to group

membership, that is, when an individual perceives himself or herself to be a member of a group (Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990). A self-concept is an understanding of oneself based on experiences with the environment and significant others (Bong & Skaalvik 2003). To establish a self-concept, individuals may use social comparisons to assess their own accomplishments or traits (Bong & Skaalvik, 2003).

Furthermore, individuals form their identity by conforming to the norms of the peer crowds they identify with (Cross, Bugaj, & Mammadov, 2016). For example, individuals who value academic achievement become motivated and focus on academic achievement in a school environment where teachers constantly communicate the importance of achievement in academics (Goddard, Sweetland, & Hoy, 2000). Hence, these individuals are more likely to engage academically if they belong to a peer crowd that values academic achievement (Cross et al., 2016). On the other hand, if they do not value academic achievement they will more likely be motivated to pursue other activities they perceive to be more valuable to the peer crowd they may identify with (Cross et al., 2016).

There is also a link between activity involvement and social identities (Barber, Eccles, & Stone, 2001). Activities help to form and strengthen social identities by providing a peer crowd structure (Barber et al., 2001). When individuals engage in different activities it allows them to explore their social identity and provides an opportunity for them to feel a sense of belonging to a peer crowd and its activities (Barber et al., 2001). Athletes are more likely to consider themselves to be 'Jocks or 'Athletes' than those who do not play sports, and this provides an opportunity for them to become integrated into the environment connected with being an athlete, further increasing their likelihood of engaging in other behaviors associated with athletes (Barber et al., 2001).

#### The Developmental Trend of Peer Crowd Affiliation

As adolescents progress from early to late adolescence, the importance of peer crowd affiliation may decline across age (Brown et al, 1986). Younger adolescents rely more on peer crowd affiliation for social and emotional support, to help foster friendships, for the facilitation of social interactions, and for identity development. In late adolescence when their personal values and morals are created, individuals rely less on peer crowds (Brown et al., 1986). However, Hopmeyer, Medovoy, Fischer, and Troop- Gordon (2017) suggested that contrary to research conducted among adolescents, as students progress in college, the importance of peer crowd affiliation remains stable as they become more confident in their ability to manage academic challenges and become more secure in their social relationships with peers (Hopmeyer et al., 2017). Peer crowds help make college students' transition from high school to college easier and increase their chances of successful degree completion, making peer crowd affiliation important (Hopmeyer et al., 2017).

Moreover, there is evidence in longitudinal studies suggesting that specific activities associated with certain peer crowds in high school continue in emerging adulthood (Barber et al., 2001; Bonsu, 2012). Barber et al. (2001) suggest that students actively involved in voluntary work and school clubs in high school identifying with the 'Brains' are more likely to continue to be actively involved in emerging adulthood, thus maintaining their social identity. Additionally, the experiences they have and skills acquired while participating in the different activities will also motivate them to maintain their peer crowd identity in emerging adulthood (Barber et al., 2001). Furthermore, peer crowd affiliation in high school may be linked with drinking during the first year of college as students affiliated with the 'Jocks' and 'Populars' have been found to be more likely to report higher levels of drinking in an average week when compared to the

'Brains' (Bonsu, 2012). Also, the different values and behaviors that each peer crowd considers as important may account for their different drinking behaviors; for example, the 'Brains' are less likely to consume alcohol excessively because this would impede activities that contribute to maintaining their identity such as studying or participating in school clubs (Bonsu, 2012). The 'Jocks' on the other hand, may continue to play sports in college and may use alcohol consumption as a shared behavior that they may engage in to maintain their identity (Bonsu, 2012). This shows that activities associated with specific peer crowds present during adolescence continue to be salient in college.

## Peer Crowd Affiliations and Behaviors

Peer crowds are reputation based. This means that peer crowds are based on the values, beliefs, and attitudes that individuals belonging to different peer crowds may have about their peer crowds and the types of behaviors characterizing those peer crowds (Brown, 1990; Lisha, Jordan, & Ling, 2016). Peer crowds also portray lifestyle norms that are defined by peers based on reputation (Lisha et al., 2016). For example, a peer crowd with a reputation of engagement in high levels of risky behaviors may have individuals engaging in high risky behaviors as they will be acting according to their social identity (Lisha et al., 2016; Moran, Walker, Alexander, Jordan, & Wagner, 2017). Peer crowd affiliation therefore portrays the behaviors and reputation associated with the different peer crowds.

Previous researchers who have studied peer crowds refer to specific peer crowds such as the 'Brains' as "prosocial peer crowds" because they do not engage in high levels of deviant activities (Brown, Mounts, Lamborn, & Steinberg, 1993; Prinstein & La Greca, 2002). Moreover, these scholars state that the 'Brains' may be under pressure to conform to the norms and values of this peer crowd such as doing well in school, or avoiding drugs (Steinberg, &

Monahan, 2007). The developmental literature tends to use the term "prosocial" in two different ways. First, prosocial is used to describe the absence of negative behavior. Second, prosocial behavior is positive social behavior that is beneficial to others, for example, helping (Carlo & Randall, 2002). The current study is designed to examine the latter form of prosocial behavior that is social behavior that benefits others. To date, no other published study examines the link between prosocial behavior defined this way and peer crowd affiliation.

Additionally, there is evidence showing that prosocial behaviors such as volunteering are common among college students, who often participate in extracurricular community service through student organizations (Gage & Thapa, 2012). Volunteers experience a high self-regard; that is, volunteering strengthens their perception of being competent and helpful to others (Zuffianno et al., 2016). While helping others, volunteers also feel connected to others (Browne, Hoyle, & Nicholson, 2012). Moreover, affiliation with Greek Letter Organizations in college is linked with high levels of volunteering activities (Cruce, & Moore, 2007). In a previous study, Cruce and Moore (2007) showed that membership in Greek Letter Organizations predicted high levels of volunteerism among first year college students. Cruce and Moore (2007) suggested that first year college students join Greek Letter Organizations where volunteerism is required or encouraged and they receive consistent messages about the value of providing community service. Therefore, the current study seeks to find individuals affiliating with certain peer crowds, such as members of Greek Letter Organizations engaging in similar activities, thus demonstrating engagement in high levels of prosocial behaviors.

