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Informal college study groups : gender and group homophily.

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INFORMAL COLLEGE STUDY GROUPS:
GENDER AND GROUP HOMOPHILY

By

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B.S., University of Louisville, 2012

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A Thesis Approved on

April 15, 2014

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DEDICATION

This thesis is dedicated to my amazing parents

Scott and Jennifer McReynolds

who have always been my constant supporters.

ACKNOWLEDGMENTS

ABSTRACT

INFORMAL COLLEGE STUDY GROUPS: GENDER AND GROUP HOMOPHILY

Brandon S. McReynolds

April 15, 2014

The examination of undergraduate informal college study groups offers not only the ability to better understand student culture, but also the ability to look further into the role that gender plays in a student's college experience. Further, it is hypothesized that students form and maintain these groups based off homophily. This study uses a mixed methods approach to examine how males and females experience informal study groups differently, along with how a student's gender informs his or her perception of the group's purpose, formation and function. Themes such as trust, along with a student's pre-college background and major, emerged in the findings as playing a role in informal study groups. The findings suggest that students use gender in order to create study groups that are homophilic while also gender contributes to how students experience college.

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CHAPTER I

INTRODUCTION

The ever-evolving nature of a college campus makes for a unique research environment. Due to this almost organic evolution, one can understand how, when student composition changes, the campus culture must adapt; these shifts create an ever-changing college environment (Hubbell and Hubbell 2010). Yet this process may not be as linear as it seems. When the campus culture changes the student has to adapt as well, meaning this process may be multi-directional wherein campus culture changes students, faculty and the administration as much as they change the culture. One aspect of a campus' culture is student groups, both formal and informal. These groups can be broken down further through a micro level analysis to understand the differential traits of each.

Informal groups are worth studying because of their relevancy as sub-societies in which social interaction and the individual can be observed (Olmsted 1959). Informal groups offer the researcher the opportunity to see how social sanctions and controls are managed at multiple stages of the group process. Particularly when looking at a college campus the uses of informal study groups, those moments in which students voluntarily choose to study together, are of great significance. These groups play a part in the college experience by helping to create a process for how students approach working in groups.

Previous work has shown that students in self-directed groups show higher achievement levels and also retained the knowledge longer than students who just attend lecture (Hovey et al 1963). Beach (1960) found that students who are more sociable showed higher achievement compared to students that were less sociable. What this area of the literature lacks though is a deeper understanding of how the composition of a group may account for different outcomes. What this researcher examines is the extent to which perceived gender differences by students may be perpetuating inequality through group studying via formation and use of these groups.

It must be noted that more formal study/work groups also exist. These are groups used by instructors for the purpose of completing an assigned group centered project. The use of student groups within the classroom is intended to teach transferable skills to both male and female students, so that upon graduation they are ready to enter the workforce and work together (Laybourn, Goldfinch, Graham, MacLeod, and Stewart 2001; Shah 2013). One then can logically conclude that informal study groups do the same just in a different manner. What is seldom questioned is whether groups are positive for students, as this area of research is dominated by studies of formal groups (Summers, Beretvas, Svinicki, and Gorin 2005; Zhao and Kuh 2004). Groups may be seen as an education equalizer by helping to raise student outcomes. But this equalization relies on group composition and member attributes, which have been shown to predict group success (Kyprinanidou M. et al. 2012).

Ultimately, formal or informal groups increase academic achievement (Bertucci, Conte, Johnson, and Johnson 2010; Kamp, Dolmans, Berkel, and Schmidt 2012). Therefore, it is important to see small groups as not only functional, but as serving an

educational purpose. Such a purpose along with how study groups are viewed may be different for males and females. This difference could have implications that make study groups along with their formation and purpose important for understanding gender differences in higher education.

This study suggests that students form groups and create unity based on homophily (likeness), which if true means that one of the most basic demographic factors taken into consideration when creating groups may be gender. Realizing this as a potential formation tool, examining how small informal study groups not only form based on gender but also how their function and rules shift based on gender composition is necessary. From here gender can be used to help form an understanding of how through informal study group formation, male and female students create groups based on what they believe will result in positive outcomes. Before doing this an understanding of gender in higher education from a more macro-level perspective is needed because the goal of this research should be seen to not only understand gender composition and formation of study groups, but also how gender may possibly have an effect on informal groups.

Literature:

National trends show that for thirty years females have been outpacing males in earning four-year degrees (DiDonato and Strough 2013). One possible contributing factor to this is that females also earn higher grades while in college (Bae, Choy, Geddes, Sable, and Snyder 2000). Ewert (2012) also found that beyond just academic performance, social integration as well as attendance patterns account for the growing gender gap. This

means that if social integration and attendance are seen as factors contributing to the higher education gender gaps, a further research is needed to examine the college environment, along with a student's pre college background.

Several models have been created that provide a framework for discussing how the college environment and each of its parts affects the student. Such models include Astin's input- environment outcome (IEO) model (1968; 1993), Tinto's model of student departure (1987) and Weidman's model of undergraduate socialization (1989). Each of these models slightly varies in the examination of the student's relationship with his or her environment but each has generally similar principles when looking at gender. Linda Sax illustrated this through what is called the conditional model of college impact (2008); this model recognizes a difference in how males and females are impacted by even the same environment (Figure 1)

Figure 1: Conditional Model of College Impact

College Environments and Experiences

Pre-College Characteristics

College Outcomes

→ Men

→ Women

The conditional model of college impact also recognizes that students come to college with different experiences and backgrounds, which have the potential to impact their college experiences and outcomes as well. A discussion regarding each of these phases of the model are important to begin to unpack how and where gender fits within this model.

First, it is important to discuss the impact of a student's pre-college characteristics along with how background can affect male and female decision-making once in college. The process of gender differentiation starts at an early age. Before children even enter into school gender differentiation has taken place through play habits (Maccoby and Jacklin 1974; Thorne 1993). Elementary schools have been shown to define gender roles as well as assign certain attributes to males and females (Adler, Kless, and Adler 1992; Patterson 2012). Even at such a young age males and females begin to establish trust with those of the opposite gender (Buzzelli 1988). It is also known that young males begin to experience what is identified as "guy code" at early ages, thereby molding and adapting male behavior to fit a masculine framework (Kimmel and Davis 2008). The "guy code" can be seen as creating gender solidarity through hegemonic influence with established rules that have negative social repercussions if not adhered to. Such a code along with other societal rules regarding gender in essence require children to modify their behavior to fit societal norms. By modifying and adapting behavior children from an early age buy into the assignment of gender roles and stereotyped gender characteristics, which help to guide not only individual interactions but also group associations by socially constructing the mind to see and create gender differences.

West and Zimmerman talked about the social construction of gender and gender roles when they discussed the differences between sex and gender (1987). They argue

that sex and gender are two totally separate categories, where sex is the category society gives to a person based on physical/biological features while gender and gender roles are the behavioral aspects of any person. This very argument defines gender for this research, along with helping to support the idea that the way in which people behave is socially constructed and has very few ties to biology. It is action and behaviors that males and females attribute to one group or another that West and Zimmerman call "doing gender"(1987). The concept of doing gender is important because it accepts that gender is socially constructed thereby setting a foundation that accounts for the constructionism perspective on gender, rather than biological perspective that is more likely to attribute male and female differences to being "natural." The reason this is important to acknowledge is due to the fact that such a clear difference between sex and gender, as described above, may not be as apparent to all college students. Therefore, all of the findings must take into account how students frame differences along with their rationale for any gender segregation.

