

2012

# An Overview of Collaborative Work: The Student Experience

Shernett M. Chung  
*Gardner-Webb University*

Follow this and additional works at: [https://digitalcommons.gardner-webb.edu/nursing\\_etd](https://digitalcommons.gardner-webb.edu/nursing_etd)



Part of the [Nursing Commons](#)

---

## Recommended Citation

Chung, Shernett M., "An Overview of Collaborative Work: The Student Experience" (2012). *Nursing Theses and Capstone Projects*. 108.  
[https://digitalcommons.gardner-webb.edu/nursing\\_etd/108](https://digitalcommons.gardner-webb.edu/nursing_etd/108)

This Thesis is brought to you for free and open access by the Hunt School of Nursing at Digital Commons @ Gardner-Webb University. It has been accepted for inclusion in Nursing Theses and Capstone Projects by an authorized administrator of Digital Commons @ Gardner-Webb University. For more information, please see [Copyright and Publishing Info](#).

An Overview of Collaborative Work: The Student Experience

by

Shernett M. Chung

A thesis submitted to the faculty of  
Gardner-Webb University School of Nursing  
in partial fulfillment of the requirements for the  
Master of Science in Nursing Degree

Boiling Springs

2012

Submitted by:

---

Shernett M. Chung

---

Date

Approved by:

---

Dr. Vickie Walker

---

Date

## Abstract

This study used a descriptive, quantitative design with survey methods to examine the experiences and opinions of 69 graduate and undergraduate nursing students who anonymously responded to questions about group work. The two-fold purpose of the study was to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting, and determine if students preferred to use the two instruments suggested in the study as regular components of future group assignments. A review of the literature suggested that the presence of slackers, social justice, and the Matthew Effect were known contributors of negative experiences within groups. The online survey sought to determine how students dealt with slackers in their groups, and the role that they would like their instructors to play in the group work process. The study correctly assumed that: more than half of the student participants would admit to having had poor experiences with group work; they would agree to more teacher input; and would agree to use the two proposed instruments in future group work. The instruments, *Accountability Log* and *Communication Log* were preferred by almost three-fourths of the respondents, who also strongly stated that more instructor involvement that spans the duration of the group project was needed. The student respondents believed that instructors needed to instruct students on group behavior and expectations prior to assigning group work, and that the instructors needed to ensure that negative behaviors were addressed.

*Keywords:* Group work, collaborative learning, cooperative learning, group based assessment, slacker, free-rider, social justice, Matthew effect

## Acknowledgements

I must express my heartfelt gratitude to my family, the BadreSinghs and the Chungs, who have given me a tremendous amount of encouragement, understanding, and love, and who have been very patient with me during this MSN thesis process. Lyra, Nadjali, Shen Hu, and Peter, thanks for being a constant source of happiness and support. To my best friend, Arlene Ramdeen, thanks for starting this journey with me; I wish that you could see the final product of one of our childhood dreams.

© Shernett M. Chung

All Rights Reserved

## TABLE OF CONTENTS

### CHAPTER I

Introduction.....	1
Problem Statement .....	1
Purpose.....	2
Background/Social Significance and Need.....	2
Conceptual Framework.....	5
Significance to Nursing.....	6
Theoretical Background of Group Work .....	8
Hypothesis.....	9
Summary .....	9

### CHAPTER II

Literature Review.....	11
Review of Literature .....	11
Students' Attitudes toward Group Work .....	12
Students' Perceptions of Instructors' Responsibilities .....	13
Students' Perceptions of Group Work .....	13
Group Relationships.....	15
Predicting Student Satisfaction .....	16
Group Dynamics .....	16
Group Trust.....	17
Collaborative Learning Outcomes .....	18

Fairness in Grade Assignment .....	20
Student Roles .....	21
Summary .....	21
CHAPTER III	
Methodology .....	23
Setting .....	23
Sample.....	23
Design .....	23
Protection of Human Subjects .....	24
Instruments.....	24
Data Collection and Analysis.....	25
Summary .....	26
CHAPTER IV	
Results.....	27
Sample Characteristics.....	27
Major Findings.....	27
Assumptions of Study.....	30
Slackers .....	33
Difficulty Scheduling Time to Collaborate.....	33
Summary .....	34
CHAPTER V	
Discussion .....	35
Implication of Finding .....	35

Application to Theoretical Framework.....	37
Limitations .....	38
Implications for Nursing.....	39
Recommendations.....	40
Conclusion .....	42
REFERENCES .....	43
APPENDICES	
A. Accountability Log for Group Members .....	49
B. Communication Log for Group Members .....	51



## List of Tables

Table 1: Description of Demographic Characteristics.....	28
Table 2: Major Findings of Student Survey Responses.....	29

## List of Figures

Figure 1: Pie Chart of Students' Experience with Group Work .....	30
Figure 2: Pie Chart of Students' Need for Instructor Involvement in Group Process .....	31
Figure 3: Pie Chart of Students' Desire for Instructor Direction on Group Behavior and Expectations .....	31
Figure 4: Pie Chart of Students' Preference to use Accountability and Communication Logs .....	32
Figure 5: Histogram of Help-Seeking Responses .....	41

## **CHAPTER I**

### **Introduction**

Academic institutions, including those at the tertiary level employ the use of group-based assessments (GBA), also referred to as group-based assignments, collaborative learning, and more commonly, group work, to determine students' learning outcomes for summative and formative evaluations. Since there are numerous factors that affect the final product of group work, it is reasonable to infer that there are also numerous causes of negative attitudes by students toward the assignment of group work. Discontent with group work has been documented (Koh, Tan, Wang, Ee, & Liu, 2007; Gallagher, 2009; Meseke, Nafziger, & Meseke, 2010).

Discontent with group work should be of great concern to educators because they need to know if the intended learning objectives are being met with integrity, and also if the prescribed collaborative method of evaluation bears substantial value. From an educational standpoint, an exploration of students' experiences with group work is worth investigating to get a better understanding of the students' concerns. A concerted effort to address the problems could effect positive practice changes in order to maximize learning and minimize student frustration.

### **Problem Statement**

Disliking and complaining about group work assignments appear to be universal among students: the literature has not shown that students have been given the opportunity to relate their general experiences and specify the areas of their discontent with group work. Likewise, it is unknown if the majority of students favor group work participation or how they perceive their instructors' roles.

### **Purpose**

The two-fold purpose of this study is to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting; and to determine if students prefer to use the two instruments suggested in this study as regular components of future group assignments. The two instruments are (a) Accountability Log, and (b) Communication Log (see Appendices A and B). The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of such assignments. This study is an overview of collaborative work that focuses on the students' experience.

### **Background/Social Significance and Need**

Research has shown that GBAs do work and that they can be an integral component of a curriculum (Gallagher, 2009; Shimazoe & Aldrich, 2010; Walton & Baker, 2009). Educators have embraced this teaching-learning method for decades from pre-school to graduate-level studies (Nihalani, Wilson, Thomas, & Robinson, 2010). One of the most solid reasons for introducing group work, also based on its successes, is social constructivism (Powell & Kalina, 2009). It is seldom however, that the students' perspectives, prior experiences, and reluctance to participate in group work are taken into account when planning such activities, hence the need for this study. If the negative aspects of group work are recognized from a student's perspective, then educators are in a better position to address those issues to curtail future non-productive experiences and outcomes, thereby making the learning process a totally beneficial one for the student.

The experiences within a particular group can prove to be varied for the members. One such example is the overachiever who dominates and bombards the group with

pertinent, and superb work, without giving the lesser achieving students the time or opportunity to make a substantial contribution. The overachiever benefits from adding to his/her knowledge base while the others may experience frustration accompanied by little or no learning. Nihalani et al. (2010) describes this phenomenon as the Matthew effect. Instructors can prevent the Matthew effect by deliberately assigning members to groups, based on their diversity in age, academic ability, and experience, among other characteristics.

A lesser recognized problem that can sometimes be the proverbial elephant in the room is social injustice (Chen, Budianto, & Wong, 2010; Fernando & Herlihy, 2010; Hays, Arredondo, Gladding, & Toporek, 2010; Newton, 2010; Ratts, Anthony, & Santos, 2010; Singh & Salazar, 2010). From the aforementioned articles, it can be inferred that social injustice is using a person's social, cultural, and legal status to persecute and intimidate them while undermining their confidence. Chen et al. (2010) recognizes that undocumented immigrant students who do not want to draw attention to themselves feel powerless in groups because of their legal status and cultural differences, and may be treated more unfairly by group members as a result. Fernando and Herlihy (2010) cite the following as social justice examples "access to resources, equal opportunities for both genders, issues of the disabled" (p. 283). Some of the more easily recognizable examples of social injustices stated by Fernando and Herlihy (2010) are "racism, sexism, heterosexism, and classism" (p. 283). Newton (2010) defines classism as "Preferential bias toward one social class over another" (p. 213). According to Newton (2010) "Class-based oppression and privilege may act as a silencing force within the group and serve as a barrier to effective functioning" (p. 212).