Finally, a few studies on peer crowd affiliation and risky behaviors have been conducted at different types of college institutions. Sessa (2007) examined whether college students' selfreported peer crowd affiliations were correlated with their drinking behaviors on a commuter

campus in the mid-Atlantic United States, which has most students living on their own. The results showed that students who identified themselves as "Jocks" and "Populars" reported greater amounts of alcohol intake than students affiliating with other peer crowds. Bonsu (2012) examined associations among high school peer crowd affiliations and drinking during the first year of college at a large public university in the southern United States. College students reporting high school peer crowd affiliation with the 'Populars' reported the highest levels of drinking in college (Bonsu, 2012). These studies found results consistent with research on adolescents conducted by La Greca and colleagues (2001) where the 'Populars' reported higher levels of alcohol consumption than other peer crowds. Hopmeyer and Medovoy (2017) examined links between peer crowd affiliation and risky behaviors at a small liberal arts college on the West Coast of the United States among mostly female participants. Hopmeyer and Medovoy (2017) examined peer crowd dimensions in college and found that students in the 'Social' dimension and the 'Counterculture' dimension engaged in high levels of risky sexual behaviors and alcohol use. These results are consistent with previous research on adolescents as the 'Populars' are part of the 'Social' peer crowd dimension among college students while the 'Burnouts' also have similar characteristics to the 'Slackers' belonging to the 'Counterculture' peer crowd dimension in college as they all reported the highest levels of risky sexual behaviors (Hopmeyer & Medovoy, 2017; La Greca et al., 2001). Hence, the current study served as a comparative study by replicating and extending these studies as it was conducted in a predominantly rural state in the United States at a mid-size university. The results of the current study aimed to show whether the results of these studies can be generalized to other college environments because the current study was conducted in a different region of the United States (Midwest) and a different campus environment.

### **Gender and Behaviors**

There are gender differences in self-identification with certain peer crowds (Hopmeyer & Medovoy, 2017). Studies with adolescents show that boys affiliate more with the 'Jocks' while girls affiliate more with the 'Populars' (Prinstein & La Greca, 2002). These peer crowds are characterized by a reputation of physical prowess and attractiveness (Prinstein & La Greca, 2002). Both of these peer crowds are well liked, which provides them opportunities to develop friendships and romantic relationships (Prinstein & La Greca, 2002). In addition, the study by Hopmeyer and Medovoy (2017) on college students demonstrates that women affiliate more with the 'Hipsters' while men report more affiliation with the 'Foreign Exchange' peer crowds (Hopmeyer & Medovoy, 2017). More women in college identify with the 'Hipsters' in the West Coast of the United States because they value self-expression, are artistic, and dress fashionably (Hopmeyer & Medovoy, 2017). The 'Foreign Exchange' peer crowd has people from abroad coming to study (Hopmeyer & Medovoy, 2017). More men than women from abroad have been reported to complete their undergraduate education in the United States (US Immigration and Custom Enforcement, 2015).

Gender differences in peer crowd affiliation with specific peer crowds and negative behaviors have also been established in adolescent research on peer crowds. In a study assessing risk-taking behaviors and sexual activity, results show that boys affiliate more with the 'Burnouts' while girls affiliate more with the 'Nonconformists' (La Greca et al., 2001). The 'Burnouts' also show that they engage in the highest levels of health-risk behaviors (La Greca et al., 2001). Boys may engage in more risky sexual behaviors and drink more alcohol than girls (La Greca et al., 2001). La Greca and Harrison (2005) also demonstrated that more boys reported being affiliated with the 'Burnouts' who are associated with fighting and substance

abuse. To the best of our knowledge, there are no studies that assessed gender differences in peer crowd affiliations and negative behaviors among college students. Thus, the current study focused on gender differences in each peer crowd dimension by assessing differences in risky behaviors including drug, sexual, academic, and alcohol risks in order to fill this knowledge gap.

In addition, prosocial behaviors differ by gender because of gender socialization (Nielsen, 2015). Gender and moral socialization theorists state that girls are socialized towards caring, nurturing, and expressive behaviors while boys are socialized to be competitive, assertive, and physically active (Nielson, 2015). Furthermore, people generally perceive girls to be more caring and prosocial than boys (Nielson, 2015). Girls show more empathy, kindness, and willingness to help others when compared to the boys (Hastings, Utendale, & Sullivan, 2007). Similarly, in emerging adulthood both men and women continue to perform the same types of prosocial behaviors in an effort to conform to cultural gender stereotypes (Nielson et al., 2017). For example, although men engage in prosocial behaviors such as sharing and including others, they also continue to engage in higher levels of prosocial behaviors involving physical helping than emotional support (Nielsen et al., 2017). While there is no research on gender differences in peer crowd affiliations and prosocial behavior, the current study anticipated that prosocial behavior in each peer crowd dimension may differ by gender with more women in each peer crowd dimension reporting higher levels of prosocial behaviors than men.

To sum up, research on adolescence and emerging adulthood has shown that peer crowds are instrumental in shaping one's identity. The Social Identity Theory shows that there are contributing factors that may shape different identities with peer crowds such as the need to conform to the norms of specific peer crowds that individuals identify with and types of

activities associated with different peer crowds. With strong evidence from longitudinal research suggesting that peer crowds continue in emerging adulthood during college years (Barber et al, 2001; Bonsu, 2012), there is a need to further understand peer crowds in this context as there is still a large knowledge gap. A better understanding of the risky and prosocial behaviors associated with peer crowds among college students will help address college students' academic engagement, social, and emotional wellbeing. Recent research suggests that students with self-reported peer crowd affiliations with the 'Social' and 'Counterculture' peer crowd dimensions engage in high levels of risky behaviors (Hopmeyer & Medovoy, 2017). To the best of our knowledge, no research has been done to examine the prosocial behaviors of peer crowds among college students. As a result, the goal of this research is to replicate and expand on the previous literature by examining peer crowds at a mid-sized university in the Midwest, a different type of university institution and region that will provide a more comprehensive understanding about peer crowds. The current study also aimed to ascertain gender differences in risky and prosocial behaviors among different peer crowd dimensions, which represent different aspects of college life. The current study contributed additional knowledge as no studies have examined gender differences in behaviors among peer crowds in emerging adulthood. The current study anticipated gender differences in risky behaviors based on previous research on adolescents indicating that more boys are affiliated with the 'Burnouts' and they engage in high levels of risky behaviors (La Greca et al., 2001). Finally, the current study anticipated more women in each peer crowd dimension would engage in more prosocial behaviors based on previous research on gender differences in prosocial behaviors among emerging adults (Nielsen et al., 2017).

#### **METHOD**

## Participants

Data from 527 undergraduate students at a mid-sized university in the Midwest were collected for this study. Participants ranged in age from 18 to 26 (M = 19.67, SD = 1.839). Of the 527 participants, 39.8 % were Freshmen, 21.4 % were Sophomores, 17.5 % were Juniors, and 21.3 % were Seniors. In addition, 69.5 % were women while 30.2 % and 0.3 % identified as male and other, respectively. The majority of the participants identified as White (92.2 %) as is reflective of the undergraduate student body. 7.8 % included other races/ethnicities such as Asian/Pacific Islander; Latino (a)/Hispanic, Native American, Black/African American, and other.

#### Procedure

Participants were recruited from the mid-sized university in the Midwest through social media, email, and in-class announcements sent to students and instructors. Participants completed an online survey during this study in exchange for extra credit or alternatively a chance of winning either a Target gift card worth \$5 or a Target gift card worth \$100. The self-report surveys were completed anonymously. Approval for the study was obtained from the university's Institutional Review Board.

