

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Measuring the Impact of Peer Learning Community on
Perceived Belongingness and Confidence in Academic Achievement

A thesis project submitted in partial fulfillment of the requirements
for the degree of Master of Science in
Family and Consumer Sciences,
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by

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DEDICATION

This thesis project is dedicated to Waheguru, who gave me the strength and resources needed for this degree. I equally dedicate it to my family who encouraged me to pursue higher education and complete this research. I am eternally grateful for their unyielding love, support, and motivation.

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ABSTRACT

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The Family and Consumer Sciences department at California State University, Northridge initiated the development of a peer learning community. When a student becomes more engaged in the academic setting and considers themselves a vital part within the school community, they reported a stronger sense of belonging (Booker, 2007). As part of the peer learning community, peer learning facilitators held workshops and office hours to increase student engagement, performance, and retention. The purpose of this thesis project was to create an instrument to measure the perceptions of belongingness and confidence in academic achievement among students through the creation of a peer learning community in their department.

A 11-item Peer Learning Community Questionnaire, specifically pertaining to sense of belongingness and confidence in academic achievement, was designed to measure the impact of the peer learning community. Goodenow's (1993) 18-item Psychological Sense of School Membership Scale, which has been widely used to measure students' perceptions of belonging in the school environment, served as reference in the creation of the questionnaire. To measure the level to which students agree or disagree with the 11-items, the 5-Likert scale ranging from 1=

Strongly Disagree to 5= Strongly Agree was used. A panel of four highly qualified faculty members from California State University, Northridge assessed the questionnaire for face validity. The feedback received from the panel validated that the product created could measure students' perceptions of belonging and confidence in academic achievement, by participating in a peer learning community on campus.

CHAPTER I

INTRODUCTION

Among the visions within the Family and Consumer Sciences department at California State University, Northridge is to support student success through the development of a learning community. This allows students to work directly with peer learning facilitators designated to their classes. Peer learning facilitators are students who have successfully completed the course whom the course instructor recommended based on their compelling academic work. The peer learning facilitators hold interactive workshops consisting of activities that demonstrate the relevance of course requirements to sub-fields within Family and Consumer Sciences and professional fields related to Family and Consumer Sciences. The two courses selected for this program were *FCS 170 Creative Expression in Family and Consumer Sciences* and *FCS 380 Family and Consumer Sciences Foundations and Research*.

Statement of the Problem

The primary aim of the Family and Consumer Sciences peer learning community project was to increase the retention in the major and passing rates of these courses. Workshops and office hours led by peer learning facilitators were designed to increase student engagement, performance, and retention. To achieve optimal effectiveness, peer learning facilitators and instructors shared their best practices amongst themselves to avoid any discrepancies that resulted due to miscommunication. In addition, discussion amongst the instructors and facilitators ensured that students were receiving accurate and consistent information. Research conducted for over a decade has revealed an overwhelming consensus that active learning methods are superior to traditional learning methods in terms of increasing student achievement (Dunk et al., 2016). While many studies and projects proved the effectiveness of students'

success, there is few studies to measure peer learning community programs in terms of perceived perception of belongingness and confidence in academic achievement among college students.

Purpose

The purpose of this research project was to create an instrument that would examine the perception of belongingness and confidence in academic achievement among college students by the creation of a peer learning community in their department. The product, an 11-item Peer Learning Community Questionnaire, was designed to measure the impact of the peer learning community on students who partake in classes offering workshops and office hours hosted by peer learning facilitators. The instrument would be evaluated by a panel of experts from California State University, Northridge for validity. The questionnaire would be administered by the research assistants post the last workshop.

Definitions

1. Peer learning is the use of teaching and learning strategies in which students learn with and from each other without the intervention of a teacher (Boud et al., 1999).
2. School membership is “more than simple technical enrollment in the school. It means that students have established a social bond between themselves, the adults in the school, and the norms governing the institution” (Hagborg, 1998, p. 461). It is the extent of personal belonging, respect, and support students feel in an academic setting.

Assumptions

The 11-item Peer Learning Community Questionnaire was based upon the following assumptions:

- Students are capable of reading and understanding English. Therefore, students are capable of reading and understanding the 11-items presented on the Peer Learning

Community Questionnaire.