The visual cues to group members' differences may never be obvious in an online group setting in which webcams are not used. Such a virtual classroom where members are not privy to each other's appearances can be seen as an advantage to overcoming social injustices, unless group members choose to divulge personal information that would cue others to the personally identifying characteristics that could cause alienation and division within the group. In an online class, bypassing members' physical characteristics that have the potential to cause comparison, judgment, and division, the group members have already overcome a significant hurdle in getting acquainted. This sets up a situation wherein other member shortcomings are easily identifiable. Those shortcomings include, but are not limited to displays of the Matthew effect, submitting low quality and/or late work, and poor communication skills.

There is no doubt that the success of online classes rely heavily on the internet with myriad programs, softwares, and applications. According to Trentin (2009) a wiki is a social software that allows asynchronous collaborative work in which each user's input is digitally tagged. This is in high contrast with Ashraf's (2004) face to face instructional models which concluded that there is no way for an instructor to monitor students' contributions in group work. Wikis allow the instructor to individually assess each member's contribution, including the intricacies associated with a grading rubric. The successful use of wikis has found its place in group work, although the negative aspects encountered by group members are also common in this forum (McConnell, 2005; Thompson & Ku, 2006; Witney & Smallbone, 2011).

Negative student experiences as a direct result of group work include dissatisfaction with other members who are seen as freeloaders or free-riders, contribute

little or nothing to the group effort, but benefit greatly from the work of other group members (Brooks & Ammons, 2003; Gallagher, 2009; Meseke et al., 2010). Meseke et al. (2010) refer to this action as social loafing (p. 26). A similar reference was made by Brooks and Ammons (2003, p. 268).

### **Conceptual Framework**

Imogene King's Conceptual System and Middle Range Theory of Goal Attainment is used to guide this study. With reference to the theoretical model, King (1999) asserts "This model, when used by nurses in any environment where nursing is practiced, leads to goal attainment. Goal attainment represents outcomes. Outcomes indicate a measure of quality care" (p. 293). King's theory is most applicable to the dynamics of nursing education because it is adaptable to the evolution of nursing throughout the modernization and specialization of the various areas contained within the nursing profession.

The personal, interpersonal, and social systems are the three interacting components of King's Theory of Goal Attainment. Each system is more complex than the former and has its own group of concepts. The personal system is defined by the relationship of individuals to their environment and the interpersonal system is the interaction of the individuals within their environment. The more complex social system contains both the personal and interpersonal systems, and involves how the two interact.

In understanding the congruence between a typical collaborative group situation and each system in King's theoretical model, the student member represents the individual system, the group represents the interpersonal system, and the class/classroom setting is the social system. To an extent, the teacher controls the social system (the

class) by setting and enforcing ground rules, setting and discussing goals and expectations, and acting as a resource for the students. The interaction of the students within the group setting represents the interpersonal system, where it is expected that students will observe social justice and demonstrate positive work ethics in order to maintain a good working relationship and achieve their goals. How each student behaves, based on their experiences, awareness of their environment, and attention to social etiquette in the presence of their peers and class setting represents the personal system. Although it is not the only factor, the teacher's presence as an authoritative figure, with the power to fairly enforce the rules, appears to be very important to ensure the best learning outcomes.

### **Significance to Nursing**

Teaching students in an academic setting is a basic expectation in the teaching-learning process, despite the discipline under which instruction is done. It is obvious that certain areas of instruction will differ in their content, but the fundamental aspects of teaching students while addressing their abilities, level of learning, learning styles, content to be taught, efficacy of content delivery, and assessment, should remain the same across curricula and discipline. Nursing students are no different in their learning experiences than any other group of students. As a matter of fact, Gallagher (2009) also shows that dissatisfaction in group work among nursing students is a real occurrence.

The trends in the current nursing workforce and nursing student population reflect diversity in age, cultural background, gender, socioeconomic status, and life experience (Wellman, 2009). It is therefore expected that a mixed, non-traditional student population in a nursing school would require a variety of teaching and assessment



methods. If members of a nursing student group are selected by the instructor, then the instructor could take the students' diversity into consideration for the assignment to ensure a richer learning environment for each member (Nihalani et al., 2010).

Gallagher (2009) concurs that successful professional nursing depends on collaboration. A team of nursing students working together on various tasks bears a striking resemblance to professional nurses working together or as members of interdisciplinary teams, whether as nurse educators on a curriculum planning committee; staff nurses in a hospital setting; or nurse researchers collaborating on a study. Determining students' perception of group work is highly applicable to nursing as the discovery can assist nurse educators in planning for and addressing students' concerns so that effective and positive outcomes can be achieved. Nursing students who work collaboratively on projects that have been designed by skilled nurse educators should experience real life work situations whether it is in a didactic or clinical setting.

A significant means by which nursing students are able to hone their group clinical skills is in the widely popular high fidelity simulation exercise, in which an instructor is able to preprogram a mannequin to exhibit signs and symptoms similar to those that a human client would experience. Within each group each student assumes the role of a nurse or of an interdisciplinary healthcare team member in order to solve the preprogrammed health crisis. The execution of the exercise relies heavily on group dynamics, while a sense of security can be maintained by safeguards that have been written into the project to maintain member accountability and reduce instances of free-riding (see Appendices A and B).

Nursing is one of the professions in which being a student, especially in the later stages of the academic program, is very similar to being a professional insofar as the social and legal responsibilities to one's clients. A nursing student's collaborative work is a good preparatory experience for the workforce and should be valued as such. Understanding nursing students' perspectives of group work is very important and significant to nursing because nurse educators will be able to design their curricula with the foresight of eliminating or greatly reducing the potential for negative student outcomes, and introduce a system of accountability by all group members.

### **Theoretical Background of Group Work**

Social constructivism is the learning theory on which the majority of academic group work is based (Powell & Kalina, 2009; Nihalani et al., 2010). Powell and Kalina (2009) present a clear understanding of social constructivism based on Lev Vygotsky's research into learning and social constructivism. The general idea of social constructivism is that the learners already have pre-existing knowledge and experiences on which they build new learning experiences to accomplish their goals. The expectation is that for adult learners who have been socialized, participating in a group with similar learners will influence personal change. During group interaction each person will develop social and academic skills by collaborating on issues, sharing ideas, and learning from each other. It is also expected that students will hone pre-existing qualities and establish new ones that are beneficial to the individual and the group. By setting the stage for group cohesiveness, members are then able to complement each other's attributes by working together as a unit and share ideas to accomplish the objectives. At

the end of the learning experience each learner would have added to their pre-existing knowledge base (Powell & Kalina, 2009).

### **Hypothesis**

This study assumes that more than half of the student participants will admit to have had poor experiences with group work, including dealing with social injustices and free riders. It is therefore hypothesized that the participants will agree to more teacher input and teacher validation of students' concerns, and that more than half of the participants will state their preference to use the two instruments that are provided: (a) Accountability Log, and (b) Communication Log.

### **Summary**

The general premise of collaborative learning is to learn from each other and to promote sharing of ideas and teamwork in a way that mirrors real life work situations (Nihalani et al., 2010). Ashraf (2004) disagrees that GBAs prepare students for the workforce. There are differences, however, between an academic and a workplace environment. The value of students' grades, course outcomes, and social status in a somewhat temporary student group setting, is not a good comparison to a workplace setting, which can be seen as more of a *permanent* situation that involves an individual's ability to earn an income, maintain a positive, professional status among peers, and the foundation for advancing career growth; in short, their identity. From an elementary view, it can be said that students are in a transitioning period in their lives, where they have the *freedom* to make irrational and sometimes flippant decisions in order to "get the work done and graduate at all cost". This view could explain some of the negative outcomes of group work among tertiary level learners. In addition to free riders, social

injustices and the Matthew effect are only a few of the common problems that create a negative learning environment. A group that is in jeopardy of failure does not have to be a total loss if educators apply King's (1999) theory as the conceptual framework that guides the learning outcomes. Also, applying Vygotsky's theory of social constructivism gives a much more concrete basis for group work, and is highly applicable in the learning process (Powell & Kalina, 2009).

## CHAPTER II

### Literature Review

The purpose of this study is to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting; and to determine if students prefer to use the two instruments suggested in this study as regular components of future group assignments. The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of such assignments. This study is an overview of collaborative work that focuses on the students' experience.