#### Measures

Age. Participants were asked to report their age in years.

**Gender.** Participants were asked to report their gender, which was coded as Women = 1 and Men = 0 with men as the reference category.

**Race/Ethnicity.** Participants were asked to describe the race/ethnicity they most closely identify with. Race/Ethnicity was dummy coded White = 1 and Other = 0 with Other as the reference category.

**Year of Study in College.** Participants reported their year of study in college. Year of study was coded as Freshman = 1, Sophomore = 2, Junior = 3, Senior = 4, and Not currently a student = 5. Those who were not currently a student (N = 2) were excluded from the analysis.

Peer Crowd Affiliations. The College Peer Crowd Questionnaire (CPCQ, Hopmeyer & Medovoy, 2017) was used to assess college students' self-reported crowd affiliations. The CPCQ was adapted from the Peer Crowd Questionnaire (La Greca & Harrison, 2005). The items in this measure reflect sixteen peer crowds which are 'Partier,' 'Popular,' 'Greek,' 'Loner,' 'Druggy/Stoner,' 'Hipster,' 'Slacker,' 'Ethnic,' 'Leader,' 'Foreign Exchange Student,' 'Academic,' 'Performing Arts,' 'Elites,' 'Jocks' 'Goth/Punk/Metal Heads' and 'Athletes'. A brief description of each peer crowd was provided. The current study used the term 'International Student' instead of 'Foreign Exchange' as the sample had more international students than foreign exchange students studying at this mid-sized university in the Midwest. Participants were asked to indicate how strongly they identified with each peer crowd on a 1 (not at all affiliated) to 5 (strongly affiliated) Likert-type response scale. In addition, in the Hopmeyer and Medovoy (2017) study, the sixteen peer crowds described above were used to generate four peer crowd dimensions, which are 'Social', 'Athletic', 'Scholastic', and 'Counterculture'. The peer crowd dimensions used in the current study are detailed in the Results section. For each participant, a composite score was generated for each peer crowd dimension by averaging their affiliation ratings on the crowds that made up each dimension. Higher scores on a specific peer crowd dimension indicated stronger affiliation. The CPCQ was validated with a

different sample of college students at a small liberal arts college in western United States in a study conducted by Hopmeyer et al. (2017) using Confirmatory Factor Analysis. This was done to ascertain whether the initial factor structure of the CPCQ was replicable and generalizable to different samples of college students (Hopmeyer et al., 2017). The results showed that all items loaded on 'Social', 'Athletic', 'Scholastic', and 'Counterculture' factors at p. < .001, and the correlations between peer crowds were positive and ranged from small to moderate in magnitude (Hopmeyer et al., 2017). Confirmatory Factor Analysis also showed that the CPCQ tested the same crowd dimensions for male and female college students as well as underclassmen and upperclassmen in college (Hopmeyer et al., 2017). Thus, the CPCQ is a valid tool for testing differences across these groups.

**Global Prosocial Behavior.** Five items from the Primary Prevention Awareness, Attitudes, and Usage Scale (PPAAUS, Swisher, Shute, & Bibeau, 1985) were used to assess global prosocial behavior in the current sample (Cronbach's  $\alpha = .67$ ). Participants were asked to report the frequency with which they engaged in prosocial behaviors in the past year (for, example, "Helped a friend with a problem"). Items were rated on a 1 (*never*) to 6 (*almost every day or more*) Likert–type scale. An average of the items was used with higher scores indicating more frequent helping. The items for this measure have been used in adolescents from grade seven to twelve and have been reliable (Swisher et al., 1985). This measure is valid because it focuses on actual behaviors, for example, helping a friend (Swisher et al., 1985). This measure has also demonstrated adequate reliability and validity on a previous longitudinal study on adolescents and emerging adults (Carlo, Crockett, Wilkinson, & Beal, 2011).

**Prosociality.** The Prosociality Scale (PS, Caprara, Steca, Zelli, & Capanna, 2005) was used to assess the degree of participants' helping, sharing, taking care of others' needs,

and empathizing with others' feelings. Sixteen items (Cronbach's  $\alpha = .91$ ) asked participants to rate their prosociality on a 1 (*never/ almost never*) to 5 (*almost always/always true*) Likerttype scale (for example, "I try to help others"). A composite score of the items was created with higher scores indicating higher levels of prosociality. This measure has been validated across different ages, across different waves of data, and on large samples of respondents in a longitudinal study of participants between ages 18 and 92 years (Caprara et al. 2005). This measure has high construct validity as it can measure individual differences in prosocial responding (Caprara et al., 2005).

Risk Behaviors. The 15-item adapted version of the Reckless Behavior Questionnaire (RBQ, Teese & Bradley, 2008) was used to assess participants' risky academic, sexual, drug, and alcohol-related behaviors, for example, "Had intercourse with a nonexclusive partner". Participants reported how often in the last six months they engaged in certain behaviors grouped in four categories: academic risk, sexual risk, drug risk, and alcohol risk. The response choices were 1 (never), 2 (1-2 times), 3 (3-4 times), 4 (5-6 times), 5 (7 times or more times). An average score for the four categories of risk behaviors was generated for each participant by averaging responses to items on each subscale. Higher scores indicated more frequent engagement in risky behaviors. This measure has been used on college students and the items have reliably measured risky behaviors (Hopmeyer & Medovoy, 2017). The reliabilities for the subscales in the current sample were as follows: academic risk (4 items, Cronbach's  $\alpha = .72$ ), sexual risk (3 items, Cronbach's  $\alpha = .55$ ), drug risk (4 items, Cronbach's  $\alpha = .68$ ), and alcohol risk (4 items, Cronbach's  $\alpha = .78$ ). The original RBQ scale by Teese and Bradley (2008) assessed the college students' risky behaviors using scales that had been previously validated by Bradley and Wildman (2002).

#### **Data Analysis**

Descriptive statistics were used to report the participants' ages in years, gender, race, and their year of study in college.

To confirm whether similar peer crowd structures established by Hopmeyer and Medovoy (2017) exist in the current sample, Exploratory Factor Analysis with oblique rotation was conducted as a pre-analysis procedure. The researcher anticipated four factors with eigenvalues greater than one. Each of the four factors would represent a different peer crowd dimension.

Hierarchical multiple regression was used to examine peer crowd affiliation as a predictor of risky and prosocial behaviors among college students. First, to address the research question examining the relationship between peer crowd affiliation and risky behavior among college students, four models, which were tested separately, consisted of risky behaviors as dependent variables (academic, sexual, drug, and alcohol). The predictors for the study were age, gender, race/ethnicity, and peer crowd dimensions.