Establishing gender as something that is constructed in each individual's brain through socialization heightens the need to take into consideration student backgrounds. It is possible that due to a student's particular background that she or he may be more inclined to rationalize gender differences as "natural" meaning that any conflict that may exist within the findings between biological essentialism (meaning that gender differences are more natural) and the social constructionist perspective will have to be accounted for. This will be especially important to take into consideration listening to how students rationalize their choice in whether to study or not to study with the opposite gender. Going forward, the research sees stereotypes and beliefs about gender as being

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formed through the socialization process and it is this process, which provides a framework for discussing male and female choices through a constructionism perspective.

Once in college the pre-college characteristics are seen as an element for student decision-making. The existing research lacks a deeper understanding of how males and females form and use informal groups while in college. Specifically, there is a lack of understanding in the literature regarding how gender affects the navigation of the college environment and then, through a continuation of the college impact model, the implications of this on student outcomes. By outcomes one should not be limited to just thinking about educational outcomes but also longer life course outcomes. For example, it has even been suggested that interactions between males and females along with the difference in graduation rate could account for changes in other societal institutions such as marriage and childrearing (Buchman and DiPrete 2006). Such a finding would point to the need to understand male and female interactions within the college environment along with how males and females base their decisions for interacting.

Social interactions happening within educational institutions have been studied before, along with how gender roles affect such interactions. Ding and Harskamp's work (2006) illustrates this process by showing how gender influences partner work in physics education. What they found is that for females, their group partner's gender played a significant factor in their achievement. Females who worked with other females outperformed females who worked in mixed gender groups by significant margins. This research supports other research already done on the topic, which also shows that females are at a disadvantage in mixed-gender groups (Barbieri and Light 1992; Light, Littleton,

Bale, Joiner, and Messer 2000). Ding and Harskamp work further says that this happens due to communication style differences between males and female which help to cause a system of disadvantage especially for females in mixed groups (2006). Realizing that composition of the group can affect outcomes any findings will have to be screened to see if students perceive gender as playing such a role. It is rational to expect that because of this difference in composition that intragroup dynamics and the perceived purpose of the group could change depending on the gender make-up. Asking students about their preferences in not only study group partners but also how each student navigates informal groups will help in understanding any gender differences.

One question that remains unexplored is why do males and females choose to study together? There are logical reasons that students could choose to work in groups whether it be for some form of individual gain like a grade or even just to socialize and talk about school work with peers. The gains from working in a group, especially the academic gains have been identified and show that groups can support positive student outcomes (Bertucci, Conte, Johnson, and Johnson 2010; Kamp, Dolmans, Berkel, and Schmidt 2012). When students choose to enter into informal study groups there also lies the potential for cost, meaning that students can also take on the cost of joining a group such as distractions, having to help others etc. What these potential costs mean for students is that when given the opportunity to enter into an informal study group, a student must see the obligations set forth by the group as not outweighing any potential gain from joining (Hechter 1987). Alternatively, this weighing of the obligations set forth by the group can act as a gate that controls entry into the group affecting group cohesion.

Yet if obligations for entry to the group are based off likeness there remains a potential for exclusion.

When it comes to group formation as well as intra-group dynamics it is necessary to discuss the bonds and relationships that are created and thereby strengthen a group. When students create informal small groups they are in effect creating relationships with their peers. The study of friendships is important for this research because of possible gender differences regarding the formation of friendship networks. Although these conclusions are not universal, men and women have different life experiences and perspectives that they bring to establishing friendships (Govier 1998). It is these psychological and socialized differences that can contribute to not only how but for what purpose males and females choose to enter into different types of friendships along with how they choose who to work with.

A major criterion for friendship that is discussed throughout the literature is trust. Trust and how individuals define and gain trust can be seen as central to developing an understanding of how groups help to form and function. Prior research looking at trust amongst college students and late adolescents has focused mainly on the individual's self- esteem as well as their interactions with pre-established relationships (Randall, et al. 2010). Although trust can be formed over time through pre-established relationships and multiple encounters, it is initial trust prior to and during group formation that is most important for developing functional teams (Spector and Jones 2004). Spector and Jones' research looked at trust in the workplace but allows for a comparison to other institutions and environments such as a college campus. It is important to note that Spector and Jones found that males have higher levels of initial trust with other males but that females

showed no difference across gender. This ties into the homophilic framework of therefore forming groups around commonalities while also illustrating a potential difference especially by females. For Spector and Jones, trust level did not just have a significant effect on formation; once established, trust played a role in group outcomes. A higher level of trust helps in relation to positive outcomes because as trust increases, so does the efficiency of the interactions taking place within the group (Arrow 1974). Therefore, if one places higher trust in a group member for help, or one group member does not pull their weight, that trust is not only lost but affects group efficiency. Such an effect has the potential to lead to some form of sanction and/or even being replaced in the group as mentioned above. Trust is one possible criterion to examine how students choose who they study with in groups.

By using the conditional college impact model one can see how more shared experiences a group of students have whether before college or during can help to pull them together while also allowing for higher levels of initial trust as discussed above. This leaves the research questioning whether homophily plays a role in not only formation but also in the perceived purpose as well as how the groups themselves functions. This leads me to create the following research questions:

- How does gender possibly affect a student's undergraduate college experience and particularly how they navigate informal study groups?
- What ways do males and females differ in informal study group formation?
- Lastly, how do purpose, formation and function affect informal study groups?

CHAPTER II

METHODOLOGY AND DATA

The literature foundation for this research used an interdisciplinary approach due to the relatively new nature of studying informal student groups. This study ties together concepts from multiple disciplines in order to more holistically understand possible implications of these groups. A mixed methods approach allows for a more comprehensive view of group purpose, formation and function.

Specifically, this research looks at a large public research university in the Midwest United States. The study sample is drawn from undergraduate full-time students with special consideration given to ensure a representative gender sample. In order to effectively address the research questions the study used both a survey as well as focus groups. The surveys were intended to create grounded questions, which the focus groups were then built upon (Morgan 1997). This method has been used before, especially in order to answer questions regarding patterns or understood practices from the survey (Morgan 1989; Shively 1992).

Participants for this survey were chosen using non-probability sampling by asking students at random whether they would be willing to take a short survey at multiple locations on the campus including but not limited to bus stops, residence halls, study lounges and eating facilities. Students were asked first whether they wished to take part

in a short survey regarding their study habits. If the student responded yes, they were then asked whether they study in a group ever, if students said yes they were administered the survey. Students who said no that they did not wish to participate or that they never studied in a group were very few, less than thirty students refused, leaving the study with a high response rate. Students who participated in the survey also left very little to no missing information. Out of the administered surveys less than 10 questions overall were left with some type of missing value, making the surveys that were administered almost all fully complete. When it comes to the specific responses gender can be seen as the independent variable. Other nominal characteristics were measured to possibly establish differences within the dichotomous gender discussion such as resident/non-resident students, year in school, race etc. Beyond just simple demographical comparisons, students were asked questions related to the central research themes regarding formation and use of informal study groups (Appendix 1). Over 200 surveys were administered leaving an n=205 undergraduate full time students. Descriptive statistics for the survey can be found in Table 1.