- Panel of experts who evaluate the Peer Learning Community Questionnaire have the appropriate qualifications to conduct evaluation of the product.
- Panel of experts who evaluate the Peer Learning Community Questionnaire will thoroughly read each of the 11-items, and provide their honest feedback.

Limitations

The 11-item Peer Learning Community Questionnaire had the following limitations:

- The 11-item Peer Learning Community Questionnaire only focuses on the Family and Consumer Sciences department at California State University, Northridge. Therefore, it cannot be generalized to all students within the university.
- The questionnaire is only evaluated by four experts. Additional experts from different fields may have varying views on the developed product.

CHAPTER II

REVIEW OF LITERATURE

The sense of having a community is vital to human development as members of society. In academic settings, community becomes even more necessary in order to create a successful and encouraging atmosphere where students can engage with peers and prosper in academic achievement (Greene & Mitcham, 2012). This academic “community” also creates a sense of belongingness within students, as they are comforted by the knowledge that their ideas and beliefs are welcomed and celebrated by their peers (Osterman, 2000).

Belongingness

Maslow’s (1943) Hierarchy of Needs offers an insight into the needs of each individual. In his model, Maslow outlines five specific needs. At the bottom of the triangle are physiological needs, the most essential of human needs. Physiological needs include basic necessities such as food, water, shelter, and clothing. Above physiological needs are safety needs, which, according to Maslow, an individual will become motivated to complete upon the fulfillment of his or her physiological needs. Then, the model outlines that with the completion of an individual’s needs of safety, they will focus on their need to belong, whether it be in society as a whole or in an academic atmosphere such as a four-year university. In current times, the importance of belongingness is very much relevant, and is often referred to as “school membership” in an academic perspective (Osterman, 2000).

School membership is the term used to define the belongingness, acceptance, and encouragement that students perceive in their school setting (Hagborg, 1998). Peer learning opportunities make it easier for students to feel that sense of school membership, as they offer a personal and much more individualized approach to teaching. Students are able to work with

each other and offer their peers support while addressing academic topics in a manner that may be more comprehensible to a wider range of learning types.

Goodenow's (1993) 18-item Psychological Sense of School Membership Scale was utilized in Hagborg's (1998) study regarding school membership to confirm that having a sense of school membership results in higher academic achievement and more dedication towards schoolwork. The 11-item Peer Learning Community Questionnaire created in this study is referenced from Goodenow's (1993) scale to measure the relationship between school membership, belongingness, and confidence in academic achievement.

In institutions of higher education, students may feel that their experience with administrative authority and faculty is quite impersonal. To add to this downside of large institutions, the transition from high school to college is difficult on its own, as students may be leaving behind friendships, relationships, family, and most of what has defined their lives for the past years (Rotenberg & Morrison, 1993). The struggle that many students face during this transition is largely oriented around the complete change of their social life (Rotenberg & Morrison, 1993). They need to make new friends and connections, which can be difficult while balancing their academics as well. This leads to strong feelings of loneliness. Many researchers have found a correlation between feeling lonely and dropping out among college students. Thus, it becomes evident that having a sense of belongingness and support on campus is essential to the academic and mental success of students in education (Chiu et al., 2016).

To combat the loneliness felt by students, it is critical that they have a community on campus, which will fulfill not only their social needs, but their academic needs as well. This type of community can be found through peer learning opportunities, where students are able to learn from and teach fellow students in an independent setting. This exchange occurs with minimal to

no involvement from a teacher, allowing students to interact freely and share knowledge that they believe will benefit their peers (Boud et al., 1999). Feelings of loneliness can also lead to low self-esteem within students (Rotenberg & Morrison, 1993).

The sense of having school membership can, in turn, result in even better academic performance by students. Even if they do not comprehend a topic in class, they are not disheartened as they have the opportunity to attend peer learning workshops, participate in activities and review the subjects in a way that is more fitting to them. This creates a more supportive social and emotional atmosphere for the students at their institution itself (Hagborg, 1998). Furthermore, this feeling of being completely accepted at an academic institution can increase the students' attachment to their institution, prompting them to continue to attend regularly and work harder to immerse themselves into the learning culture they are surrounded by (Hagborg, 1998). It becomes much easier to enjoy an academic experience when a student has an entire community of supportive and equally motivated peers to share it with (Chiu et al., 2016). Thus, support they gain through these opportunities of peer learning, and eventual networking, are crucial in order to draw students back to campus and ensure that they continue working towards achieving their degree.