Second, to address the research question examining the relationship between peer crowd affiliation and prosocial behavior among college students, two models, which were tested separately, consisted of prosocial behavior as dependent variables (global prosocial behavior and prosociality). The predictors for the study were age, gender, race/ethnicity, and peer crowd dimensions.

Third, to address the research question of whether gender moderates the relationship between peer crowd affiliation, prosocial behavior, and risky behavior of college students a few steps prior to the analysis were done. First, to reduce multicollinearity between main effects and interaction terms, continuous variables for peer crowd dimensions were centered by

subtracting the mean score from the original score. Similarly, the gender categorical variable was centered by subtracting the mean score from the original score. Second, interaction terms were created by multiplying the centered scores for gender and each of the peer crowd dimensions.

When conducting the hierarchical multiple regression analyses for assessing risky behaviors among college students affiliated with different peer crowd dimensions, dependent variables (academic, sexual, drug, and alcohol) were tested separately in each model. In addition, for each model Block 1 had main effects (age, gender, race/ethnicity, and peer crowd dimensions. Block 2 had interaction terms. Separate models assessing prosocial behaviors (global prosocial behaviors and prosociality) among college students affiliated with different peer crowd dimensions were tested in each model. Block 1 had main effects (age, gender, race/ethnicity, and peer crowd dimensions. Block 2 included interaction terms. In sum, six models were tested in SPSS to assess risky and prosocial behaviors among college students affiliated with different peer crowd dimensions. These analyses provided beta weights and p values for significant predictors. In addition, change in  $\mathbb{R}^2$  with its p value was provided for the moderation effects and post hoc analyses were used to interpret results for significant interactions.

#### RESULTS

## **Peer Crowd Structures**

Exploratory Factor Analysis with oblique (Promax) rotation in SPSS was conducted to determine the peer crowd structure of this sample. Five factors had eigenvalues greater than one. Factor 1 was defined by positive loadings of the 'Goth/Punks/Metal Heads', 'Druggy/Stoners', 'Slackers', 'Populars', and 'Hipsters' crowds and was labeled Counterculture (Cronbach's  $\alpha$  = .69). Factor 2 was defined by positive loadings of the 'Athletes' and 'Jocks' crowds and was labeled Athletic (Cronbach's  $\alpha$  = .81). 'Factor 3 was defined by positive loadings of the 'International Students', 'Racial/Ethnic Group', and 'Performing Arts' crowds and was labeled Arts/Ethnic (Cronbach's  $\alpha$  = .68). Factor 4 was defined by positive loadings of the 'Academics', 'Elites', and 'Student Leaders' crowds and was labeled Scholastic (Cronbach's  $\alpha$  = .61). Factor 5 was defined by positive loadings of the 'Partiers', 'Greeks', and a negative loading of 'Loners', which was reverse scored to make higher scores reflect strong identification with the Social peer crowd dimension (Cronbach's  $\alpha$  = .47). These results were not satisfactory because Factor 5 had a low alpha thus another analysis was conducted to ascertain more meaningful peer crowd dimensions.

Exploratory Factor Analysis with oblique (Promax) rotation in SPSS was next restricted to four factors to replicate the previous analysis by Hopmeyer and Medovoy (2017). Factor 1 was defined by positive loadings of the 'Athletes', 'Jocks', 'Partiers', and 'Greeks' crowds and was labeled Athletic/Social (Cronbach's  $\alpha = .74$ ). Factor 2 was defined by positive loadings of the 'Goth/Punks/Metal Heads', 'Druggy/Stoners', 'Slackers', 'Populars', and 'Hipsters' crowds and was labeled Counterculture (Cronbach's  $\alpha = .69$ ). Factor 3 was defined by positive loadings of the 'International Students', 'Racial/Ethnic Group', and 'Performing Arts' crowds and was labeled Arts/Ethnic (Cronbach's  $\alpha = .68$ ). Factor 4 was defined by positive loadings of the 'Academics', 'Elites', and 'Student Leaders' crowds and was labeled Scholastic (Cronbach's  $\alpha = .61$ ). After conducting reliability analyses for each peer crowd dimension, the 'Loners' peer crowd was removed from the Arts/Ethnic peer crowd dimension because it was not highly correlated with other variables in factor 3 (Cronbach's  $\alpha = .61$ ). Hence, the Cronbach's alpha increased (Cronbach's  $\alpha = .68$ ). The peer crowds for each factor appeared to correlate well with each other and these groups represented more meaningful peer crowd dimensions than the previous analyses.

### **Main Effects of Peer Crowd Affiliations**

Hierarchical multiple regression was used to examine peer crowd affiliations as predictors of risky behavior and prosocial behavior among college students. As shown in Table 1, peer crowd affiliations were significant predictors of risky behavior. Counterculture crowd affiliation positively predicted academic-related risk-taking behaviors. In addition, Athletic/Social and Counterculture crowd affiliations positively predicted sex-related risk-taking behaviors, whereas Arts/Ethnic crowd affiliation negatively predicted sex-related risk-taking behaviors. In comparison to other races/ethnicities, White students were less likely to engage in sex-related risk-taking behaviors. Furthermore, women were less likely to engage in drugrelated risk-taking behaviors. Counterculture crowd affiliation positively predicted drug-related risk-taking behaviors, whereas Arts/Ethnic and Scholastic crowd affiliations negatively predicted drug-related risk-taking behaviors. Alcohol-related risk-taking behaviors increased with age. Athletic/Social and Counterculture crowd affiliations positively predicted alcoholrelated risk-taking behaviors, whereas Arts/Ethnic and Scholastic crowd affiliations negatively predicted drug-related risk-taking behaviors. Alcohol-related risk-taking behaviors increased with age. Athletic/Social and Counterculture crowd affiliations positively predicted alcoholrelated risk-taking behaviors, whereas Arts/Ethnic and Scholastic crowd affiliations negatively predicted alcohol-related risk-taking behaviors.

### Table 1

	Academic Risk		Sexual Risk		Drug Risk		Alcohol Risk	
Predictors	β	sr <sup>2</sup>	β	sr <sup>2</sup>	β	sr <sup>2</sup>	β	sr <sup>2</sup>
Age	.05	.00	.02	.00	.07	.01	.08*	.01
Race/Ethnicity	.07	.00	09*	.01	06	.00	02	.00
Gender	.00	.00	01	.00	11**	.01	02	.00
Athletic/Social	.03	.00	.24***	.04	.08	.00	.26***	.05
Counterculture	.20***	.02	.18***	.02	.31***	.06	.25***	.04
Arts/Ethnic	07	.00	15**	.01	15**	.02	19***	.02
Scholastic	06	.00	08	.01	12**	.01	09*	.01
Gender Interactions								
Athletic/Social	04	.00	02	.00	10	.01	09	.01
Counterculture	04	.00	04	.00	10	.01	01	.00
Arts/Ethnic	01	.00	03	.00	.03	.00	04	.00
Scholastic	.08	.01	.03	.00	.06	.00	.05	.00

Regression Analyses Predicting Risk-Taking Behavior among Peer Crowds

*Note.* N = 527. All values represent beta weights, sr<sup>2</sup> is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter. Gender was coded as 0 = Males, 1 = Females and then centered. Race/Ethnicity was coded 0 = Other, 1 = White and then centered.