### Review of Literature

A literature review was completed using the Education Resources Information Center (ERIC) database and Cumulative Index to Nursing and Allied Health Literature (CINAHL), using the search terms, *collaborative work*, *group work*, *group-based assessment*, *student issues with group work*, and *student perspectives of group work*. The search was done to investigate collaborative learning in terms of its effectiveness, and students' social concerns. The following pertinent studies were selected after the irrelevant search results were disregarded. It is important to note that very few studies provided students' perspectives of group work. Equally rare were examples or suggestions of the ground rules that groups used to maintain accountability, conduct, and communication among the members. The literature review will provide insight into the vastness of collaborative learning, the dynamics associated therein, and students' concerns with said form of evaluation. Some studies acknowledged negative perceptions, experiences, or dissatisfaction with group members who did not contribute sufficiently.

In some of those instances there were no details of how the problems were addressed by the instructors.

### **Students' Attitudes toward Group Work**

An anonymous online survey of 1,249 undergraduate university students by Gottschall and García-Bayonas (2008) sought to determine the students' attitudes toward group work. Of the three majors represented by the students, the Education majors had the most positive attitudes toward group work, although all three majors reported that free riding presented challenges to accomplishing their objectives. The responses to negative and positive aspects of group work were similar to all three majors. Some of the student responses indicated that teachers did not give enough direction, while some thought that group work was given to lessen teachers' workload. Two of the most notable problems with group work were free riders and scheduling meeting times with group members. Other problems were insufficient time to meet outside of class; different priorities of group members; different levels of motivation; and more than a third of the students stated their preference to work alone.

The focus group study by Myers et al. (2009) consisting of 47 college students, sought to understand the subjects' response to slackers in a collaborative learning setting, and to elicit responses on how the subjects would deal with the slackers in other group-based assignments. The result of the five-hour focus groups showed that slackers hindered group progress with poor or no work ethics, lack of contribution to the group effort, and disrespect, resulting in low group morale. The group dealt with slackers by ignoring them, doing or re-doing the missing or poor quality work, and even attempting to include the offending students in group communication.

### **Students' Perceptions of Instructors' Responsibilities**

In order to understand how race, age, and the presence of slackers in a group setting affect student's beliefs of group work, Payne and Monk-Turner (2006) conducted a quantitative analysis of 143 college students, using survey methods. The survey was administered after the students had already completed a group project that lasted one semester. The results showed that of race, age, and the presence of slackers in a group, the latter was the most mentioned factor that affected students' beliefs of and attitudes toward group work. Minority students favored group work the least, and it was surmised that social justice played a role in this research. The findings of race and the case against slackers caused Payne and Monk-Turner (2006) to make four recommendations for instructors to become more involved in students' group projects. They recommended that (1) students grade each other, (2) students be given the opportunity to leave a group when slackers pose a problem, (3) instructors join a group to have a working knowledge of group dynamics, and (4) instructors should ignore the problems so that students learn how to resolve them independently.

### **Students' Perceptions of Group Work**

Koh et al. (2007) conducted an ethnographic study of 17 secondary school students divided into four groups. Prior to beginning their group projects, two of the groups were given the freedom to choose the title of their project while the remaining two groups had to choose a project title from a list. All of the study participants who were of low academic ability in the Singaporean school system were interviewed to determine their perception of group work, based on their personal experiences. During the interviews the students' opinions of: the positive and negative attributes of group work; problems that

they have experienced; what they learned about the process; how they rated the importance of group work; and their suggestions for improvements, were determined. The results of the study indicated that the majority of the students viewed group work negatively and did not know how to research the subject, but about half did not know how to plan and begin the project. The students who did not believe that group work was important, missed meetings; but they also reported that group work was important to their social skills. All groups reported negative group dynamics and member discord, with some members refusing to work. The group leaders' main solution to this problem was to do the work of the non-contributors and/or to force them to do the work. All groups reported that their leadership, responsibility, teamwork and cooperation had improved. None of the groups reported that they were taught the skills necessary to participate in group work. Koh et al. (2007) concluded that for low academic ability students, the benefits of group work are overshadowed by their lack of organization.

Myers et al. (2009) conducted a quantitative study of 192 undergraduate students to investigate how they associated the positive and negative aspects of group work with their ability to handle a group situation. The subjects' four abilities that were being investigated were (a) tolerance for ambiguity, (b) tolerance for disagreement, (c) conversational sensitivity, and (d) cognitive flexibility (Myers et al., 2009, p. 822). In addition to asking the subjects a specific research question, five instruments, each employing the use of a five-point Likert scale were used to collect data for statistical analysis. A conclusion was that students' personality traits determined their interaction with group members and how they perceived group work. It was found that students who perceived group work positively made a conscious effort to promote positive behavior



and produce good work. The other conclusion was that students formed opinions of group work based on their opinions of the other group members in their particular roles. Students' positive attributes of group work appeared to produce positive group dynamics and outcomes, while the opposite is true for their negative attributes. Myers et al. (2009) had suggestions for instructors to establish positive group experience and outcomes, (a) assign students to groups based on their self-reported personality traits, (b) provide clear instructions for assignments and student expectations, and (c) facilitate students' conflict resolution by conducting open classroom discussions among students and instructor about group issues.

### **Group Relationships**

Survey methods, using purposive sampling of 125 students from six online classes that used group work as an evaluation tool, helped to find a relationship between five social tasks and students' perceptions of a sense of community in online group work (Cameron, Morgan, Williams, & Kostelecky, 2009). The social tasks were: making oneself known, developing an identity, getting to know each other, developing supportive relationships, and discovering and contributing to etiquette. The study found that politeness and etiquette were important to the students, they did not seek to form deep relationships, and they were task-oriented. The students were more focused on grades and getting the work done. Cameron et al. (2009) suggested that teachers should play a more *visible* role in their online classrooms in order to establish deeper relationships among the students by incorporating different methods of communication between individuals and groups. In building deeper relationships Cameron et al. (2009) assert that the focus of

group work will not necessarily be on completing the task for a grade, but creating deeper interactions that may foster more dialog and creative ideas.

### **Predicting Student Satisfaction**

A mixed quantitative and qualitative study of 344 undergraduate business students was completed by Burdett and Hastie (2009), with the use of questionnaires, in order to understand the students' group work experiences and determine the predictors of students' satisfaction with group work. The five main areas of individual student interest that were studied are (1) high or low achievers, (2) willingness to become a group leader, (3) distribution of workload, (4) grades, and (5) group work process. It was concluded that the best predictors of group work success were students' perception of the group work process—whether they thought that they were achieving the goals or had the ability to do so; and workload—how fairly the work was divided among the group. A positive correlation was also found between group work process and distribution of workload. Burdett and Hastie (2009) suggest that faculty become more involved in students' group work, including distribution of workload as it pertains to time management, explanation of the expectations and group ethics, and assignment of grade.

### **Group Dynamics**

Cheng, Lam, and Chan (2008) evaluated 1,921 secondary school students' performance in group work to determine how group dynamics, and groups consisting of high and low achievers contributed to acquiring group and individual goals. A student questionnaire measured group dynamics, while test scores measured student achievements for the quantitative study. In a one-year study of the 367 learning groups, Cheng et al. (2008) found that positive group dynamics resulted in high and low

achievers acquiring their group and individual goals. It was also found that if the group dynamics were of low quality, only the low achievers benefitted on an individual basis, while the high achievers did not benefit. The overall conclusion was that low achievers benefit more from group work than high achievers, despite the quality of their group dynamics.

### **Group Trust**

A two-year study of 136 university students, divided into two groups, online and on-campus learners, was conducted by Wade, Cameron, Morgan, & Williams (2011). The aim of the study was to help determine if students' beliefs about their group relationships played any role in their group trust and experiences. Survey methods were used for the two groups of students who all engaged in online group projects. The results showed that the students did not believe that their group relationships played any role in their experiences of developing trust with their fellow group members. They did believe, however, that their group experiences were dependent on whether individual students were on-campus or online, or male/female. On-campus students did not seek out relationships with their group members as much as the online students did with their group members. The online students were also more inclined to trust their respective group members, and reported that they felt a closer relationship with them than the on-campus students reported that they did. Males were more likely to report negative comments about the group exercise and relationships than females, and also preferred to work face to face than online. Wade et al. (2011) concluded that females were more open to establishing trust with their group members than males, and online students found the online group experience more pleasant than on-campus students did.

### **Collaborative Learning Outcomes**

Employing the use of a student survey, Gallagher (2009) conducted a descriptive study to discern 163 nursing students' perceptions on learning and group process in collaborative essay testing. Each group was comprised of three or four randomly assigned students, and they were responsible for completing essays and multiple choice questions as a part of each of three examinations. The results showed no improvement in examination grades, although students positively favored learning and group process in collaborative testing, some of whom reported a decrease in their test anxiety, increased comprehension of material, communication skills, and camaraderie. There were reports of student dissatisfaction due to conflict and with some group members not contributing equally. No further discussion of group discontent was mentioned in the study.