Confidence in Academic Achievement

For the students utilizing the opportunity of peer learning to learn from fellow students, this activity offers them more confidence in voicing their academic concerns and discussing what they are seeking help for. This confidence is encouraged by the peer learning environment being inclusive and oriented around learning and helping others grow academically (Sharpe et al., 2018). Additionally, for the peer learning facilitators who share information and teach it to their peers, it is imperative that they are confident in their own knowledge first. Thus, students will

take more time to fully understand concepts and have a good grasp on how to teach them to peers before going into a peer learning activity. They will develop more confidence in their own academic achievement, prompting them to become even more engaged in their school community and validating their feeling of belongingness (Hagborg, 1998).

Although developed in the midst of the twentieth century, Maslow's (1943) Hierarchy of Needs is still relevant when discussing the needs felt by all people throughout and at different points in their lives. After physiological and safety needs, Maslow places the need of belonging. Once attending institutions of higher education, most students will have already fulfilled their physiological needs and safety needs. However, belonging is a difficult need to conquer, as students can become overwhelmed with the changes occurring in their lives and fall into feelings of loneliness (Rotenberg & Morrison, 1993). However, as aforementioned, this need can be easily fulfilled through the implementation of peer learning communities in academic institutions. Once students feel that they belong at their school, their next need of esteem, as outlined by Maslow, becomes more accessible to fulfill (Gailliot & Baumeister, 2007).

One of the strongest of the innate human desires is the desire to be highly-esteemed, by oneself and by others. Individuals tend to go too far lengths to create high esteem for themselves, and this holds true in academic settings as well. With the fulfillment of their need for belonging, students are driven to work towards high academic achievement. This often results in bolstered confidence and a strong passion for hard work. This may also translate to positive trends in terms of academic and social ties for students, especially with their peers. Higher self-esteem tends to also result in a stronger feeling of belongingness, further fulfilling students' need to belong (Hernández et al., 2017).

Although there are many factors that contribute to an individual's self-esteem, school

belonging, membership, and confidence are all parts of self-identity (Gailliot & Baumeister, 2007). As Maslow (1943) explained, the fulfillment of one need is a mobilizing factor in a person's endeavor towards completing their next need. Although belongingness in a school environment may not be enough to fully complete a student's need for self-esteem, it is a step forward towards his or her journey of self-actualization.

Self-actualization, according to Maslow, is an effort to reach one's full potential and better oneself in terms of capacities and capabilities. With students reaching a desired level of self-esteem in their school setting, they are prompted to seek self-actualization (Alaghmand et al., 2018). Students work with even more determination to showcase their finest academic capabilities, making efforts to reach their full academic potential. Self-actualization, as a concept, is ever-expanding, making it possible for students to extend themselves without limits.

Psychological Sense of School Membership Scale

There are a number of standardized and validated self-report instruments that researchers may utilize when investigating school climate (Kohl et al., 2013). Although scales are created from different theoretical backgrounds, they have many shared characteristics (Kohl et al., 2013). The three shared characteristics are:

Firstly, most of them approach the subject matter in a very nuanced way, using various subscales to uncover differentiated results. Secondly, most scales presented here focus on student and or teacher perception of school climate variables. Thirdly, almost all of the scales presented here use the relationships between students and teachers and/or students and their peers as well as organizational school factors, such as school rules as a measure of school climate (Kohl et al., 2013, p. 422).