\*p < .05. \*\*p < .01. \*\*\*p < .001.

Furthermore, Table 2 also reflected that peer crowd affiliations were significant predictors of prosocial behaviors. Overall, more women engaged in global prosocial behaviors and were more prosocial. Athletic/Social and Scholastic crowd affiliations positively predicted global prosocial behaviors. In addition, Scholastic crowd affiliation positively predicted prosociality.

#### Table 2

	Global Prosocial Behaviors		Prosociality		
Predictors	β	sr <sup>2</sup>	β	sr <sup>2</sup>	
Age	.02	.00	.02	.00	
Race/Ethnicity	.04	.00	04	.00	
Gender	.11**	.01	.13**	.02	
Athletic/Social	.02***	.00	.01	.00	
Counterculture	.00	.00	.04	.00	
Arts/Ethnic	04	.00	.05	.00	
Scholastic	.28***	.07	.15**	.00	
Gender Interactions					
Athletic/Social	.06	.00	.07	.00	
Counterculture	.02	.00	21***	.02	
Arts/Ethnic	04	.00	.16**	.01	
Scholastic	04	.00	09*	.00	

Regression Analyses Predicting Prosocial Behavior among Peer Crowds

*Note.* N = 527. All values represent beta weights, sr<sup>2</sup> is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter. Gender was coded as 0 = Males, 1 = Females and then centered. Race/Ethnicity was coded 0 = Other, 1 = White and then centered. \*p < .05. \*\*p < .01. \*\*\*p < .001.

#### **Testing Gender as a Moderator**

Hierarchical multiple regression was used to examine whether gender moderates the relationship between peer crowd affiliations and risky and prosocial behavior of college students. Gender was not a significant moderator of the relationship between peer crowd affiliations and risky behaviors among college students. When the interaction terms were added to the models predicting risky behaviors, there was an increase in  $R^2$  although it was not significant. When interaction terms were also added to model examining global prosocial behavior  $R^2$  increased but it was not significant. In contrast, a significant increase in  $R^2$  was found when interaction terms were added to the model with prosociality ( $R^2 = .03$ , p = .002). Therefore, gender had a

significant moderation effect on the relationship between peer crowd affiliations and prosociality (refer to Table 2).

As shown in Figure 1, post hoc simple slope analysis on Counterculture crowd affiliation shows that among those with low affiliation with the Counterculture crowd, women had higher levels of prosociality than men. However, among those with high affiliation with the Counterculture crowd, men appeared to have higher levels of prosociality than women.



Figure 1. Effects of Gender and Counterculture Peer Crowd Affiliation on Prosociality

In addition, the post hoc simple slope analysis in Figure 2 indicates that men with low affiliation with the Arts/Ethnic crowd appear to have about the same levels of prosociality as women with low affiliation with the Arts/Ethnic crowd. Women with high affiliation with the Arts/Ethnic crowd on the other hand appeared to have high levels of prosociality when compared to men with high affiliation with the Arts/Ethnic crowd.

Finally, the post hoc simple slope analysis in Figure 3 shows that women with low affiliation with the Scholastic crowd had higher levels of prosociality than men with low affiliation with the Scholastic peer crowd. However, men with high affiliation with the

Scholastic crowd appear to have about the same levels of prosociality when compared to women with high affiliation with the Scholastic crowd.



Figure 2. Effects of Gender and Arts/Ethnic Peer Crowd Affiliation on Prosociality



Figure 3. Effects of Gender and Scholastic Peer Crowd Affiliation on Prosociality

#### DISCUSSION

#### **Emerging Adulthood and Peer Crowd Affiliations**

The results of the current study showed that college peer crowds capture the sporting, social, academic, cultural, and political aspects of collegiate life. Consistent with the recent research by Hopmeyer and Medovoy (2017), Counterculture, Athletic/Social, and Scholastic affiliations were found at this public mid-sized university in the Midwest. The Athletic/Social peer crowd dimension found in the present study were defined as two peer crowd dimensions called Athletic and Social in Hopmeyer and Medovoy's (2017) study.

Furthermore, there was an important aspect of collegiate life that was revealed in this study. This was the Arts/Ethnic peer crowd dimension, which comprises of international students, students identifying strongly with their race/ethnicity, and students engaging in performing arts. It is possible that the international students also identify strongly with their race and ethnicity. These students from abroad intend to complete their undergraduate education at this university. Students engaging in performing arts were also highly correlated with the 'International Students' and the 'Racial/Ethnic Groups' because they have similar behavioral characteristics; for example, they all engage in low levels of risky behaviors and engage in high levels of prosocial behaviors. This peer crowd dimension is different from Hopmeyer and Medovoy's (2017) study, which was conducted at a small liberal arts college whereas the current study was conducted at a larger public university. These results suggest that students at different types of college institutions may exhibit different behaviors that may shape their identities. This demonstrates that it is important to examine peer crowds from different college environments in the United States to get a comprehensive understanding of peer crowds and their behaviors.

#### **Emerging Adult Peer Crowd Affiliations and Behaviors**

As was hypothesized, affiliations with certain peer crowd dimensions predict risk-taking behaviors. Counterculture affiliation predicted academic, sex, drug, and alcohol related risky behaviors. As indicated in previous research (Hopmeyer & Medovoy, 2017; Hopmeyer et al., 2017), this peer crowd dimension reflects behaviorally deviant lifestyles. In the current study, students identifying strongly with the 'Populars' were included in the Counterculture peer crowd dimension. This is a peer crowd associated with high levels of sexual-related risk-taking behaviors and substance use (Hopmeyer et al., 2017). Therefore, the current findings show a consistent theme suggesting that risk behaviors in emerging adulthood are associated with crowd affiliations organized around deviant norms, substance abuse, and sexual-related risk-taking behaviors (Cross & Fletcher, 2009).