The types of questions included in the survey focused around three main areas, purpose, formation and function. During the construction of the survey these stages of the group process were used to create questions that allowed for the survey to dig deeper into discovering how students navigate the landscape of informal study groups. What these three phases of the group process mean for analyzing the results is that different questions will be discussed based on which area that specific question is seen to fit into (purpose, formation, or function).

Table1: Descriptive Statistics- Survey [1]	Central Tendency Measure	Variability
Gender		
Male		46.50%
Female		53.70%
Age	20.04 (mean)	
Race		
White		72.20%
African American		18.00%
Asian/Pacific Islander		6.30%
Other		2.90%
Idenitfy as Hispanic		
Yes		2.90%
No		96.10%
Distance from Campus		
Live on Campus		36.10%
Live in Walking Distance		31.20%
5-15 Minute Drive		16.60%
16-25 Minute Drive		9.30%
More than 25 minute Drive		6.30%
Year in School		
Freshmen		36.60%
Sophomore		26.30%
Junior		21.50%
Senior		15.10%
[1] Based on n= 205 respondents		

Chi-squared tests were run in order to identify statistically significant gender differences in variables at p <.10 or lower. These results informed the research regarding male and female differences in regards to each of the three phases of informal study groups. The results were then used to create the foundation for the second step of the research process, the focus groups.

The use of focus groups is to gain further understanding of gender differences that emerged from the exploratory survey research described above; this allows the focus groups to build upon data rather than a researcher's possible perceptions (Morgan 1997). The focus groups were semi-structured in design, allowing for the students to direct the conversation. The focus group instrument is attached in Appendix 2. While collecting these data grounded theory was used in not only the coding but also the questioning

process allowing for a truly flexible research design (Charmaz 2006). The grounded theory approach is discussed more below when looking at how the transcriptions of the groups were coded.

Four focus groups (2 segmented by gender, and 2 mixed gender groups) were conducted with on average five to six participants in each and an overall N=22. The overall descriptive statistics for the focus groups can be found in Table 2 while the descriptive statistics by group can be found in Table 3. Zeller suggests that more focus groups do not necessarily produce new data (once saturation was met from the focus group questions, there remained no need to continue to hold focus grouops (1993).

Table 2: Overall Descriptive Statistics- Focus Groups [1]		
	Central Tendency Measure	Variability
Gender		
Male		45.00%
Female		55.00%
Age	19.81 (mean)	
Race		
White		72.72%
African American		18.18%
Asian/Pacific Islander		4.54%
Other		4.54%
Identify as Hispanic		
Yes		4.54%
No		95.45%
Distance from Campus		
Live on Campus		36.36%
Live in Walking Distance		40.90%
5-15 Minute Drive		13.63%
16-25 Minute Drive		4.54%
More than 25 minute Drive		4.54%
Year in School		
Freshmen		31.81%
Sophomore		18.18%
Junior		27.27%
Senior		22.72%
[1] Based on n= 22 participants		

Table 3: Focus Group Demographics by Group	
All Male Group	*All Female Group*
Gender	Gender
5 Males	0 Males
0 Females	5 Females
Race	Race
4 White	3 White
1 African American	1 African American
0 Asian Pacific Islander	0 Asian Pacific Islander
0 Other	1 Other
Distance From Campus	Distance From Campus
2 Live on Campus	2 Live on Campus
2 Live in Walking Distance	2 Walking Distance
0 5-15 Minute Drive	1 5-15 minute walk
1 16- 25 Minute Drive	0 16- 25 Minute Drive
0 More than 25 minute Drive	0 More than 25 minute Drive
Year in School	Year in School
1 Freshmen	2 Freshmen
1 Sophomore	1 Sophomore
2 Juniors	2 Juniors
1 Seniors	1 Seniors
Mixed Gender Group 1	*Mixed Gender Group 2*
Gender	Gender
3 Males	2 Males
4 Females	3 Females
Race	Race
5 White	4 White
1 African American	1 African American
1 Asian Pacific Islander	0 Asian Pacific Islander
0 Asian	1 Asian
Distance From Campus	Distance From Campus
2 Live on Campus	2 Live on Campus
3 Walking Distance	2 Walking Distance
1 5-15 minute walk	1 5-15 minute walk
0 16- 25 Minute Drive	0 16- 25 Minute Drive
1 More than 25 minute Drive	0 More than 25 minute Drive
Year in School	Year in School
3 Freshmen	1 Freshmen
1 Sophomore	1 Sophomore
1 Juniors	1 Juniors
2 Seniors	2 Seniors

Members of the focus groups were recruited from the pool of survey participants. When students returned the survey they were given information about follow-up focus groups. Those students who expressed interest were selected based on gender, year in school and race in order to garner well-rounded focus groups. The first round of focus groups involved one male and one female group. This allowed for both gender groups to talk openly regarding differences and critiques of the opposite gender when it comes to study groups. This was needed in order to mediate the possible effects of issues such as "guy code" where males may adapt what they say based on a female presence (Kimmel and Davis 2008).

For the female only group a female member of the research team led the group in order for open unhindered discussion regarding male influence in study groups. From here mixed gender focus groups were formed based on background, race, age, and major as well as other student characteristics. The same questions were asked for both the male and female only groups as well as the mixed gender groups. This was in order to allow for proper comparisons of responses. This stacked approach of first working with segmented gender groups then mixed gender groups allowed for a range of discussions and a range of perspectives regarding student group formation and student study group dynamics.

Many of the focus group questions focused around the concept of formation due to the fact that the survey found that to be the stage in the group process with the largest difference. Therefore, once the data were collected they were transcribed and coded to find any emerging themes regarding the process of forming a study group. What was of particular interest during the coding process were any differences between males and

females when they choose who they study with. Each of the focus groups were coded one time initially using a line by line coding method and from there coded once again to draw out the larger thematic points which are illustrated in the findings (Charmaz 2006).

CHAPTER III

RESULTS AND DISCUSSION

The purpose of this research was to answer central questions regarding undergraduate students' choices and decision-making when working in informal study groups. The results from both the survey and focus group portions of the research will be discussed using both the conditional college impact model (Figure 1).

Survey:

The survey results will be discussed using the three question groups discussed above (purpose, formation and function) and are listed in such a way in Table 4, which displays the results of the chi-square tests for gender differences. The first questions regarding perceived purpose and advantages/disadvantages of study groups are important in order to illustrate any possible motivational difference in how students approach informal study groups. The questions, which showed significant gender differences, asked about accountability ($p<.05$), stress ($p<.01$), whether groups help in understanding the material($p<.10$), if they use study groups to take outside exams ($p<.10$) and whether they thought informal study groups helped their grades ($p<.10$). Males disagreed more with the idea that study groups help hold them accountable while females disagreed more that groups helped to understand material better.