Goodenow's (1993) 18-item Psychological Sense of School Membership Scale, which

has been widely used to measure students' perceptions of belonging in the school environment, served as reference in the creation of the 11-item Peer Learning Community Questionnaire. Many researchers have chosen to utilize the reliable Psychological Sense of School Membership Scale due to its validity. Bosworth et al., (2016) chose to use only four of the items of the Psychological Sense of School Membership Scale for their research. Specifically, they utilized the items that focused on a sense of belonging. Another researcher, Crooks et al., (2016) used all 18 items of the Psychological Sense of School Membership Scale, thereby extending the scope of school climate to youth's perceived feelings of acceptance, inclusion, respect and encouragement for participation at school. Kohl et al. (2013) concluded that:

...researchers often chose to adapt a scale, by adding or dropping variables or by choosing only those subscales that fit their theoretical approach best. Creating a new scale can be advantageous if researchers are taking a new approach to an issue or are faced with a novel context, in which an existing scale might not cover all the variables (p. 423).

For this thesis project, there were modifications made to Goodenow's (1993) 18-item Psychological Sense of School Membership Scale. The original scale did not incorporate the impact of a peer learning community on students who partake in classes offering workshops and office hours hosted by peer learning facilitators. Therefore, an instrument was needed that would measure the perceptions of belongingness and confidence in academic achievement among students. It would simultaneously take into consideration the impact of peer learning communities in the students' departments. Despite similarities between the two instruments, the 11-item Peer Learning Community Questionnaire was created specifically to measure in the context of students' experience with peer learning.

CHAPTER III

METHODOLOGY

The 11-item Peer Learning Community Questionnaire, structured upon the 5-Likert scale ranging from 1= Strongly Disagree to 5= Strongly Agree, was derived from preexisting research studies, especially Goodenow's (1993) 18-item Psychological Sense of School Membership Scale. The 18-item scale has been utilized by a plethora of research studies to measure students' perceptions of belonging in the school environment. The 11-item Peer Learning Community Questionnaire examines the perception of belongingness and confidence in academic achievement among college students by the creation of a peer learning community in their department. The two courses selected for this project were *FCS 170: Creative Expression in Family and Consumer Sciences* and *FCS 380: Family and Consumer Sciences Foundations and Research*. *FCS 170: Creative Expression in Family and Consumer Sciences* is a lower division prerequisite required for all Family and Consumer Sciences majors. The importance of this core course is to help students feel welcomed and see relevancy of the course content toward their specific Family and Consumer Sciences area of study (options). *FCS 380: Family and Consumer Sciences Foundations and Research* has one of the highest D, F, and withdrawal rates within the department.

Formative Evaluation

The 11-item Peer Learning Community Questionnaire (Exhibit 1) was designed to examine the perceptions of belongingness and confidence in academic achievement among students through the creation of a peer learning community in their department. It is an instrument composed of 11-items that are measured using the 5-Likert scale ranging from 1= Strongly Disagree to 5= Strongly Agree. To ensure the feasibility of the questionnaire, an

evaluation by a panel of experts to determine whether the questionnaire is feasible was deemed critical. Based on feedback and concrete information by the experts, modifications were necessary. This improved the initial product, leading to better delivery.

Evaluation by Experts

The panel of experts are university faculty with backgrounds in Adolescent Development, Consumer Affairs, and Kinesiology. Recommendations from the panel of experts lead to considerable improvement and clarification of the subject matter. This in return assisted in achieving greater accuracy and validity.

Expert Evaluation Procedures

The panel of four experts evaluated the 11-item Peer Learning Community Questionnaire. These individuals have an educational background, extensive knowledge, and work experience relevant to this study. All experts hold a doctorate in different disciplines to increase diversity.

Due to Covid-19, active measures necessary to prevent the potential spread of the virus had been considered. Therefore, all experts were reached via email only (Exhibit 2). A copy of the 11-item Peer Learning Community Questionnaire and Expert Evaluation Survey was emailed to each expert on October 5th, 2020. The panel was given six weeks to review the questionnaire and complete the evaluation survey. No compensation was offered to the panel of experts for their evaluations. This eliminated the possibility of any bias.

Expert Evaluation Measurement

The panel of experts evaluated the 11-item Peer Learning Community Questionnaire by using the Expert Evaluation Survey (Exhibit 3). The survey asked the experts to indicate their level of agreement by rating several items on a scale ranging from 1=Strongly Disagree,

2=Disagree, 3= Not Sure, 4= Agree, and 5= Strongly Agree. The experts were asked for their constructive feedback on any statements with level of agreement ≤ 3 . The survey contained close-ended questions, because they are quicker for respondents to answer and easier for researchers to compare.