In addition, the current findings on Athletic/Social affiliation as a predictor of alcohol and sexual-related risk-taking behaviors replicate those obtained from adolescent and some emerging adult studies (La Greca et al., 2001; Miller et al; 2005; Sessa, 2007). As indicated earlier, the Athletic/Social peer crowd dimension in the current study included the Social peer crowd dimension and the Athletic peer crowd dimension. This suggests that 'Athletes' overlap to a large degree with 'Partiers' and 'Greeks'. Affiliating with 'Partiers' and 'Greeks' was associated with engagement in high levels of sexual-related risk-taking behaviors and experimenting with alcohol and drugs (Hopmeyer et al., 2017). High levels of alcohol consumption were also reported by students affiliated with the 'Jocks' at a large commuter college in the Mid-Atlantic United States (Sessa, 2007). However, Hopmeyer and colleagues (2017) found evidence to the contrary. They suggested college students affiliated with the Athletic peer crowd dimension may engage in low levels of sexual and alcohol related risk-taking behaviors because they are

concerned with the damages these behaviors might do to their ability to play sports. However, they mentioned that their results should be interpreted conservatively because their college students attended a small liberal arts college with little emphasis on sports (Hopmeyer et al, 2017). Therefore, these conflicting findings reinforce the need to understand peer crowds from different college environments.

Arts/Ethnic and Scholastic affiliations also appear to share the same behavioral characteristics. The results from this study suggest that affiliation with these peer crowd dimensions negatively predicted alcohol and drug related risk-taking behaviors. The Arts/Ethnic and Scholastic peer crowd dimensions found in the present study were defined as one peer crowd dimension called Scholastic in Hopmeyer and colleagues' (2017) study. Emerging adults affiliated with the Scholastic peer crowd dimension engage in activities that provide opportunities to socialize with peers who share similar backgrounds and interests, such as cultural and political organizations on campus (Hopmeyer et al., 2017). Therefore, students' affiliations with the Arts/Ethnic and Scholastic peer crowd dimensions greatly reduces their chances of engaging in risky behaviors.

The current study contributed to the literature on peer crowd affiliations in emerging adulthood significantly as the findings suggested that peer crowd affiliations with specific crowds predicted prosocial behavior. Athletic/Social and Scholastic affiliations predicted global prosocial behaviors. These results were expected because the Athletic/Social and Scholastic peer crowd dimensions had students such as the 'Elites' and 'Greeks' belonging to cultural and Greek Letter organizations, who engage in high levels of volunteering activities (Gage & Thapa, 2012). Furthermore, Scholastic affiliation predicted prosociality. These students were more inclined to engage in behaviors benefiting others, for example, sharing and empathizing with

others' feelings (Caprara, Alessandri, & Eisenberg, 2012). Students affiliated with the Scholastic peer crowd dimensions may be inclined to act in favor of others because it provides a sense of competence and meaning in life (Van Tongeren, Green, Davis, Hook, & Hulsey, 2016).Considering that some emerging adults may face challenges academically or in relationships during college years, prosociality may foster positive relationships in which they feel supported and valued (Van Tongeren et al., 2016). Hence, engaging in prosocial behaviors promotes social wellbeing among college students (Zuffianò, Marti-Vilar, & López-Pérez, 2018).

### **Gender and Behaviors**

Fewer women were likely to engage in drug- related risk-taking behaviors. These results were expected because men are more likely to use illicit drugs more frequently than women (McCabe et al., 2007; Schulenberg et al., 2017). The findings of this study support previous work that revealed higher rates of illicit drug use including marijuana, prescription stimulants, and inhalants among more men than women (McCabe et al., 2007; Schulenberg et al., 2017). In addition, emerging adults assume greater responsibility for managing their medications during the transition from adolescence to emerging adulthood (McCabe, Teter, Boyd, Wilens, & Schepis, 2018) This may lead to prescription medication diversion because of greater availability of prescription drugs and increased chances of peers sharing their medication (McCabe et al., 2018). Men may also engage in drug use to develop physique and physical strength (Schulenberg et al., 2017) to uphold societal expectations (Nielsen, 2015). The national survey results on drug use from 1975 to 2016 conducted by Monitoring the Future demonstrated that in 2016 Creatine, which is a protein supplement combined with the use of steroids, had an annual prevalence rate of 3 percent for college men compared with 0.3 percent for college women (Schulenberg et al.,

2017). Therefore, there are gender differences in drug use among emerging adults as indicated by the results from this sample.

As hypothesized, overall more women engaged in more prosocial behaviors than men. The results are consistent with previous research suggesting that prosocial behaviors differ by gender because of gender socialization (Nielsen, 2015). Emerging adult women, therefore, display higher levels of prosocial behavior to fulfill cultural expectations for women encouraging them to be friendly and kind (Eagly, 2009; Eisenberg, Spinrad, & Knafo-Noam, 2015; Nielson et al., 2017). Therefore, gender socialization may allow women to continue developing relatively high levels of positive interpersonal abilities such as prosociality in emerging adulthood (Caprara et al., 2012).

Contrary to what was hypothesized, gender did not moderate the relation between peer crowd affiliations and risky behaviors. Although, previous research on adolescents indicated that more boys are affiliated with the 'Burnouts' and they engage in high levels of risky behaviors (La Greca et al., 2001), the current study did not find supporting evidence for peer crowds among emerging adults. It is possible that gender was not an important factor in engaging in risky behaviors because the majority of the participants were women leading to women being overrepresented in the sample. Since this is the first study to examine gender differences in risky behaviors in each peer crowd dimension in emerging adulthood, future studies may find significant gender differences with gender balanced samples.

Furthermore, as hypothesized, gender moderated the relation between peer crowd affiliations and prosociality. The results, consistent with research suggesting that women have higher mean levels of prosocial behaviors than men (Eisenberg et al., 2015), were applicable to women with low affiliation with the Counterculture and Scholastic peer crowd dimensions as

well as high affiliation with the Arts/Ethnic peer crowd dimension. However, it was surprising to find that this was not applicable to women who reported high affiliation with the Counterculture peer crowd dimension because men with high affiliation with this peer crowd appeared to have higher levels of prosociality than women. In addition, both men and women appeared to have similar levels of prosociality in low affiliations with Arts/Ethnic and high affiliations with Scholastic peer crowd dimensions. These results show that gender differences may vary by the type of prosocial behavior due to gender socialization where in emerging adulthood both men and women continue to perform the same types of prosocial behaviors (Nielson et al., 2017). Men with high affiliations with peer crowd dimensions may act in favor of others more than women when they engage in prosocial behaviors involving physical helping (Nielsen et al., 2017). Women with low affiliations with peer crowds may also continue to engage in more prosocial behaviors involving emotional support (Nielsen et al., 2017). Therefore, the current findings also suggest that there may be gender differences in prosocial behavior when men and women differ in their strength of their affiliation with certain peer crowds.

In addition, Padilla-Walker and colleagues (2018) also suggest that the pressure for men to avoid prosocial behaviors to conform to the masculine image that is expected of them declines in emerging adulthood, thus increasing their levels of prosocial behavior. This may be possible due to high levels of civic engagement activities available in emerging adulthood (Padilla-Walker, Memmott-Elison, & Nielsen, 2018). Men affiliated with the Arts/Ethnic and Scholastic peer crowd dimensions are more likely to engage in volunteer activities because they belong to cultural and Greek Letter Organizations. Thus, emerging adulthood is a paramount

developmental period at which to promote engagement in various prosocial activities (Padilla-Walker et al., 2018).