Table 4:Survey Responses by Gender in Percentages (Continued on next page)

	Male	Female	X^2		Male	Female	X^2
Studying in a group helps hold me accountable (P)			9.828*	*I take classes with people to study together (P)*			11.005*
Disagree	4.3	7.3		Disagree	12.8	28.4	
Slightly Disagree	11.7	4.5		Slightly Disagree	7.4	12.8	
Neutral	24.5	30		Neutral	31.9	21.1	
Slightly Agree	43.6	30.9		Slightly Agree	24.5	21.1	
Agree	16	27.3		Agree	23.4	16.5	
I understand the material better when studying in a group (P)			8.225[+]	*Study groups prepare me for working in groups after college (P)*			4.002
Disagree	2.1	11		Disagree	4.3	8.2	
Slightly Disagree	9.6	4.6		Slightly Disagree	4.3	9.1	
Neutral	26.6	24.8		Neutral	39.8	30.9	
Slightly Agree	37.2	32.1		Slightly Agree	36.6	36.4	
Agree	24.5	27.5		Agree	15.1	15.5	
Given the opportunity I take test in groups outside class (P)			8.382[+]	*I learn to work with different types of people by studying with others (P)*			1.442
Disagree	11.7	17.3		Disagree	7.4	7.3	
Slightly Disagree	19.1	7.3		Slightly Disagree	7.4	9.2	
Neutral	24.5	21.8		Neutral	34	29.4	
Slightly Agree	18.1	26.4		Slightly Agree	33	30.3	
Agree	26.6	27.3		Agree	18.1	23.9	
Working in a group helps me get better grades (P)			8.987[+]				
Disagree	4.3	12.7					
Slightly Disagree	21.3	15.5					
Neutral	33	38.2					
Slightly Agree	31.9	20					
Agree	9.6	13.6					
Studying in a groups makes class less stressful (P)			17.340**				
Disagree	2.1	11.8					
Slightly Disagree	1.1	10					
Neutral	28.7	20					
Slightly Agree	43.6	30.9					
Agree	24.5	27.3					

[+] P<.10   *P<.05   **P<.01   (P)= Purpose (FM)=Formation (FN)= Function

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Table 4(continued):Significant Survey Responses by Gender in Percentages

	Male	Female	X^2		Male	Female	X^2
I prefer studying with people of the same gender (FM)			13.937**	*Few people contribute when studying in a group (FN)*			12.857*
Disagree	28.7	18.2		Disagree	6.4	16.5	
Slightly Disagree	25.5	13.6		Slightly Disagree	28.7	15.6	
Neutral	37.2	45.5		Neutral	40.4	35.8	
Slightly Agree	7.4	16.4		Slightly Agree	21.3	21.1	
Agree	1.1	6.4		Agree	3.2	11	
I study with people I see as like me (FM)			14.840**	*Members in group divide task amongst each other (FN)*			.039*
Disagree	5.3	6.4		Disagree	2.1	13.8	
Slightly Disagree	20.2	10.1		Slightly Disagree	11.7	10.1	
Neutral	34	30.3		Neutral	26.6	26.6	
Slightly Agree	36.2	32.1		Slightly Agree	38.3	27.5	
Agree	4.3	21.1		Agree	21.3	22	
I purposeully pick the people I study with(FM)			6.223	*When I study in a group, members share notes & other materials (FN)*			0.953
Disagree	1.1	5.5		Disagree	2.1	4.6	
Slightly Disagree	4.3	0.9		Slightly Disagree	5.3	5.5	
Neutral	18.1	17.3		Neutral	10.6	11	
Slightly Agree	37.2	30.9		Slightly Agree	35.1	33.9	
Agree	39.4	45.5		Agree	46.8	45	
I study with people I am friends with (FM)				*Studying with people also involves socializing (FN)*			3.397
Disagree	4.3	2.8	0.902	Disagree	0	2.7	
Slightly Disagree	2.1	2.8		Slightly Disagree	2.1	0.9	
Neutral	10.6	11.2		Neutral	13.8	16.4	
Slightly Agree	31.9	36.4		Slightly Agree	33	40.9	
Agree	51.1	46.7		Agree	51.1	49.1	
I study with the same group of people every time (FM)			1.757				
Disagree	11.7	12.8					
Slightly Disagree	18.1	22					
Neutral	35.1	28.4					
Slightly Agree	24.5	28.4					
Agree	10.6	8.3					

$^+$ P<.10   *P<.05   **P<.01

(P)= Purpose (FM)=Formation (FN)= Function

When it came to grades though, women were more likely to disagree that groups help them get better grades ($p<.10$), potentially supporting what previous research has established, that females are disadvantaged in groups especially groups which are mixed in terms of gender (Barbieri and Light 1992; Light, Littleton, Bale, Joiner, and Messer 2000). The non-significant questions dealt with whether study groups help with life after college and if study groups help to learn with different types of people. Neither of these questions that mainly deal with a result in some type of individual outcome regarding the student's perceived gain in the ability to work with others showed significant differences by gender.

The second grouping of questions deal with formation, specifically the types of individuals that males and females choose to study with. Two questions dealing with formation emerged as significantly different among males and females. Females are more likely to agree overall that they prefer to study with the same gender than males who were more likely to disagree ($p<.01$). Females were also more likely to agree that they prefer to study with people they see as like them ($p<.01$). Both of these results suggest that women are more likely to exhibit homophilic tendencies when choosing who they study with. When it comes to non-significant findings in terms of formation the questions asked if they purposefully pick the people they study with, whether they study with their friends and if they study with the same group of people each time.

The final grouping of questions dealt with how study groups actually function once composed. One of these differences deals with group members' contributions to the group. Females were more likely to agree that only a few people contribute when working in a group ($p<.05$), while males were more likely to agree that when in a group

tasks are divided amongst members (p<.05). Questions that did not show significant gender differences asked about sharing notes and materials, along with whether studying with people involves socializing. These results listed in Table 3 do highlight gender differences amongst not only attitudes regarding function of informal study groups but also formation and purpose as well. Going forward the research sees purpose, formation and function as key areas that are essential to explore in the focus groups.

Focus Groups:

The four focus groups helped in qualifying the previously discussed survey results. By grounding the focus group questions in the survey results the research was able to work to qualify, through student answers, how they view, form and work within informal study groups. Once the transcripts of the focus groups were coded three major themes emerged. Each of these themes - trust, background, and major - is discussed below along with how these results help to better inform the survey.

Trust-

The ability to trust another student emerged as a key criterion for informal study group formation. Previous research indicated that in the workplace trust is not only a factor for dictating group output, but for how both males and females possibly choose whom to work with (Spector and Jones 2004). Such research highlights how stereotypes and homophilic tendencies help to inform the criteria that people use to gauge trust initially (Keller 2001; William 2001).

Although students were never directly asked about trust - rather they were asked about and discussed what they look for when picking people to study with - trust became an important theme and topic of discussion. Each focus group at some point discussed the criterion of being able to trust people in informal study groups. Some students spoke

directly about trust, specifically one Junior White female student who said "another thing that is important for me is that the same people that I study with I also trust. So that I know they have put in the effort to do the things we have to accomplish so we are not wasting time." Other students spoke about the ability to have faith and rely on group members, which I interpret as a form of trust.