Apart from the items focusing on the topics of sense of belonging and confidence in academic achievement, the experts were asked to evaluate if the content is easy to understand. Clarity eliminates the risk of misinterpretation and discrepancies. These items were followed by a yes or no question, which asked the experts if he or she would recommend use of the 11-item Peer Learning Community Questionnaire. To capture the most recommendations possible, a free response section requesting experts to provide any additional feedback was added.

Expert Characteristics

The panel consisted of four experts. The individuals presented appreciable educational background, extensive knowledge, and work experience. Furthermore, each expert is a doctorate holder. Two of the panel members were female, and two of the panel members were male.

Expert #1 is a Doctor of Education in Educational Leadership. Some topics she focuses on are parent education, adolescent development, family theories, and human development. She is a University Lecturer within the department of Family and Consumer Sciences.

Expert #2 is a Doctor of Education. She is a University Professor within the department of Kinesiology. Additionally, she supervises the Peer Learning Facilitator Program for Exercise Physiology courses.

Expert #3 is a Professor of Consumer Affairs in the department of Family and Consumer Sciences. He has a Ph.D. in Housing and Consumer Economics. Some of his research interests include consumer decision making, consumption and financial behavior, and financial literacy.

Expert #4 holds a Ph.D. in Human Environmental Sciences, with specialization in Family Relations and Adolescent Development. He is a University Professor of Psychology. His prior research includes investigating peer, school, and neighborhood qualities in relation to adolescent and emerging adult mental health and academics. Additionally, he evaluates university and community programs that promote the health and well-being of children and adults.

CHAPTER IV

RESULTS

Results from the Evaluation by the Experts

The Expert Evaluation Survey captured recommendations from the panel of experts. Given their educational background, extensive knowledge, and work experience relevant to this study, their constructive feedback assisted in achieving greater accuracy and validity. The Expert Evaluation Survey asked the experts to indicate their level of agreement on a scale ranging from 1=Strongly Disagree, 2=Disagree, 3= Not Sure, 4= Agree, and 5= Strongly Agree.

Question 1 Feedback

All experts indicated their level of agreement as ‘Agree’. Expert 1 suggested rewording the statement to say, “After taking the current course with Peer Learning Facilitator (PLF), I feel I am a part of the Family and Consumer Sciences discipline” (personal communication, 2020, October 23). To Expert 3, the question indicated some kind of pre- and post-effect by stating “after taking the course...,” he was fine with the question, however suggested a more natural statement would be better (personal communication, 2020, November 2). Expert 4 recommended removing the comma from the statement, and replacing “I feel I am a part of” with “I feel more connected to” (personal communication, 2020, November 9).

Question 2 Feedback

Expert 1 indicated her level of agreement as ‘Not Sure’, while the others’ level of agreement was ‘Agree’ (personal communication, 2020, October 23). Expert 1 proposed changing “I feel I am more a part of my area of study...” to “I feel I am more connected to my area of study...” (personal communication, 2020, October 23). Expert 2 suggested editing “taking this course with PLF” to “taking this course with the PLF” (personal communication,

2020, October 15). Expert 3 asked if there is any other term to replace “part of my area” in the question, as it seems to duplicate Question 1 to some extent (personal communication, 2020, November 2). Similar to Expert 1, Expert 4 also suggested using “I feel more connected to...” instead of “I feel I am a part of...” (personal communication, 2020, November 9).

Question 3 Feedback

Experts 1 and 2 indicated their level of agreement as ‘Not Sure’, and Expert 4 indicated his level of agreement as ‘Disagree.’ Expert 1 recommended changing “I believe my Peer Learning Facilitator supported my success in the course” to “I believe my Peer Learning Facilitator is supportive towards my success in the course” (personal communication, 2020, October 23). Expert 2 and Expert 4 both mentioned not seeing a strong connection with confidence in academic achievement in Question 3 (personal communication, 2020, October 15 ; personal communication, 2020, November 9). Unlike the other experts, Expert 3 indicated his level of agreement as ‘Strongly Agree.’