Finally, emerging adult men also have increasing expectations to be emotionally engaged with people surrounding them (Padilla-Walker et al., 2018). Men affiliated with the Counterculture dimension, which includes individuals who are highly social such as the 'Populars', have a lot of peer interactions, thus creating more opportunities to help those they see more regularly (Padilla-Walker et al., 2018). Strong relationships with peers may create a platform to engage in prosocial activities. More research in this area is needed to provide more supporting evidence.

### **Limitations and Future Directions**

There are limitations of the study to be considered. First, the participants were from a midsized university in the Midwest; the findings of this study may not generalize to emerging adults from other college types or college institutions from different regions and parts of the world. Second, all measures used for this study were self-reported, and data was collected once. More research with longitudinal data will provide a more comprehensive understanding of peer crowd affiliations as predictors of prosocial and risky behaviors among emerging adults. Third, the majority of participants were women. Future research should explore gender differences in peer crowd affiliations with more gender balanced samples. Fourth, the sample used for the current study was homogeneous in regard to race/ethnicity. With 92.2 percent of the participants identifying as White, differences could not be ascertained fully. Future research should continue to consider more diverse samples when exploring the peer crowds and risky and prosocial behaviors.

Finally, the College Peer Crowd Questionnaire by Hopmeyer and Medovoy (2017) did not fully capture the peer crowds present at this university. This institution has some students with agricultural and religious interests. In addition, despite the fact that this study was anonymous, there may have been social desirability in identifying with peer crowds such as 'Slackers' or 'Druggy/Stoners', which are associated with deviant lifestyles on campus. It is possible that some participants stated that they identify with the 'Academics' (25%) to create a favorable image of themselves (Van de Mortel, 2008). This may have affected the validity of the results. Future research should include peer crowds such as 'Farmers/Ranchers' and 'Religious Groups' to capture most of the peer crowds represented in this sample. In addition, other names of peer crowds would also reduce social desirability on peer crowds that have negative labels. There is also a need to update the peer crowd labels to fit the current generation of emerging adults, for example, participants may not identify with 'Goth/Punk/Metal Heads' or the 'Jocks'.

#### Conclusion

The current study contributed significantly to the literature on peer crowd affiliations among emerging adults. The current study provides evidence consistent with previous research stating that peer crowds continue to play an important role in identity exploration in emerging adulthood as reflected by the Social Identity Theory. This theory shows that emerging adults shape different identities with peer crowds by conforming to the norms and behaviors of specific peer crowds that individuals identify with. Furthermore, the current findings provided a better understanding of the risky and prosocial behaviors associated with peer crowds among college students. This will help address college students' academic engagement, social, and emotional wellbeing. Moreover, the current study contributed additional knowledge as no studies have

examined gender differences in behaviors among peer crowds in emerging adulthood. The results suggest that gender differences in prosocial behaviors among different peer crowd dimensions may be linked with how strongly women and men are affiliated with peer crowd dimensions. Finally, this study shows that peer crowds are important in promoting the social well-being of emerging adults because when they engage in high levels of prosocial behaviors they build strong social relationships with others. Future research should continue to explore these positive aspects of peer crowds to combat negative behaviors associated with emerging adults.

#### REFERENCES

- Abrams, D., Wetherell, M., Cochrane, S., Hogg, M. A., & Turner, J. C. (1990). Knowing what to think by knowing who you are: Self-categorization and the nature of norm formation, conformity and group polarization. *British Journal of Social Psychology*, 29, 97-119.
- 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. (2005). The developmental context of substance use in emerging adulthood. Journal of Drug Issues, 35, 235-254.
- Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, *1*, 68-73.
- Asher, S. R., & Weeks, M. S. (2014). Loneliness and belongingness in the college years. In R.
  J. Coplan & J. C. Bowker (Eds.), *The handbook of solitude: Psychological perspectives* on social isolation, social withdrawal, and being alone (pp. 283-301). Hoboken, NJ: Wiley.
- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review*, *15*, 1-40.
- Bonsu, J. A. (2012). *Do high school peer crowd affiliation and peer alcohol use predict alcohol use during college?* (Doctoral dissertation) University of Kentucky. Retrieved http://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1007&context=psychology\_etd.

- Bowes, L., Carnegie, R., Pearson, R., Mars, B., Biddle, L., Maughan, B., & Heron, J. (2015).
  Risk of depression and self-harm in teenagers identifying with goth subculture: A longitudinal cohort study. *The Lancet Psychiatry*, *2*, 793-800.
- Bradley, G., & Wildman, K. (2002). Psychosocial predictors of emerging adults' risk and reckless behaviors. *Journal of Youth and Adolescence*, *31*, 253–265.
- 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.
- Brown, B. B., Eicher, S. A., & Petrie, S. (1986). The importance of peer group ("crowd") affiliation in adolescence. *Journal of adolescence*, *9*, 73-96.
- Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. *Child development*, *64*, 467-482.
- Browne, K. M., Hoyle, R., & Nicholson, M. (2012). Self-esteem, self-efficacy, and social connectedness as mediators of the relationship between volunteering and wellbeing. *Journal of Social Service Research*, 38, 468-483.
- Buhi, E. R., Marhefka, S. L., & Hoban, M. T. (2010). The state of the union: Sexual health disparities in a national sample of US college students. *Journal of American College Health*, 58, 337-346.
- Carlo, G., Crockett, L. J., Wilkinson, J. L., & Beal, S. J. (2011). The longitudinal relationships between rural adolescents' prosocial behaviors and young adult substance use. *Journal* of Youth and Adolescence, 40, 1192-1202.
- Caprara, G. V., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. *European Journal of Psychological Assessment*, *21*, 77-89.

- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: The contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, *102*, 1289-1303.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31, 31-44.
- Colom, R., & Lynn, R. (2004). Testing the developmental theory of sex differences in intelligence on 12–18 year olds. *Personality and Individual Differences, 36*, 75-82.
- Côté, J. E. (2006). Emerging adulthood as an institutionalized moratorium: Risks and benefits to identity formation. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 85-116). Washington, DC, US: American Psychological Association.
- Cross, J. R., Bugaj, S. J., & Mammadov, S. (2016). Accepting a scholarly identity: Gifted students, academic crowd membership, and identification with school. *Journal for the Education of the Gifted, 39*, 23-48.
- Cross, J. R., & Fletcher, K. L. (2009). The challenge of adolescent crowd research: Defining the crowd. *Journal of Youth and Adolescence*, *38*, 747-764.
- Cruce, T. M., & Moore, J. V. (2007). First-year students' plans to volunteer: An examination of the predictors of community service participation. *Journal of College Student Development*, 48, 655-673.
- Eagly, A. H. (2009). The his and hers of prosocial behavior: An examination of the social psychology of gender. *The American Psychologist*, *64*, 644–658.

- Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2015). Prosocial development. In M. Lamb& C. Garcia-Coll (Eds.) and R. M. Lerner (Vol. Ed.), *Handbook of child psychology* (7thed.). New York, NY: Wiley.
- Ellis, W. E., Dumas, T. M., Mahdy, J. C., & Wolfe, D. A. (2012). Observations of adolescent peer group interactions as a function of within-and between-group centrality status. *Journal of Research on Adolescence*, 22, 252-266.
- Gage III, R. L., & Thapa, B. (2012). Volunteer motivations and constraints among college students: Analysis of the volunteer function inventory and leisure constraints models. *Nonprofit and Voluntary Sector Quarterly*, 41, 405-430.
- Goddard, R. D., Sweetland, S. R., & Hoy, W. K. (2000). Academic emphasis of urban elementary schools and student achievement in reading and mathematics: A multilevel analysis. *Educational Administration Quarterly*, 36, 683-702.
- Hastings, P. D., Utendale, W. T., & Sullivan, C. (2007). The socialization of prosocial development. In J.E. Grusec & D. Hastings (Eds.), *Handbook of socialization: Theory* and research, (pp.638-664). New York, NY: Guilford.
- Hopmeyer, A., & Medovoy, T. (2017). Emerging adults' self-identified peer crowd affiliations, risk behavior, and social–emotional adjustment in college. *Emerging Adulthood*, 5, 143-148.
- Hopmeyer, A., Troop-Gordon, W., Medovoy, T., & Fischer, J. (2017). Emerging adults' selfidentified peer crowd affiliations and college adjustment. *Social Psychology of Education*, 20, 643-667.

- La Greca, A. M., & Harrison, H. M. (2005). Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child and Adolescent Psychology*, *34*, 49-61.
- La Greca, A. M., Prinstein, M. J., & Fetter, M. D. (2001). Adolescent peer crowd affiliation: Linkages with health-risk behaviors and close friendships. *Journal of Pediatric Psychology*, 26, 131-143.
- Lisha, N. E., Jordan, J. W., & Ling, P. M. (2016). Peer crowd affiliation as a segmentation tool for young adult tobacco use. *Tobacco Control*, 25(Suppl 1), i83-i89.
- McCabe, S. E., Morales, M., Cranford, J. A., Delva, J., McPherson, M. D., & Boyd, C. J. (2007).
   Race/ethnicity and gender differences in drug use and abuse among college students.
   *Journal of Ethnicity in Substance Abuse*, 6, 75-95.
- McCabe, S. E., Teter, C. J., Boyd, C. J., Wilens, T. E., & Schepis, T. S. (2018). Sources of Prescription Medication Misuse Among Young Adults in the United States: The Role of Educational Status. *The Journal of Clinical Psychiatry*, 79,1-17.
- Moran, M. B., Walker, M. W., Alexander, T. N., Jordan, J. W., & Wagner, D. E. (2017). Why crowds matter peer: Incorporating youth subcultures and values in health education campaigns. *American Journal of Public Health*, 107, 389-395.
- Nielson, M. G. (2015). How Do Boys and Girls Help? Validation of a multidimensional measure of prosocial behavior (Dissertation). Brigham Young University. Retrieved from https://scholarsarchive.byu.edu/etd/6046.
- Nielson, M. G., Padilla-Walker, L., & Holmes, E. K. (2017). How do men and women help?
  Validation of a multidimensional measure of prosocial behavior. *Journal of Adolescence*, 56, 91-106.

- Padilla-Walker, L. M., Memmott-Elison, M. K., & Nielson, M. G. (2018). Longitudinal change in high-cost prosocial behaviors of defending and including during the transition to adulthood. *Journal of Youth and Adolescence*, 47, 1853-1865.
- Petts, R. J. (2009). Trajectories of religious participation from adolescence to young adulthood.
   Journal for the Scientific Study of Religion, 48, 552-571. Pew Research Center. (2015).
   America's changing religious landscape. Washington, DC: Pew Research Center.
- Phinney, J. S. (2006). Ethnic identity exploration in emerging adulthood. In J. J. Arnett & J. L.
  Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 117-134). Washington, DC, US: American Psychological Association.
- Prinstein, M. J., & La Greca, A. M. (2002). Peer crowd affiliation and internalizing distress in childhood and adolescence: a longitudinal follow-back study. *Journal of Research on Adolescence*, 12, 325-351.
- Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Miech, R. A., & Patrick, M. E. (2017). *Monitoring the Future national survey results on drug use,* 1975-2016: Volume II, college students and adults ages 19-55. Ann Arbor, MI: University of Michigan, Institute of Social Research.
- Sessa, F.M. (2007). Peer crowds in a commuter college sample: The relation between selfreported alcohol use and perceived peer crowd norms. *The Journal of Psychology*, 141, 293–305.
- Silberman, M. A., & Snarey, J. (1993). Gender differences in moral development during early adolescence: The contribution of sex-related variations in maturation. *Current Psychology*, 12, 163-171.

- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43, 1531-1543.
- Steptoe, A., & Wardle, J. (2004). Health-related behavior: Prevalence and links with disease. In: Kaptein, A.A.; Weinmen, J., (Eds.), *Health psychology* (p. 25-51).Oxford, UK: British Psychological Society and Blackwell Publishing Ltd.
- Sussman, S., Pokhrel, P., Ashmore, R. D., & Brown, B. B. (2007). Adolescent peer group identification and characteristics: A review of the literature. *Addictive Behaviors*, 32, 1602-1627.
- Swisher, J. D., Shute, R. E., & Bibeau, D. (1985). Assessing drug and alcohol abuse: An instrument for planning and evaluation. *Measurement and Evaluation in Counseling and Development*, 17, 91-97.
- Teese, R., & Bradley, G. (2008). Predicting recklessness in emerging adults: A test of a psychosocial model. *The Journal of Social Psychology*, 148, 105-128.
- US Immigration and Customs Enforcement (2015, August). *Student and exchange visitor information system* (SEVP).
- Van de Mortel, T. F. (2008). Faking it: social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25, 40-48.
- Van Tongeren, D. R., Green, J. D., Davis, D. E., Hook, J. N., & Hulsey, T. L. (2016).Prosociality enhances meaning in life. *The Journal of Positive Psychology*, *11*, 225-236.
- Zuffianò, A., Eisenberg, N., Alessandri, G., Luengo Kanacri, B. P., Pastorelli, C., Milioni, M., & Caprara, G. V. (2016). The relation of pro-sociality to self-Esteem: The mediational role of quality of friendships. *Journal of Personality*, 84, 59-70.

Zuffianò, A., Marti-Vilar, M., & López-Pérez, B. (2018). Prosociality and life satisfaction: A daily-diary investigation among Spanish university students. *Personality and Individual Differences*, 123, 17-20.