Using a nonequivalent control group design with an experimental and a control group of 80 and 78 chiropractic students, respectively, Meseke et al. (2010) investigated the outcomes of group testing on three variables: student learning, attitude toward testing, and course satisfaction. A comparison of students who tested collaboratively, and those who tested individually, showed that the former cohort earned higher grades; felt satisfied that the collaborative experience enhanced their comprehension of the work; studied no more than they would have if the tests were individually completed; experienced less test anxiety; and boasted "increased overall course performance, better testing attitudes, and equal learning" (Meseke et al., 2010, p. 28). Negative group perceptions of free-riders were mentioned, but not elaborated upon in the study.

A quasi-experimental design was used to compare group test and course performance between randomly- and student-selected groups of 80 and 82 students,

respectively. Nafziger, Meseke, and Meseke (2011) found that if the content and delivery of learning material were similar for both groups, there was no difference between their course performances. On the contrary, the randomly-selected group had significantly higher scores for three of the six quizzes, while the student-selected group had only one significantly higher score than the former group. There was no difference between the groups' examination scores. Nafziger et al. (2011) concluded that there was no advantage to having either randomly-selected or student-selected groups in terms of their overall test and course performance since positive results were demonstrated.

Kelly, Baxter, and Anderson (2010) conducted a mixed quantitative and qualitative one-year study of 461 first-year university undergraduate psychology students. The randomly selected students of six or seven members per group were given 12 increasingly difficult assignments over the course of a year, requiring more group collaboration as time progressed. The aim of the study was to determine how a Collaborative Online Assessment (COA) program affected the students' attitudes and performance on midterm and final examinations, while measuring their online participation (Kelly et al., 2010). A comparison of the test groups' examination grades and those of the previous year's first-year psychology students, who did not participate in a COA, was done. The findings indicated that the COA method was very effective: students were more attentive, email communication and collaboration among group members increased, and examination grades were much improved over the previous year's grades. Some students reported their concern that there were others who did not contribute equally to the group effort. The students stated that some aspects of the

project were stressful because they had to check their computers frequently, while some students believed that too much time was spent on a course that was an elective.

### **Fairness in Grade Assignment**

Orr's (2010) qualitative study with reflexive inquiry involving focus groups and interviews, consisted of 32-48 and 19 subjects, respectively, to "explore students' and lecturers' experience of group work assessment" (p. 303) in a performing arts program. Of special interest were inquiries into the subjects' ideas of group composition, freeloading, and fairness. After assessing the group assignments each member was awarded individual grades based on other components of the grading criteria. The findings showed that students liked working in groups; recognized that the value of the process rather than the final product was the intended aspect of learning; realized that interdependence on each other was integral to the group process; and that the process was preparation for the workforce. Freeloaders posed some challenges for the groups, as it was stated that some members who did not contribute much or at all actually benefitted from the groups' efforts. The students had different ways of handling the issue, from doing the freeloaders' portion of the work, to verbally confronting them, and finally requesting instructor intervention. The subject of fairness was related to individual student's final grades. Some students believed that the grade should reflect how much work was done by the individual, and felt that the instructors who observed the process may not have seen pertinent occurrences that would have reflected a different grade. Other students, however, felt like commenting or complaining would have a negative effect on their grades.

## **Student Roles**

A qualitative study consisting of 126 university students in groups of three or four, who were enrolled in either a 16- or 12-week online course, was conducted by Williams, Morgan, and Cameron (2011). The study lasted for the duration of the particular course. The aim of the research was to determine how students' roles were formed in group assignments for online classes. Survey methods for the study required students to answer questions about social task development. The students' online chat sessions were also monitored by the instructor in order to analyze and identify emerging roles. The results showed that slackers were a part of the groups, although they were referred to as coat-tails, and that the roles that students played in groups were sometimes acquired accidentally or by default based on the direction that the group relationship was going. The coat-tails' roles appeared to be predetermined. Students, especially females, often tried to avoid potentially conflicting situations by offering apologies, hence placing themselves in unintended roles. Williams et al., (2011) suggested that students need assistance with leadership roles and how to give and receive feedback in a group setting. Because group members were generally guarded, they unintentionally put the group at risk for negative outcomes as communication was hampered by the façade. The authors suggest that instructors should be more involved with their student groups, and plan group assignments that can promote learning.

## **Summary**

According to the review of literature, it appears that educators need to be: proactive in setting and enforcing ground rules prior to group assignment; more involved in facilitating smooth group dynamics; and maintain awareness of the active learning

process within groups and among students or the lack thereof. Also, it appears that instructors could consider assigning individuals to groups based on their diversity in culture, life experiences, and learning abilities, as deemed appropriate. Allowing students to navigate the process alone with frustration, ignorance, and dread of the collaborative learning process is a great disservice to them and it defeats the original purpose of group work while disregarding the role of the instructor in managing their charge. The gap in the literature is where it should have been demonstrated that instructors are visible and that they assume far more responsibility with respect to setting and reinforcing ground rules and maintaining a strong presence when assigning group work. Another gap in the literature is the explanation to students by instructors, of the history and aim of cooperative learning from the basis of social constructivism.



## **CHAPTER III**

### **Methodology**

The purpose of this study is to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting; and to determine if students prefer to use the two instruments suggested in this study as regular components of future group assignments. The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of such assignments. This study is an overview of collaborative work that focuses on the students' experience.

### **Setting**

The survey was completed online by nursing students from a four-year university in western North Carolina. The anonymous surveys were completed by degree-seeking students.

### **Sample**

The sample consisted of 69 degree-seeking undergraduate and graduate, adult nursing students with a history of participating in at least one group project. There was no age or gender bias. Of the 92 returned surveyed, only 69 were used. The discarded surveys consisted of students who did not meet the eligibility requirements and surveys with identical internet protocol (IP) addresses.

### **Design**

A descriptive, quantitative design with survey methods was used to examine and report nursing students' (n = 69) perception of collaborative work. After approval was obtained from the Institutional Review Board (IRB), nursing students were contacted via

university email by their instructors, and asked to anonymously complete and submit the online survey. A Microsoft Excel spreadsheet with the raw data was converted to Statistical Package for Social Sciences (SPSS) version 20 for Windows, for statistical analysis.

### **Protection of Human Subjects**

Prior to conducting the study, the researcher obtained permission from the university's IRB and immediately from each student who attempted to complete the survey. Each student gave consent to be included in the study after reading the Informed Consent Form (ICF) and before beginning to answer the questions. There were no risks or immediate benefits to the participants. Their participation, however, could provide valuable information that may guide changes in the practice of assigning group work. The study was conducted with integrity. By not researching or otherwise determining the identities of the participants, their expectation of anonymity was protected. Further protection was afforded the students by failing to identify their institution in this study.

### **Instruments**

Appendices A and B represent two instruments (a) Accountability Log, and (b) Communication Log, that were designed specifically for this study. They were not implemented, but were viewed by the study participants to find out if they would prefer to use the suggested instruments in their own future group assignments. The participants' input was required in order to determine their ideas of fairness in the evaluation process.

The following was the proposed use of the two logs. Both instruments are expected to be maintained then submitted by each group member at the completion of the group work. The Accountability Log is similar to an evaluation, but unlike an evaluation,

the purpose of the Accountability Log is to simply and factually state the behavior of the peer group member, rather than provide opinions of the behavior. Providing opinions would also provide a means of reporting negatively biased information about peers with strained relationships, or conversely, reporting positive information about peers with close relationships, who may or may not have had a positive relationship with the group. Personal vendettas are avoided by not including a free response section on the Accountability log. Each of the five statements of the Accountability log requires one of three responses by the student: always, sometimes, and rarely/never. The instructor may use the Communication Log for comparison with the other group members' logs to verify individual participation, especially in the event of group dispute, but more so as an instructor's guide for individual student assessment. The Communication Log shows the date, subject, and mode of communication among members.

### **Data Collection and Analysis**

Data collection consisted of requesting, via email, that each study participant provide demographic information and responses to the survey questions. The completion and submission of the anonymous online surveys were based on each student's own experiences with group work. After the survey was closed to all students, a Microsoft Excel spreadsheet with the raw data was generated by the web designer and forwarded to the researcher. The raw data was used for statistical analysis. Since the survey was anonymous there was no further contact with the participants. To dispel doubt and preserve the integrity of the study, all completed surveys that shared IP addresses were discarded as they were perceived as multiple surveys by one individual. It was not possible to determine the identities of each participant. The Microsoft Excel spreadsheet

was converted to the SPSS version 20 for Windows, and then the data was coded and cleaned. Descriptive and univariate statistical analyses for the categorical data were done using SPSS.

### **Summary**

The study investigated students' negative perceptions of, and experiences with collaborative learning in a tertiary level academic setting; and determined if students preferred to use the two instruments suggested in this study as regular components of future group assignments. The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of similar assignments. This study is an overview of collaborative work that focuses on the students' experience.