Question 4 Feedback

Experts 1 and 4 indicated their level of agreement as ‘Disagree.’ Expert 1 recommended changing the question to read “After taking this course with a PLF I am more likely to take another course with a PLF” (personal communication, 2020, October 23). Expert 4 was concerned that Question 4 was not only pertaining to academic achievement, as the PLF might be providing other sources of support beyond academics (e.g., emotional support, career advice, academic advising) (personal communication, 2020, November 9). Expert 2 indicated her level of agreement as ‘Not Sure’ for the same reason as Expert 4. Unlike the others, Expert 3 ‘Strongly Agreed’ with Question 4.

Question 5 Feedback

Expert 1 indicated her level of agreement as ‘Agree.’ She suggested rearranging the wording to say, “Due to the support of the PLF, I feel more confident about the completion of my degree program” (personal communication, 2020, October 23). Both Expert 2 and Expert 3 indicated their level of agreement as ‘Strongly Agree.’ Expert 4 indicated his level of agreement as ‘Not Sure,’ because more than likely the respondent is thinking about academic achievement when answering the question, but it is also possible the PLF has given advice beyond the specific course (personal communication, 2020, November 9). Therefore, a more specific term should be used to relate Question 5 to academic achievement.

Question 6 Feedback

Expert 1 indicated her level of agreement as ‘Disagree.’ She recommended adding “After taking this course with a PLF” to the start of Question 6 (personal communication, 2020, October 23). Both Expert 2 and Expert 3 indicated their level of agreement as ‘Agree.’ Expert 3 requested CSUN Learning Community be defined and clarified in Question 6 (personal communication, 2020, November 2). Expert 4 indicated his level of agreement as ‘Strongly Agree.’

Question 7 Feedback

Expert 1 indicated her level of agreement as ‘Agree.’ She advised adding “I feel my PLF...” at the start of Question 7 (personal communication, 2020, October 23). Additionally, she recommended replacing the word “comfortable” with “confident.” Expert 2 indicated her level of agreement as ‘Not Sure’ for the same reasons as Expert 1. She suggested changing the word “help with helping” (personal communication, 2020, October 15). Expert 3 indicated his level of agreement as ‘Disagree’ because to him Question 7 is more about the effectiveness of the PLF, rather than the participant’s confidence in academic achievement (personal communication,

2020, November 2). Unlike the others, Expert 4 ‘Strongly Agreed’ with Question 7.

Questions 8 and 9 of the 11-item Peer Learning Community Questionnaire were intentionally omitted from the Expert Evaluation Survey as they were irrelevant to the contents of perception of belongingness and confidence in academic achievement.

Question 10 Feedback

Expert 1 and Expert 2 indicated their level of agreement as ‘Strongly Agree.’ Expert 3 indicated his level of agreement as ‘Agree.’ Unlike the others, Expert 4 indicated his level of agreement as ‘Disagree.’ He mentioned that attending a PLF workshop does not necessarily mean a student feels they belong (personal communication, 2020, November 9). Instead, they may be attending because the workshops are required, to prepare for exams or ask for help on assignments.

Question 11 Feedback

Expert 1 indicated her level of agreement as ‘Not Sure.’ Both Expert 2 and Expert 3 ‘Strongly Agreed’ with Question 11. Expert 4 indicated his level of agreement as ‘Agree.’ Similar to Expert 1, he suggested replacing the word “performance” to “grade” (personal communication, 2020, November 9).

Comprehensibility

Expert 1 indicated her level of agreement as ‘Not Sure’ when asked if the 11-item Peer Learning Community Questionnaire’s content was easy to understand. She mentioned that there was some confusion whether a question was asking about the person who led the workshop or the workshop itself (personal communication, 2020, October 23). Expert 2, Expert 3, and Expert 4 indicated their level of agreement as ‘Strongly Agree.’