Overall females were much more likely not only to discuss trust as a major criteria for a study group partner but also to cite specifically what they look for in order to measure such trust. One's perceived likeness or similarity to the student who is making the decision to trust another student is important and should be seen as tendency for developing initial trust (Hurley 2012). One sophomore biology student stated, "When I pick the people and its people I trust, people that I see has working and studying like me" This matches with the survey results that showed that females are more likely to agree that they prefer to study with someone they see as like them and that they also prefer studying with other females. This finding also points to trust not only being desirable criteria in a study partner but also assuring homophily through shared characteristics. In order to ensure group cohesiveness an established standard for inferring and evaluating trust must also be discussed.

The survey had pointed to there being no difference between males and females regarding whether they choose to study with their friends. What emerged from the focus groups helped to qualify this and in turn reexamine how students define this type of friendship. In the female only focus group a participant stated that she likes to pick people who go to class and work hard because she knows they will "get things done" and motivate her to do better. Another female, who is a junior philosophy major, in that same

group stated, "I'm not going to study with one of my best friends, she might be awesome or he might be great but if I don't trust their academic work there's no way I will ever study with them." This finding is less applicable to men, especially younger college males who are more likely to trust their convenient friend group, while college females overall put more initial trust in those whose academic work they see as successful, as suggested by the previous quote, rather than their convenient friendships. Even though younger males were most likely to discuss being okay with studying with their convenient friend group they still spoke about the same criteria for what they look for in a study partner/group. Specifically one freshmen male education major stated, "Its just easier for me to study with my friends, I mean I pick the ones I can trust but I don't go out of my way to find other people."

A college student's perceived ability to get his or her work done effectively is a large determinant on trust, especially for females and older males. Several students reiterated that when they study with someone it is about trusting him or her to be of high academic standing, while also recognizing that many times they do not study with their friends but rather other people within their network (people they know from class, friend of a friend etc.). Again, females talked more about picking people that they trust that were not necessarily a part of their immediate friend groups, while males were more open to and trusting of those convenient to them. What both males and females agreed upon was that the group of people whom they trust to study with was a much smaller network than their normal friend group, usually no more than five to seven students. Although how males and females choose whom they study with only slightly differs, it is important

to look at how each develops as well as defines their study group relationships/friendships.

Students point to a difference between trust within a friendship and trust within a study relationship creating what I call an academic relationship. This specific type of relationship/friendship creates cohesion through shared likeness by measuring a peer's ability to study in a group based on whether they can be trusted academically. Taken together with the survey results that showed little difference in male and female preference to study with friends. These results indicate that students consider those they study with "friends" but really a subset of their larger friendship network and not usually the same people they associate with on a regular and especially more social basis. It is because of this difference in the level of interaction and type of interaction that the research is to conclude that although students call their regular study partners "friends" they are more closely partaking in an academic relationship where they focus on task rather than a social support system more attributed to the social norm of friendship. When asked to follow up on how students develop these academic relationships and the trust associated with them one senior female majoring in economics stated in a mixed focus group "I don't study with people who don't come to class. That's my first red flag," while a female freshmen English major followed up by saying, "I don't study with people who don't seem very engaged in class."

This was reiterated by the single gender groups as well, where members of both genders spoke about the association between trust and the people who come to class, are in the library, and whom they know are getting good grades. Students did recognize that these observations regarding a peer's perceived academic rigor did not solely come from

in-class behavior. Students also discussed the role of social media and how many of their peers use social media to announce that they are studying or in the library so that as one student put it "all of their followers know." These results suggest the possibility that students are partaking in impression management regarding their trustworthiness to study and that having the rapport of a good study partner goes beyond just face to face interactions.

The recognition that how one is perceived is related to trust was never explicitly stated by the students but rather through their examples of how they have picked study partners over their college experience. What this means for students is that ensuring trustworthiness and positive impression management is important in order to ensure being included in study groups as well as to uphold the groups perceived purpose post formation. This builds off Parson's theory of influence in which he states when people need information they adapt in order to receive it, meaning that influence is a factor that affects how one views another and thereby acts on those beliefs (1963). Applied here this means that one's perceived trustworthiness is in effect a way of ensuring their own influence and inclusion amongst their peers. So when a student sets a high standard for trustworthiness they are not only setting social controls but also setting a standard for influence within the network and creating a structure prior to formation. When the group forms homophily has been assured through the group formation by acting as a gate to enter the group. The perspective of the student whose trustworthiness is being judged must also be taken into account especially the importance of being perceived as academically rigorous. If one continues to follow Parson's theory of influence, the student has the ability to change his or her behavior to ensure he or she meets formation

rules and controls. It is this level of perceptional control and impression management that leads to the next finding which I call the façade of academic rigor.

The concept of the facade of academic rigor comes from the recognition that social controls exist and are established by students and therefore a student must control the impression/façade by which others see them (in order to uphold their influence and importance). Students base their selection of study partners on those whom they see as working hard and people they define as good students. Social norms and rules are set to sanction those individuals out of many informal academic relationships and study groups. Students rationalized these sanctions by stating that those students who did not put forth at least facades of academic rigor were unable to "pull their own weight." This allows for a screening like process to take place, effectively helping to eliminate the fear/ perception, especially by females according to the survey that few people contribute when studying in a group. The connection between perception and trust point to trustworthiness as being a major criteria for whom a student chooses to study with. In the following section other central themes will be discussed along with how students measure other criteria when choosing whom they study with and how the group will work once constructed.

Pre College Characteristics & Major-

For students the background of a potential study partner or group partner plays a role in choosing whom they study with. But not only does background play a role in formation it also affects student outcomes within study groups which fits within the conditional model of college impact, shown as Figure 1 (Sax 2008). This model shows that every student brings a unique perspective/knowledge when joining a study group. In

order to align with this research the model was adapted to reflect how gender is seen as a determinant for how one experiences college.

This emphasis on the importance of one's identity and background emerged through the focus groups via the discussion on the advantages of studying with males and/or females. It was here that the importance of perspective, as well as high school experience began to be discussed. Students stated that both perspective and high school experience played a significant role in how informal study-groups were approached and helped to determine whom they picked to study with.

Several students discussed going to single gender high schools and how their college transition experience was an eye opener for them. A senior communications major said:

> I have never really studied with guys that much and I think it's a lot to do with the all girl high school that I went to. Then I came to college and it's just like… I'm not going to seek out these guys to study with. It's just more convenient to study with the girls cause that's who I'm around.

This student goes on to talk about the adjustment that it required to having males in the classroom let alone as part of informal and formal group settings. She talked about the transition being such a difficult adjustment that she avoided mixed gender interactions in study group settings for at least a year. Another girl in the same group who had also attended a single gender high school reiterated that she too had the same experience coming to college. These findings reinforce that when students experience transition into the college environment they cling to peers who they feel are most like them.