## **CHAPTER IV**

### **Results**

The purpose of this study is to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting; and to determine if students prefer to use the two instruments suggested in this study as regular components of future group assignments. The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of such assignments. This study is an overview of collaborative work that focuses on the students' experience.

### **Sample Characteristics**

The final sample size ( $n = 69$ ) was reduced from the total number of survey respondents, 92, because several identical IP addresses were linked to individual surveys, which is a possible indicator that some respondents completed multiple surveys. Since there was no way to determine the true nature of the anonymous surveys, the questionable ones were eliminated before statistical analysis to preserve the integrity of the study. Univariate and descriptive statistics were done of the mostly categorical data.

### **Major Findings**

Of the 69 participants, 56 were females; 67 pursued graduate studies; 34 had experience with online classes only, and 32 had both online and face-to-face class experience. For age: mean =  $40.85 \pm 11.30$  (SD); median (minimum, maximum) = 42.0 (22.0, 60.0). SPSS was used to generate the univariate analysis for the demographic characteristics (see Table 1).

Table 1

*Description of Demographic Characteristics (n = 69)*

Characteristic		Value
GENDER	Male	8
	Female	56
	Missing	5
AGE (years)	Mean	40.85
	Median	42.0
	Minimum	22.0
	Maximum	60.0
	Standard Deviation	11.30
CLASSIFICATION	Undergraduate	2
	Graduate	67
EXPERIENCE	Online	34
	Face-to-face	3
	Online and Face-to-face	32

Group work was stressful for 73.9% of the students; only 37.7% liked group work; and 88.4% reported being in a group with slackers. In dealing with slackers, 47.8% said that they did the slackers' work, 36.2% confronted the slackers, and 15.9% ignored them. To the question of whether grades should be assigned based on each group

member's contribution, 78.3% thought it should be so. If given the choice to participate in group work, 53.6% would not, but 85.5% stated that they would be more inclined to participate if there was a way to make all group members accountable for their conduct and contribution (See Table 2).

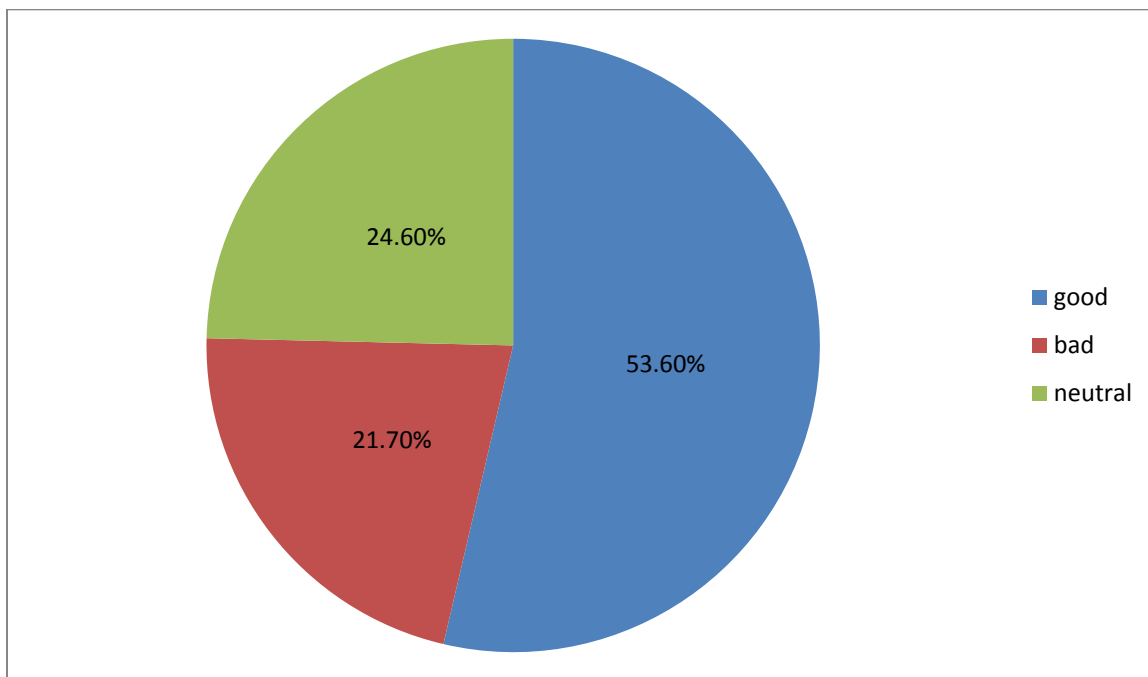
Table 2

*Major Findings of Student Survey Responses*

Survey Question	Student Response (%)		
	Yes	No	Not yes, Not no
Group work is stressful to me.	73.9	26.1	-
Do you like group work?	37.7	44.9	17.4
Have you ever been in a group with slackers?	88.4	11.6	-
Should grades be assigned based on each group member's contribution?	78.3	14.5	7.2
Would you participate in group work if you had a choice?	39.1	53.6	7.2
Would you be more inclined to participate in group work if there was a way to make all group members accountable for conduct and contribution?	85.5	11.6	2.9

### Assumptions of the Study

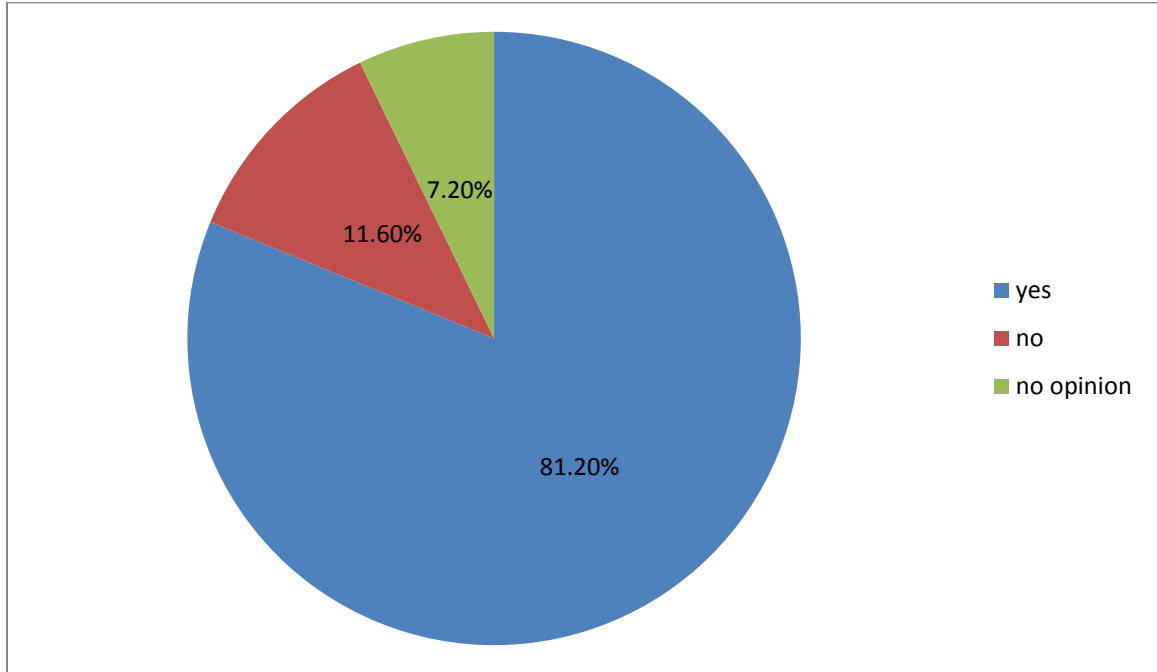
This study assumed that more than half of the student participants would have admitted to a bad experience with group work; the results showed that 21.7% had a bad experience (see Figure 1).