Applicability

Expert 1 and Expert 4 rejected use of the 11-item Peer Learning Community Questionnaire to examine the perceptions of belongingness and confidence in academic achievement among students. Expert 1 suggested using open-ended questions (personal communication, 2020, October 23). Expert 4 thought some of the items were not tapping specifically into academic achievement (personal communication, 2020, November 9). Since the goal was to measure whether the students' confidence in academic achievement was better, the questionnaire needed questions specifically asking that, such as "I feel my grades improved due to attending PLF workshops" or "I feel I was more prepared for my exams due to attending PLF workshops." Expert 2 and Expert 3 recommended use of the 11-item Peer Learning Community Questionnaire. Expert 2 suggested the questionnaire needed to address her feedback to become optimal (personal communication, 2020, October 15).

Additional Comments

Expert 1 believed the questions captured the notion of support, comfort, and connectedness well (personal communication, 2020, October 23). Expert 2 mentioned that Question 2 says "more a part," but Question 1 says "a part" (personal communication, 2020, October 15). She recommends using "more a part" for both questions. Expert 3 had no additional feedback to provide. Expert 4 suggested to add more response options on the Likert Scale (e.g., 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree) (personal communication, 2020, November 4).

Discussion of the Expert Evaluation Survey and Modifications

The Expert Evaluation Survey captured recommendations from the panel of experts, which led to considerable clarification of the subject matter. The experts recommended a few modifications to the questionnaire. For future use of this questionnaire, these changes will make

the instrument stronger. For Question 1, all the experts indicated their level of agreement as 'Agree.' Expert 4 recommended replacing "I feel I am a part of" with "I feel more connected to" (personal communication, 2020, November 9). This modification will be applied to the questionnaire. Similarly, in terms of Question 2, Experts 1 and 4 suggested writing "I feel more connected to" instead of "I feel I am a part of," (personal communication, 2020, November 9).

In the feedback for Question 3, the experts recommended modifications to create a stronger connection between the question and confidence in academic achievement. The edit to increase this connection is changing "I believe my Peer Learning Facilitator supported my success in the course" to "I believe my Peer Learning Facilitator is supportive towards my success in the course," as recommended by Expert 1 (personal communication, 2020, October 23). Question 4 needs to be modified to read: "After taking this course with a PLF I am more likely to take another course with a PLF," as recommended by Expert 1 (personal communication, 2020, October 23). This will also satisfy the suggestions by Expert 2 and 4 of emphasizing the support offered by PLF. For Question 5, Experts 2 and 3 responded that they 'Strongly Agree,' while Expert 1 responded 'Agree.' Expert 4 suggested that the question be made more specific to pertain to academic achievement and PLF. To satisfy recommendations made by Experts 1 and 4, the question needs to read: "Due to the support of the PLF, I feel more confident about the completion of my degree program" (personal communication, 2020, October 23). As recommended by Experts 1 and 3, Question 6 needs to be made more specific, and "After taking this course with a PLF" needs to be added to the start of the question (personal communication, 2020, October 23).

Some modifications need to be made to Question 7 as recommended by Experts 1 and 2, who thought that the question should be molded to emphasize the opinion of the individual

student. The question needs to be modified to include “I feel my PLF...” at the start of Question 7 (personal communication, 2020, October 23). Additionally, the word “comfortable” needs to be replaced with “confident,” and the word “help” with “helping” (personal communication, 2020, October 15). This will also address Expert 3’s suggestion of focusing on the participant’s confidence in academic achievement (personal communication, 2020, November 2). No modification needs to be made to Question 10, as a majority of the experts ‘Agree’ or ‘Strongly Agree’ with the question. Question 11 needs to be only slightly modified to replace the word “performance” with “grade,” as recommended by Experts 1 and 4 (personal communication, 2020, November 9).

On the 11-item Peer Learning Community Questionnaire “Neither or N/A” negates “3” as a midpoint. Weems and Onwuegbuzie (2001) determined that:

...the midpoint could imply neutral, don't know, don't care, or no opinion. This creates a serious threat to validity because the responses are coded and interpreted as the middle value regardless of the actual reason for selecting the category. For example, a respondent with no knowledge of the topic (i.e., "don't know") may select the midpoint, and his or her viewpoint would be interpreted as middle-of-the-road (p. 167).

Expert 4 suggested to add more response options on the Likert Scale (e.g., 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree) (personal communication, 2020, November 04). With this modification, more continuous level data will be retrieved.