When it came to the experience of attending a single gender high school the difficulties with transitioning to college were not limited to just females. Males who had

attended all male high schools shared how their experiences influenced who they studied with. One senior male said, "For me it is very hard to study with girls. Perhaps it is a product of X High School, I don't know. When I am with other guys I am able to focus and I find that the way I learn best is with other guys."

This point became reiterated throughout the groups regarding their high school study experiences along with how those experiences informed them as they transitioned into college. Students did state that as they progressed in their college experience that the level of influence from their high school experience wore off but they did not concede that their knowledge and beliefs formed about the opposite gender at that pre-college stage ever truly disappeared. Although it is impossible from these data to determine whether students' high school experiences ultimately determined whom they study with upon entering college, their pre-college characteristics and background definitely affected their college experience.

What these accounts show is that there is a potential for different college experiences based on pre-college characteristics and behaviors. These findings of gender segregation are not unique to the college transition - from adolescence and throughout their college experience students have been shown to overwhelmingly choose to hang out with other students of their same gender (DiDonato and Strough 2013; Mehta and Strough 2010). This informs the research that a larger more social campus culture of gender segregation exists amongst student.

One point that also emerged from the focus groups regarding the advantages of studying in mixed gender groups was that the groups provided perspective. Men and women both discussed the role of perspective within study groups and how many times

each member of the study group offered a unique way of thinking. This seems to counter the importance of background. If students are truly interested in unique perspectives it would be assumed they would strive to find people with different backgrounds as well as from different majors/programs.

Students brought forward the concept of perspective within the discussion regarding mixed gender group advantages. They were interested in how one's gender affected how they interpreted the classroom material. Students differed on the level of importance assigned to another student's perspective. This division begs the question about why possible divides may exist specifically regarding the importance of gender perspective. When students discussed the concept of gender perspective they agreed that it was much more in specific classes such marketing, political science and women/ gender studies courses. Students made the point that in these classes it is important to hear arguments and ideas from both genders due to unique vantage points. On the other hand, students were much less likely to discuss or see the need for multiple gender perspectives in subject areas such as biology, chemistry, math and engineering because as one student stated, "they are very black and white subjects." One senior male biology student stated:

> I completely agree, for a subject like marketing or business or anything that kind of field it is a pretty subjective kind of thing a lot of ways. So getting a female's perspective is beneficial. For a science it is pretty objective, here is a solution and this is what happens this is what happens when you have high blood pressure, it is pretty cut and dry. So those opinions aren't as necessary cause there is no opinion in it, it's just information.

This leaves the door open for questions regarding the role that a college major may play, not only in the conditional model of college impact but also gender interaction.

It is no secret that gender gaps exist between college majors especially in the STEM and business fields where women are underrepresented, with the exception of biology majors (Ball 2012; DiPrete and Buchmann 2013). This differences means that a lack of interaction in the informal settings creates the potential for homogenous gender interactions that leave students in majors and careers that are predominately one gender at a disadvantage when it comes to working with one another. Major is also seen by the research as a determinant of success post college experience, where students whose majors which more closely identify with career occupations (business, engineering etc.) are on average more successful throughout their lives (Brown and Corcoran 1997; Roksa 2005). These majors are also predominately male, suggesting that although gender disparity in terms of overall higher education admissions favors women, major choice and the economic return of that choice still favor males (Davies and Guppy 1997; DiDonato and Strough 2013; Zhang 2008).

During the formation stage of informal study groups, a student's major plays a contributing role. As mentioned above, the concept of trust is very important to students and trust is gained through the impression students receive from one another. What students also said over and over is that they study mostly with people that they have class with, so as they progress in their college experience this means students study more within their major/program. The survey data showed that males were more likely than females to take classes with others for the purpose of being able to study with them. Students discussed how class choice and the influence of their major changed over time as if it were natural, meaning that it seemed only right to study with people who are taking the same line of classes. One white male Junior Political Science Major student

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said, "Exposure to other majors declines as you go up and I think that also limits the amount of interaction or what has been called the siloing effect by a lot of people." Although the student recognized the potential consequences of strictly studying with people inside of his major, almost all students practice this technique.

The finding that students prefer to study with those in their same major is supported by the previous concepts of impression management and façade of academic rigor due to the fact that students can trust by seeing students in class. This way of establishing trust is much easier when students see each other on a more regular basis in their major program/academic unit.

Beyond establishing and forming study groups students also were asked about the purpose of studying with others, specifically what are the advantages and disadvantages? It is from these questions that two sub-themes started to emerge, which are the ability to teach one another and learning styles. First, the ability to teach one another was a universal advantage given by all students, both male and female, no matter their major because each student offers a unique perspective. As one female, white sophomore English major stated, "I will meet with a friend who is also in class and we just talk out loud through it." While another female in a different group, a junior Communication major said, "It is very helpful to go to my friends who are in the class and discuss it or talk about whatever paper we have due, just so I get a better understanding if I am doing it correctly or not." It was this concept of understanding that became echoed by all the students, especially when a test or large paper is upcoming. One freshmen African American male said, "For bigger tests like Chemistry, I'm in engineering. I study with

groups because it helps with concepts I don't know. It helps with repetition. It really helps to drive home concepts rather than going over stuff just by myself."

Not only does the ability to teach each others offer students the opportunity to hear things discussed from multiple perspectives, due to each student's unique background, it also possibly allows for students with different learning styles to supplement each other's learning. What students began to say though is that mixed gender study groups also bring forth challenges due to many students perception that males and females inherently learn differently. One senior in the male only focus group said:

> Girls in my classes especially the way that they organize is all of this color coded and tables. It's just too much, it's almost like it's too organized and too broken down in a way if that makes sense. So like the way they organize it is almost distracting to me, there will be pink and blue and orange, and all this color and highlighting that it takes away from trying to get the information out.

This speaks to just one way students discussed the perceived differences in how males and females study and learn. What mixed gender study groups do offer students beyond perspective is the ability to develop skills, which they saw as needed for beyond college for working with both males and females. These findings are interesting because students are stereotyping learning styles and behaviors to the gender group at large and continued to imply that such differences were "natural." Although theses findings to not equivocally illustrate that these assumptions are built upon the belief that males and females are inherently biologically different when it comes to learning styles. Such a belief is not is not far stretched, in that college students may perceive gender differences as "natural". Therefore seeing biological essentialism as a rationale for how students rationalize and

discuss gender in the study group setting, due to being taught from an early age that gender identity and roles are different for males and females, is not far fetched (Adler, Kless, and Adler 1992; Maccoby and Jacklin 1974; Patterson 2012; Thorne 1993). Some differentiation in learning styles has been attributed to gender although the literature in this area lacks any conclusive evidence regarding any differences amongst male and female learning styles (Keri 2002; McCabe 2014). Background experiences such as one's family characteristics and culture have been found to instead be a predictor of student preferred learning styles (Holtbrugge and Mohr 2010; Schmeck and Nguyen 1996). These findings, along with prior research, therefore lead to the concepts of perspective and background being more significant rationales for discussing differences in learning styles. Gender does play a significant role in how one experiences life from birth forward therefore offering both males and females unique vantage points when discussion happens in an informal study group. As the conditional college impact model illustrates, even how one experiences college is different based on gender, a process that is true throughout life. What can be taken from these findings in regards to one's background and college major is that due to pre-college characteristics and the gender segregated college environment, gender is affecting how students experience and navigate their time in college.