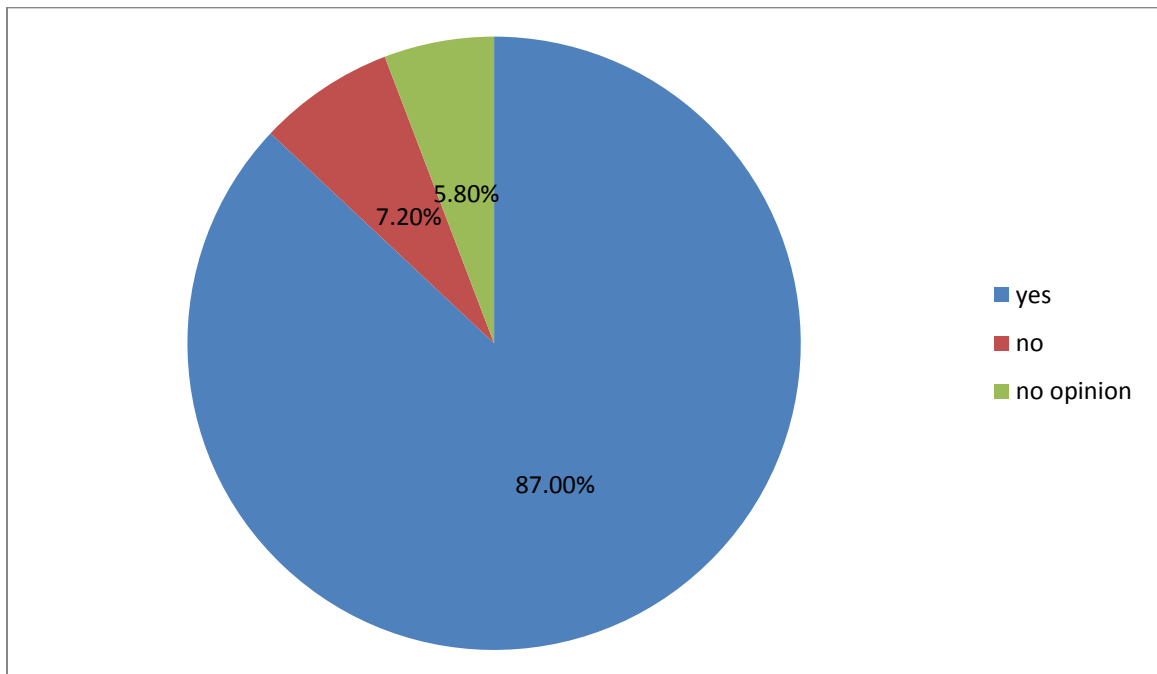
*Figure 1.* Pie Chart of Students' Experience with Group Work

On the subject of instructor involvement, the study also assumed that the participants would have agreed to more instructor input and instructor validation of students' concerns. The results showed that 81.2% of students believed that instructors need to be more involved in the group process to ensure that negative behaviors are addressed (see Figure 2), and 87% believed that instructors need to instruct students specifically on group behavior and expectations before assigning group work (see Figure 3).



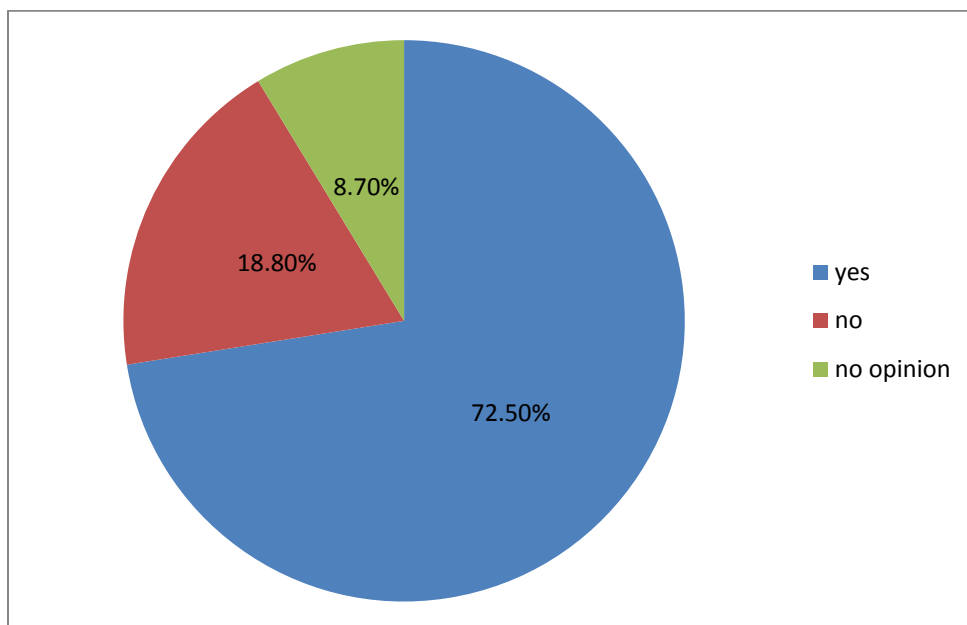


*Figure 2.* Pie Chart of Students' Need for Instructor Involvement in Group Process



*Figure 3.* Pie Chart of Students' Desire for Instructor Direction on Group Behavior and Expectations

Another assumption of the study was that more than half of the participants would state their preference to use the Accountability and Communication Logs: the results showed that 72.50% stated that preference (see Figure 4).



*Figure 4.* Pie Chart of Students' Preference to use Accountability and Communication Logs

The two most addressed concerns in the free response question of the survey were, the presence of slackers, and difficulty coordinating time with group members. Gottschall and García-Bayonas (2008) found the same two concerns of the students in their study. Some of the student responses in this study follow.

## Slackers

- “I don’t prefer working in groups because there are always several group members that don’t participate or give their 100%. The other group members have to pick up the slack of the non-participants and do extra work.”
- “I end up doing most of the work and everyone gets the same grade.”
- “Not everyone pulls their weight.”
- “Group work is beneficial when it comes to collaborating ideas, but it can be difficult to fully participate if one feels that a team member is not fully involved. Because of this fact, individual grades should be assigned.”

## Difficulty Scheduling Time to Collaborate

- “I dislike group work due to the fact that having to meet together and work around schedules is usually inconvenient. Everyone in the group may have different work ethics and different ideas which can potentially cause conflict within the group.”
- “In the online environment it is difficult to get all group members together. As with all online instruction, the struggle revolves around coming together as a group due to the distance.”
- “Coordinating schedules sometimes is a difficulty.”
- “Online classes for working individuals do not represent *real time*. Therefore, delays in responses are the norm. As a weekend night nurse, I have often found that others in my group that work weekdays expected us all to meet/chat on the weekends, which of course is not convenient to me as it is my time to sleep.”

- “My experience is that it has been difficult to share the work and communicate with other group members especially for online courses.”

### **Summary**

All but one of the assumptions of this study were proven true by the data collected: less than the assumed 50% of students reported having had bad experiences with group work. The main similarity between the survey responses and the free response question showed that the presence of slackers was a negative aspect of group work. An overwhelming number of free response statements clearly indicated that it was difficult to coordinate time with group members in an online course. Students reported the desire for more instructor involvement in the group process. There were no extraneous data in the survey questions, which required further exploration.

## **CHAPTER V**

### **Discussion**

The purpose of this study is to investigate students' negative perception and experience of collaborative learning in a tertiary level academic setting, and to determine if students prefer to use the two instruments suggested in this study as regular components of future group assignments. The inquiry into students' negative perception and experience of group work will serve to improve educators' awareness and involvement in the design of such assignments. This study is an overview of collaborative work that focuses on the students' experience.

### **Implication of Findings**

Although more students disliked group work than those who did like it, the results show that there is a problem with group work assignment that causes almost three-fourths of the students to feel like it is a stressful endeavor. The stressful aspect appears to stem from the presence of slackers (88.4%) in GBAs. A review of the literature has recognized the presence of slackers in group work settings. The surveyed students from Orr's (2010) study proposed that students should be graded on the amount of work that they had done while they were assigned to a group with slackers.

The high percentage of students who want their instructors to be more involved, suggested that students are interested in participating in group work, but need guidance. The indication is that many students' problems are not being addressed. Burdett and Hastie (2009) suggested that instructors should become more involved in giving clear directions to their students as it pertains to group work. More than three-quarters of the students surveyed wanted more instructor involvement, also a consistent finding by Koh

et al. (2007), who reported that students from their study complained about not being taught the necessary skills that would prepare them for group work.

Students claimed that they understood the need for group work, but their responses to other questions do not support their understanding. It is possible that they do not understand the need because they have stated that they did the slackers' work. In proposing that everyone gets individual grades that reflect their own contribution to the group effort, it is implied that the slackers would earn a lower grade than the other members in their group. By doing the slackers' work, those respondents may also be attempting to avoid confrontation, as some students reported that they had done. Doing the slackers' work is consistent with findings by Myers et al. (2009). Doing the slackers' work may be a coping mechanism that puts undue stress on the students, and should be addressed by a non-partial entity—the instructor—as soon as the problem surfaces.

Because of the very low percentage of face-to-face classes (4.3%) that was reported, compared to (95.7%) of those with online experience, it is possible that that accounts for the low reporting of social justice issues within groups. As proposed by this study, physical characteristics that are easily observable in real time collaborative groups are virtually eliminated in some online classes, therefore it is expected that a low number of social justice problems would be reported. The study by Wade et al. (2011) showed that online students were more likely to form trust relationships with their group members. It is possible that because they were unable to *see* their fellow group members, they were more likely to find other good qualities that they could relate to in order to build relationships.

In the free response section of this study, students did not mention having experienced characteristics of the Matthew Effect. The students mentioned however that there was a problem of scheduling time to collaborate, mainly because many group members had conflicting schedules. Kelly et al. (2010) discovered a similar issue in their study. The students stated that with their online group assignment, they had to check their computers too often because they could not predict when another group member would be online or contribute to their group's work (Kelly et al., 2010).