Discussion:

Taken together the results of both the survey and the focus groups highlight the beliefs that male and female college students have regarding group studying. The results also support previous work that showed that college students, when given the option, choose to hang out with others of the same gender (DiDonato and Strough 2013). What

these results also point to is that cohesion and group struture is being formed through established social norms and goals along with the frequency of male and female interaction prior to study group formation. This discussion regarding student interaction points to the fact that not only is background a potential criteria for selection as a study partner but a person's own background informs him or her of whom it is best to study with. It is this background and socialization process which also informs one of the largest findings regarding the need for trust amongst study group members and that such trust is gained prior to formation, meaning formation stage is critical for the group. It is here that students act as gatekeepers and monitors who have specified criteria due to preconceived notions or beliefs, based off their background, regarding whom or if they study with the opposite gender or with anyone at all.

Females were more likely than males to want to study with those they see as like them, as well as being more likely to study with members of the same gender. The reason for this is because overall females were more likely to emphasize the need for trust amongst study group members. Although males did discuss the need for trust they were more likely to trust their existing friendship network while females said that they look beyond their already established friendship network more often than not when wanting to study in a group. Therefore, males and females differ in not only their level of emphasis on certain criteria such as trust and background but also in their degree to look beyond those peers most convenient to them but rather to those who are the best fit as study partners.

The purpose in having such strict formation criteria is due to the fact that this is how students ensure cohesion and if study group cohesion is not established through

selection of members, students do not see the ability to change their group partners' study habits, knowledge etc. This is why students emphasize their selection of group study partners because it ensures that members are not only trustworthy but also somewhat knowledgeable on whatever the study group's intended outcome is. Such a rule also ensures that all members coming into the study groups need not be taught all of the information but rather their knowledge just needs to be supplemented by further support.

This study only further supports the college conditional model by illustrating the importance of the student's pre college characteristics on not only their college experience but also potentially their college outcomes. It therefore is plausible to conclude that males and females who experience the same college atmosphere and even the same college experiences through possibly a shared major will approach study groups differently depending on their pre college characteristics Another theme that emerged from the study also connects the findings to this model and that is the importance of college major choice. A student's major not only sets them on a career track but also affects, due to large gender gaps in business and STEM majors, their in-class level of interaction with the opposite gender. This is important because both males and females agreed that one of the main ways in which they choose a study partner or group is through in class interaction, meaning that large gender gaps within majors can potentially affect the likelihood that males and females will study together in a group. It is also important to note that although students attempted to pick group partners who would help them focus and study, that both males and females in the survey and focus groups stated that socializing takes place at some point while studying with others. The outcome then,

due to less mixed gender interaction in study groups, is that males and females may be limiting the venues in which members of both genders socialize together.

After groups are formed males and females differ much less in their utilization of study groups as well as their group dynamics. Both males and females see informal study groups as a way to hold one another accountable while also being an additional way to learn material through explaining it to their peers from an alternate perspective. Although males and females differed in their perspectives on group work, specifically whether group members equally contribute and whether study groups help improve grades, they both spoke of study groups as operating in the same fashion whether single or mixed gender in composition. What this means is that post formation males and females differ very little in how they orientate and work in groups. Instead all differences are weeded out in the formation state contributing to cohesive groups once formed and as they begin to operate.

Overall, the findings emphasize the need to understand further the purpose and formation of informal study groups in order to fully understand any potential outcome differences. It is at these two stages that established criteria helps to ensure strong and even homophilic groups by creating shared norms. The establishment of these norms not only creates an understanding of shared responsibilities within the group but always lay out the personal characteristics, such as trust, which attribute to the creation of friend-like academic relationships. These norms for group partners also act as rules for entry into a group, in order to minimize having to sanction someone out of the group post-formation. Sanctions are important because such a structure of shared responsibility requires repercussions for not meeting established group norms. Students talked about working

together as a unit, a team with no central figure leading the group rather just a shared responsibility for the group outcomes. Although group outcomes were not measured students did discuss what they perceived to be the purpose of the groups, which a majority of the time involves better understanding the material due to the desire to do better on the assignment, test, paper, etc. (potential outcomes).

Limitations:

There are limitations to this study due to the sampling methods for both the survey and the focus group. This leaves these findings non-representational of all colleges/universities but still allows for the establishment for a central framework for future research to be conducted on a larger scale. This research also explores the possible effects gender can have on a student's college experience, leaving other intersecting demographical and personal traits unaccounted for. This does leave room for future research though, especially in using the conditional college impact model for discussions such as race, socio-economic status etc. One other limitation is that gender in this research was discussed from a dichotomous standpoint and fails to take into account other possible gender categorizations. Once again this leaves room for future research regarding a wider definition and examination of gender in higher education as it relates to a student's college experience.

Future Research:

Future research needs to look at not only how gender affects both the college experience, but also at how pre-college characteristics can inform higher education about students and campus culture. The literature must look at larger national representative data sets in order to create a stronger understanding of student relationships, especially

the formation of trust amongst college students during their time on campus. Together understanding the intersection of gender and the college experience, as well as relationships and trust amongst college students can better help to inform the campus culture literature, while allowing for better higher education policy decision-making. Cumulatively by understanding how a student's gender affects their college experience higher educators can make better decisions when making campus-based decision. Such an understanding regarding gender differences can also help inform our understanding in regards to the transition out of college and how the student's experiences prepared them for the workforce.

Policy Implications:

Within higher education these findings should be seen as further call to action in regards to better understanding campus culture, especially how informal settings influence said culture. Institutions should play a role in helping their students develop group work skills by instructing students on how to work in groups, which are then transferable after graduation and into their chosen occupation. Although universities cannot change students' pre-college characteristics, they do as power brokers create policy and a culture on their respective campuses. It is at this institutional level that universities and colleges should not only look to create policy that better acknowledges gender divides but also works to break them down. The breaking down of any gender divides can be done whether by helping to close the gap in major choice or creating opportunities for multidisciplinary learning where both males and females can work together, not only for positive academic outcomes but to also build academic and intellectual trust amongst both gender groups.

Conclusion:

This research informs the literature by showing how trust, background and major choice play a role not only in how students navigate informal study groups but additionally that their gender plays a significant role. Students ensure homophily amongst their group mates by creating criteria that they not only see as setting a standard for participation but also is based on traits they see in themselves. Trust, established through a facade of academic rigor, is highly important to establish to ensure inclusion in informal study groups. By establishing this trust early on in the formation stage and prior, students feel that that can ensure that the group will operate in a well-oiled fashion once formed.

These findings also help to close the gap in understanding how a student's gender can affect their college experience while also, through the use of the condition college impact model, showing the importance of the student's pre college characteristics. By using this model the research is also able to begin to discover how students base their decisions for who they associate with, specifically when it comes to completing academic task. Through understanding this decision process along with student criteria for interacting in informal study groups the literature is aided by establishing new hypothesizes regarding the gender gaps in higher education, especially through questions that ask about how students choose whom they work with.