### **Application to Theoretical Framework**

Imogene King's Conceptual System and Middle Range Theory of Goal Attainment was appropriate to guide this study because the students were the central focus. The goal of this study was to determine students' experiences of group work, while paying special attention to areas of discontent for the students. The prospective student participants were the main focus in designing the survey questions and the instruments. Furthermore, the results of this study would benefit more students if the results were taken into consideration by nurse educators.

In an educational practice setting, a nurse educator would emphasize the students' success in collaborative group projects by: ensuring that they had an understanding of the group process, including rules and expectations; knowing how to resolve conflicts in a group setting; and relying on the instructor for consistency in guidance and support. The nurse educator and the students would be working toward the common goal of students' success through goal attainment. This framework would be more applicable if this were an experimental study rather than a survey.

### **Limitations**

Ordered response options are interpreted differently by different people.

Providing the participants with only three possible response options does not account for the varying degrees of possible personal responses that could be obtained in order to present a clearer understanding of the students' perception of group work. According to the Centers for Disease Control and Prevention (2011, p. 2) "there are limited statistical tests designed for analyzing ordinal data."

The survey participants were solicited via university email during the summer semester. Since less students register for summer semester than in the fall or spring semester, it is possible that the smaller size of the potential pool from which to choose participants, limited the variation in the sample size that was obtained. Voluntary responses by the subjects, to participate in the study, were not controlled by the researcher so it is unknown if given the time period for completion of the surveys, significantly more students would have responded. Because of the anonymity of the survey, it was not possible to increase the response rate of undergraduates (2.9%) and males (11.6%). It should be noted, however, that nursing is a female-dominated career (Evans & Frank, 2003; Lane, 2000), so it is expected that there were more female nursing students than males.

Extending the study to more disciplines and to other universities could have also increased the varied experiences of group work that would be reflected by statistical analysis. It is expected that the culture of practice within institutions vary, so surveying students from similar universities may have shown different student experiences, including group work trends that are unique to some institutions. Rather than allow



educators to establish their own guidelines for students' group work, it is possible that some institutions have already established standardized guidelines that are in favor of student success. Such situations, if surveyed, would provide more insight into students' experiences.

### **Implications for Nursing**

If nurses are to continue to maintain a holistic approach to practicing nursing, then nurse educators should prioritize their care toward nursing students, in terms of eliminating the unnecessary frustration that is endured in collaborative learning assignments. King's (1999) student-centered approach to the teaching-learning process is applicable in this situation. Educators can intervene in two ways. In the first instance, if the instructor insists on allowing the group members to learn how to resolve their own problems, then the instructor should give the students the necessary tools to do so. Prior to assigning group work, the instructor, rather than assume that students know what to do, should instruct them on the group process, rules, consequences, expectations, time management, and conflict resolution. In so doing, the instructor can introduce a method of student accountability (see Appendices A and B) so that each student can maintain responsibility for their actions.

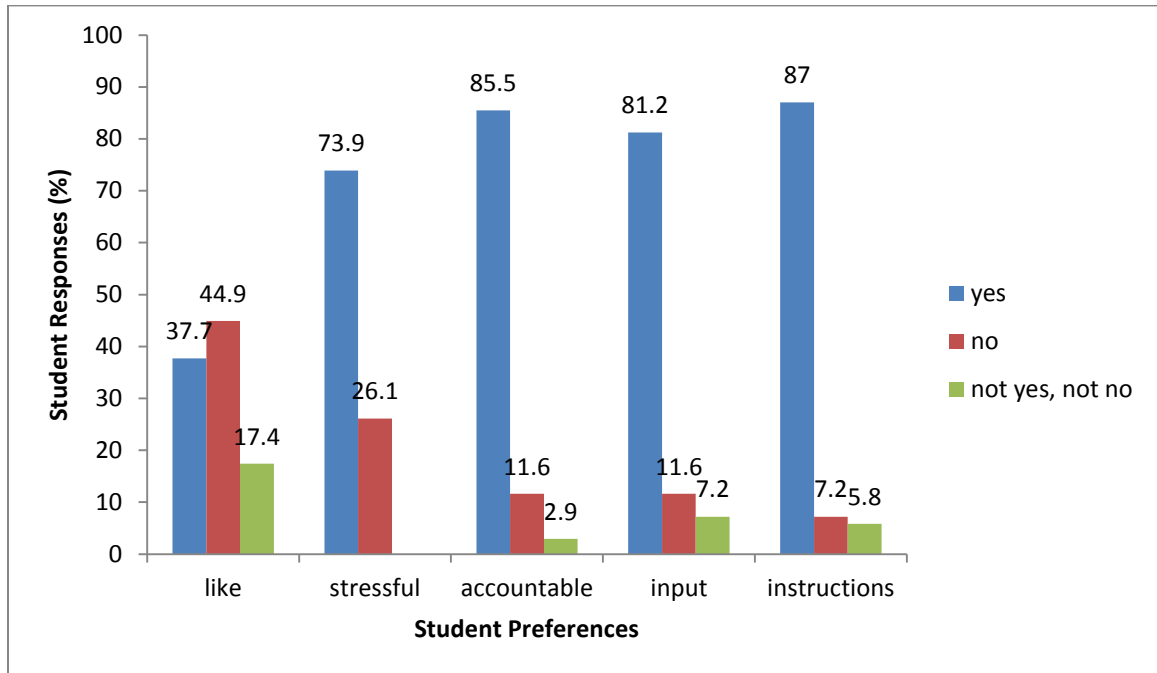
From a personal and social aspect, there is much that a student can lose from a group project that is overshadowed by negativity within the group. This study has shown that nursing students who participate in group work are highly stressed (73.9%). There is no need for nurse educators to remain uninvolved when group dynamics have clearly begun to deteriorate; at that point it is an unreasonable expectation that quality learning will occur.

If nurse educators help to preserve the integrity and peace of mind of their nursing students, it is possible that the students' focus will remain at the forefront of their education. Maintaining equilibrium between social stressors and school, when they have to focus on the lives and well-being of their patients and themselves, is undoubtedly an asset to effective nursing students. It is clear from the findings in this study, that nurse educators should play a key role in the success of the group projects that they assign.

### **Recommendations**

Since the results of this study suggest that group work is not very satisfying to students, employing the use of wikis could be an alternative. Instructor effort would involve: learning about wikis, embracing a new way of teaching and learning, and being open to change. Because each student's contribution to the group effort could be digitally identified, modified versions of the Accountability and Communication Logs could also be used since communication among members would not necessarily be limited to building the wiki.

This study has recognized help-seeking responses by the student respondents (see Figure 5). Almost 45% of students admit to disliking group work, 73.9% find group work stressful, but over 80% of the same students would participate if other group members could be held accountable. Over 80% of students also would like to have more instructor input and clear instructions prior to and during the group assignment. The help-seeking responses are indicative of specific ways that the students can be helped. This study proposes that the aforementioned student preferences be addressed in a study that measures student satisfaction.



*Figure 5.* Histogram of Help-Seeking Responses

Since 72.5% of the surveyed students stated that the Accountability and Communication Logs would be beneficial in future group work assignments, then a possible study could employ the use of both instruments to investigate student satisfaction and/or perceptions of the group experience. In conducting such a study, it could be made available to students from other disciplines and institutions so that a larger sample size could be obtained. A larger sample size may provide more information about the efficacy of the instruments.

An investigation into instructors' perceptions of student group work could provide valuable information in understanding the reasons for students' negative attitudes toward group work. The results would provide the instructors with firsthand knowledge into this common problem for students. After reviewing the results the instructors would be able

to implement measures that would address their students' concerns, and possibly cause practice changes.

A study of how instructors are affected by students' discontent and how they (instructors) handle each unique occurrence would be important to the general student population. It would show a genuine attempt by the instructors to understand and validate the students' experiences. The information obtained from such an inquiry would be important to other educators so that they can review and alter their approach to assigning and monitoring group work.

### **Conclusion**

Students have reported generally good experiences with group work, but it is interesting that more students would choose not to participate if given the choice. It is clear that instructors need to explain the group process to students, including, but not limited to the expectations and ground rules that address the problem of slackers. Instructors should be available to students and be a source of guidance and support for the duration of the group assignment. The study implies that students are conflicted and need a mediator to put the focus on the learning objectives of group work by reducing the social stressors, and again, that responsibility lies with the instructors. Based on the free response section of the survey, the students consistently reported that group work was not conducive to online courses due to the difficulty in coordinating group members' for discussion or submission of work. This study agrees that group assignments in an online course should be minimal to none, unless the use of alternatives like wikis will be employed.