The concept of homophily is seen as significant because it is how students pick and choose who they study with. Females more than males are likely to say that they prefer studying with members of their same gender and when females described the process of picking a group partner the criteria was much longer. Males on the other hand

are more likely to pick from those who are most convenient to them especially early on in their college experience. Overall though, due to a student's chosen major along with their pre-college background students are drawn to others who have common interest, are involved in the same types of out of classroom activities and who have the same academic drive. This indicates that informal study groups have the tendency of being homophilic in nature.

When it comes to identifying the advantages of working in mixed gender groups, students from STEM majors were much more likely to not see any benefit because for those students the material is much more black and white. While non-STEM majors especially those in the social sciences felt that mixed gender groups, if formed correctly serve the function of being able to share unique gender perspectives on an issue. Such a finding, on top of the already established gender divide in major choice points to a rationale for why students view the input of the opposite gender differently depending on their chosen major. This finding can be seen as a further divide if a male or female student had a pre-college experience that included attending a single gender high school because for these students especially, both males and females, they saw their ability to complete high school as a rationale enough for not needing multiple gender perspective.

These findings illustrate the fact that the college environment/experience along with pre college socialization affects the decision making process for informal study groups. In order to better understand campus culture and gender differences in higher education, we must look at how one's gender identity not only informs his or her college experience but also who the student is when they arrive on campus, in order ever effectively measure student outcomes.

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APPENDIX 1: SURVEY SS01

The following survey asks general questions regarding habits as a student. Please fill out both Section 1 and 2 to the best of your abilities. The survey takes no more than 5 minutes to complete. Your identity is confidential and at no time will your name be used.

If you would like to participate in follow up focus groups. Please tear off the contact information on the bottom of the last page and send an email to the listed address.

Section 1

Please mark each answer with one response by bubbling in the circle.

1. **Gender**

◎ Male

◎ Female

◎ Choose not respond

2. **Age**

____

3. **Race which I most closely identify with**

◎ White/Caucasian

◎ African American

◎ Asian/Pacific Islander

◎ American Indian

◎ Other

4. **Do you identify as either Latino or Hispanic?**

◎ Yes

◎ No

5.   **Distance I live from campus**

O   I live on campus

O   I live in walking distance

O   5- 15 minute drive

O   16- 25 minute drive

O   More than a 25 minute drive

6.   **Year in School**

O   Freshmen

O   Sophomore

O   Junior

O   Senior

O   Graduate or Professional Student

7.   **On average during the semester I study in a group**

O   Once per week

O   Twice a week

O   Three times a week

O   Four or more time

8. **Major- Please Identify Your Chosen Major**

Section 2
For each question in this section please bubble in the answer which you most identify with.

1. Working in groups helps me get better grades

             1   2   3   4   5
Disagree O   O   O   O   O Agree

Continued on next page

2. I purposefully pick the people I study with

         1   2   3   4   5

Disagree O   O   O   O   O Agree

3. I take tests outside of class in groups if given the opportunity

         1   2   3   4   5

Disagree O   O   O   O   O Agree

4. I study with people I am friends with

         1   2   3   4   5

Disagree O   O   O   O   O Agree

5. When I study in a group, members in the group share notes and other materials

         1   2   3   4   5

Disagree O   O   O   O   O Agree

6. I take classes with friends so we can study together

         1   2   3   4   5

Disagree O   O   O   O   O Agree

7. I prefer studying with members of the same gender as me

         1   2   3   4   5

Disagree O   O   O   O   O Agree

8. I study with the same group of people every time

         1   2   3   4   5

Disagree O   O   O   O   O Agree

9. When studying in groups, only a few people contribute

          1   2   3   4   5

Disagree O   O   O   O   O Agree

10. Study groups prepare me for working in groups after college

          1   2   3   4   5

Disagree O   O   O   O   O Agree

11. I study with people I see as like me

          1   2   3   4   5

Disagree O   O   O   O   O Agree

12. Studying in a group holds me accountable

          1   2   3   4   5

Disagree O   O   O   O   O Agree

13. I learn to work with different types of people by studying with other people

          1   2   3   4   5

Disagree O   O   O   O   O Agree

14. Studying with others helps me better understand the material

          1   2   3   4   5

Disagree O   O   O   O   O Agree

15. Studying with people also involves socializing

          1   2   3   4   5

Disagree O   O   O   O   O Agree

16. Studying with others makes classes less stressful

        1   2   3   4   5

Disagree O   O   O   O   O Agree

17. When doing group work, members divide task amongst each other.

        1   2   3   4   5

Disagree O   O   O   O   O Agree

Thank you for completing this survey.

Introduction:
Hey Everyone. I want to start off by thanking you all for coming today. The goal of this is the share stories and experiences in your daily life that pertain to studying, specifically with others. Feel free to share stories of some of your experiences.

Before we get started I want to go over the consent form, which I need each of you to sign. Please feel free to ask any questions as we go over the form.

Now that we have gone over the form we can get started. I am going to ask a series of questions throughout this time and lets treat this just as an open forum where you can just share. The only rule is to be respectful of each other and wait until someone is done. Other then that this should be a fun discussion. Again I want to remind you that whatever you say will be kept in strict confidence but if you choose you do not have to answer any particular questions.

Any Questions?

Okay, Lets get started

Questions:
1. Why do you study with people?
2. What are some examples of any advantages with studying in a group?
   A. How does studying with others help you academically?
3. What are some examples disadvantages with working in a group?
   A. How doesn't studying with others help you academically
4. Tell me about how you all pick the people you study with?
   A. On a normal day tell me about the type of people you study with.
   B. Do you always study with the same people?
5. To what extent are males and females similar when studying in groups, feel free to provide an example?
6. To what extent are males and females different when studying in groups, feel free to provide an example?

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Education
January 2013- *Expected May 2014*
> **M.A. in Sociology**
> University of Louisville, Louisville KY
> Expected Graduation Date- Summer 2014

August 2009 – December 2012
> **B.S. in Political Science and Public Policy**
> University of Louisville, Louisville KY

Teaching Experience
Fall 2013- Present
Graduate Teaching Assistant for Race in the U.S (Sociology 210)
Work along side a faculty member to instruct and administer a class which looks at the historical construction of race along with the current state of race in the United States. Main obligations of the position include facilitating two, one hour discussion sessions, grading and office hours.

Research
Current Project
Master Thesis "Informal Study Groups: Gender & Group Homophily"
Currently researching informal group formation and whether gender plays a role in not only group formation but also how students experience higher education.

Employment
January 2013- August 2013
AmeriCorps VISTA- Louisville Chamber of Commerce
Worked on city wide educational initiatives and did research to help guide city programs in order to increase the percentage of citizens with associate and bachelor degrees.

Professional Development

August 2013- Present

Graduate Teaching Academy

Regular workshops designed around developing a pedagogical teaching style and preparing future academics to teach.

Service

August 2013- Present

University of Louisville Student 21st Century Committee

Sit on a university wide committee of students who have been tasked with identifying the goals and direction of the university going forward.

References

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