## References

- Ashraf, M. (2004). A critical look at the use of group projects as a pedagogical tool. *Journal of Education for Business, 79*(4), 213-216.
- Brooks, C. M., & Ammons, J. L. (2003). Free riding in group projects and the effects of timing, frequency, and specificity of criteria in peer assessments. *Journal of Education for Business, 78*(5), 268-272.
- Burdett, J., & Hastie, B. (2009). Predicting satisfaction with group work assignments. *Journal of University Teaching & Learning Practice, 6*(1), 61-71.
- Cameron, B. A., Morgan, K., Williams, K. C., & Kostelecky, K. L. (2009). Group projects: Student perceptions of the relationship between social tasks and a sense of community in online group work. *The American Journal of Distance Education, 23*, 20-33. doi: 10.1080/08923640802664466
- Centers for Disease Control and Prevention. (July 2011). *Evaluation briefs: Using ordered response options to collect evaluation data*. Retrieved from [www.cdc.gov/healthyyouth/evaluation/pdf/brief23.pdf](http://www.cdc.gov/healthyyouth/evaluation/pdf/brief23.pdf)
- Chen, E. C., Budianto, L., & Wong, K. (2010). Professional school counselors as social justice advocates for undocumented immigrant students in group work. *The Journal for Specialists in Group Work, 35*(3), 255-261. doi: 10.1080/01933922.2010.49287
- Cheng, R. W.-Y., Lam, S.-F., & Chan, J. C.-Y. (2008). When high achievers and low achievers work in the same group: The roles of group-heterogeneity and processes in project-based learning. *British Journal of Educational Psychology, 78*(2), 205-221. doi: 10.348/000709907X218160

- Evans, J., & Frank, B. (2003). Contradictions and tensions: Exploring relations of masculinities in the numerically female-dominated nursing profession. *The Journal of Men's Studies*, (11)3, 277-292.
- Fernando, D. M., & Herlihy, B. R. (2010). Supervision of group work: Infusing the spirit of social justice. *The Journal for Specialists in Group Work*, 35(3), 281-289. doi: 10.1080/01933922.2010.492905
- Gallagher, P. A. (2009). Collaborative essay testing: Group work that counts. *International Journal of Nursing Education Scholarship*, 6(1), 1-11. doi: 10.2202/1548-923X.1845
- Gottschall, H., & García-Bayonas, M. (2008). Student attitudes towards group work among undergraduates in business administration, education and mathematics. *Education Research Quarterly*, 32(1), 3-28.
- Hays, D. G., Arredondo, P., Gladding, S. T., & Toporek, R. L. (2010). Integrating social justice in group work: The next decade. *The Journal for Specialists in Group Work*, 35(2), 177-206. doi: 10/1080/01933921003706022
- Kelly, D., Baxter, J. S., & Anderson, A. (2010). Engaging first-year students through online collaborative assessments. *Journal of Computer Assisted Learning*, 26, 535-548. doi: 10.1111/j.1365-2729.2010.00361.x
- King, I. M. (1999). A theory of goal attainment: Philosophical and ethical implications. *Nursing Science Quarterly*, 12(4), 292-296. doi: 10.1177/08943189922107205
- Koh, C., Tan, O. S., Wang, C. K. J., Ee, J., & Liu, W. C. (2007). Perceptions of low ability students on group project work and cooperative learning. *Asia Pacific Education Review*, 8(1), 89-99.

- Lane, N. (2000). The management implications of women's employment disadvantage in a female-dominated profession: A study of NHS nursing. *Journal of Management Studies*, (37)5, 705-731.
- McConnell, D. (2005). Examining the dynamics of networked e-learning groups and communities. *Studies in Higher Education*, 30(1), 25-42.
- Meseke, C. A., Nafziger, R., & Meseke, J. K. (2010). Student attitudes, satisfaction, and learning in a collaborative testing environment. *The Journal of Chiropractic Education*, 24(1), 19-29.
- Myers, S. A., Smith, N. A., Eidsness, M. A., Bogdan, L. M., Zachery, B. A., Thompson, M. R., Schoo, M. E., & Johnson, A. N. (2009). Dealing with slackers in college classroom work groups. *College Student Journal*, 43(2), 592-598.
- Myers, S. A., Bogdan, L. M., Eidsness, M. A., Schoo, M. E., Smith, N. A., Thompson, M. R., & Zackery, B. A. (2009). Taking a trait approach to understanding college students; perceptions of group work. *College Student Journal*, 43(3), 822-831.
- Nafziger, R., Meseke, J. K., & Meseke, C. A. (2011). Collaborative testing: The effect of group formation process on overall student performance. *The Journal of Chiropractic Education*, 25(1), 11-15.
- Newton, K. (2010). A two-fold unveiling: Unmasking classism in group work. *The Journal for Specialists in Group Work*, 35(3), 212-219. doi: 10.1080/01933922.2010.492906
- Nihalani, P. K., Wilson, H. E., Thomas, G., & Robinson, D. (2010). What determines high- and low-performing groups? The superstar effect. *Journal of Advanced Academics*, 21(3), 500-529.

- Orr, S. (2010). Collaborating or fighting for the marks? Students' experiences of group work assessment in the creative arts. *Assessment & Evaluation in Higher Education*, 35(3), 301-313. doi: 10.1080/02602931003632357
- Payne, B. K., & Monk-Turner, E. (2006). Students' perceptions of group projects: The role of race, age, and slacking. *College Student Journal*, 40(1), 132-139.
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education*, 130(2), 241-250.
- Ratts, M. J., Anthony, L., & Santos, K. N. T. (2010). The dimensions of social justice model: Transforming traditional group work into a socially just framework. *The Journal for Specialists in Group Work*, 35(2), 160-168. doi: 10.1080/01933921003705974
- Shimazoe, J., & Aldrich, H. (2010). Group work can be gratifying: Understanding & overcoming resistance to cooperative learning. *College Teaching*, 58, 52-57. doi: 10.1080/87567550903418594
- Singh, A. A., & Salazar, C. F. (2010). The roots of social justice in group work. *The Journal for Specialists in Group Work*, 35(2), 97-104. doi: 10.1080/01933921003706048
- Thompson, L., & Ku, H. Y. (2006). A case study of online collaborative learning. *The Quarterly Review of Distance Education*, 7(4), 361-375.
- Trentin, G. (2009). Using a wiki to evaluate individual contribution to a collaborative learning project. *Journal of Computer Assisted Learning*, 25, 43-55. doi: 10.1111/j.2365-2729.2008.00276.x



- Wade, C. E., Cameron, B. A., Morgan, K., & Williams, K. C. (2011). Are interpersonal relationships necessary for developing trust in online group projects? *Distance Education, 32*, (3), 383-396. doi: 10.1080/01587919.2011.610288
- Walton, K. L. W., & Baker, J. C. (2009). Group projects as a method of promoting student scientific communication and collaboration in a public health microbiology course. *Bioscene 35*(2), 16-22.
- Wellman, D. S. (2009). The diverse learning needs of students. In D. M. Billings & J. A. Halstead, *Teaching in Nursing: A Guide for Faculty* (3<sup>rd</sup> ed., pp. 18-32). St. Louis, MO: Saunders.
- Williams, K. C., Morgan, K., & Cameron, B. A. (2011). How do students define their roles and responsibilities in online learning group projects? *Distance Education, 32*(1), 49-62. doi: 10.1080/01587919.2011.565498
- Witney, D., & Smallbone, T. (2011). Wiki work: Can using wikis enhance student collaboration for group assignment tasks? *Innovations in Education and Teaching International, 48*(1), 101-110. doi: 10.1080/14703297.2010.543765

## Appendices

**Appendix A**

**Accountability Log for Group Members**

### Accountability Log for Group Members

Name: \_\_\_\_\_

Group-member's Name: \_\_\_\_\_

**Instruction:** Each group member will maintain the log and submit it at the end of the project.

Student's Characteristics	Always	Sometimes	Rarely/Never
1. Showed respect to group members			
2. Contributed substantially to group project			
3. Contributed work in a timely manner			
4. Submitted satisfactory quality contributions			
5. Responded to group requests in a timely manner			

**Appendix B**  
**Communication Log for Group Members**

### Communication Log for Group Members

Name: \_\_\_\_\_

**Instruction:** Each group member will maintain the log and submit it at the end of the project.

<b>Date of Communication</b>	<b>From</b>	<b>To</b>	<b>Subject</b>	<b>Mode of Communication, e.g. email, text, IM, phone, Skype</b>
January 6, 2012	Student #1	All group members	Submit preferred contact information to entire group	email
January 8, 2012	Student #2	All group members	<ul style="list-style-type: none"> <li>• Set date for online discussion of objectives with group</li> <li>• Designate roles</li> </ul>	email
January 12, 2012	Student #3	All group members	Instructor approval obtained	text
January 16, 2012	Student #4	Student #1	Resend flow sheet	IM
February 20, 2012	Student #5	All group members	Demonstration of group-constructed simulated design	Skype