Expert 2, Expert 3, and Expert 4 indicated their level of agreement as ‘Strongly Agree’ when asked if the Peer Learning Community Questionnaire’s content was easy to understand, and the questionnaire was accepted by Experts 2 and 3 to examine the perceptions of

belongingness and confidence in academic achievement among students. It is anticipated that with the application of the suggested modifications, the questionnaire will also be accepted by Experts 1 and 4. Incorporating these suggestions will ensure that the questionnaire will be a strong instrument for measuring the perceptions of belongingness and confidence in academic achievement among students. Exhibit 4 presents the revised 11-item Peer Learning Community Questionnaire including the suggested modifications by the panel of experts.

Summary

The Expert Evaluation Survey captured recommendations from the panel of experts, which led to considerable clarification of the subject matter. The experts have suggested a few modifications be made to the 11-item Peer Learning Community Questionnaire. An overall theme that emerged from the experts' purpose of suggestions was to use more specific terminology for academic achievement. Expert 2 and Expert 3 accepted use of the questionnaire to examine the perceptions of belongingness and confidence in academic achievement among students. Expert 4 suggested to add more response options on the Likert Scale; this leads to more continuous level data. By incorporating the experts' suggestions, the 11-item Peer Learning Community Questionnaire will become a stronger instrument.

CHAPTER V

DISCUSSION

The purpose of this graduate project was to create the 11-item Peer Learning Community Questionnaire to measure students' sense of belongingness and confidence in academic achievement on students who partake in classes offering workshops and office hours hosted by peer learning facilitators. Supplemental instruction (SI) includes recurrently scheduled, outside of the classroom, peer-facilitated workshops that offer students an opportunity to discuss and process course information (Martin & Arendale, 1993). Martin and Arendale (1993) concluded:

1. Students participating in SI within the targeted high-risk courses earn higher mean final course grades than students who do not participate in SI. This finding is still true when analyses control for ethnicity and prior academic achievement.
2. Despite ethnicity and prior academic achievement, students participating in SI within targeted high-risk courses succeed at a higher rate (withdraw at a lower rate and receive a lower percentage of [fail] final course grades) than those who do not participate in SI.
3. Students participating in SI persist at the institution (reenroll and graduate) at higher rates than students who do not participate in SI (p. 26).

By administering the questionnaire twice during the semester, faculty and administrators are able to assess an increase in sense of belongingness and confidence in academic achievement among students partaking in the courses.

Implications

Before the implementation of the 11-item Peer Learning Community Questionnaire within the department, current students may offer feedback on the clarity and efficiency of the

instrument. Conducting test runs with current students will check for reliability. Once administered, the 11-item Peer Learning Community Questionnaire will allow the department to detect courses reporting lower levels of sense of belongingness and/or confidence in academic achievement. The department can reach out to instructors and peer learning facilitators to develop a revised program that promotes students' emotional and academic success. Once determined, instructors and peer learning facilitators can adjust the workshops and how they support students. Therefore, this product can assist instructors and peer learning facilitators in developing meaningful connections with their students.

In addition, the Likert scale format allows future researchers to administer the questionnaire by paper, or easily transfer it onto platforms such as Google Forms or Qualtrics Surveys. Therefore, this tool can be used on other populations within the university, such as different colleges and departments, to obtain a more accurate representation of the students' sense of belonging and confidence in academic achievement. Essentially, the 11-item Peer Learning Community Questionnaire would serve as a template, which all faculty and staff may replicate for similar projects.

Conclusion

The purpose of this graduate project was to create the 11-item Peer Learning Community Questionnaire to measure students' sense of belongingness and confidence in academic achievement when partaking in classes offering workshops and office hours hosted by peer learning facilitators. The process of writing the 11-item Questionnaire was guided by the research completed within the literature review, and by the 18-item Psychological Sense of School Membership scale (Goodenow, 1993). The review of literature confirmed a higher sense of belongingness is present when a student has interaction with his or her peers. It also confirms

as studies aforementioned in our literature review have concluded, school belongingness and membership also have a positive correlation with higher academic achievement and academic confidence, overall. Furthermore, by encompassing the impact of peer learning communities on belongingness and confidence in academic achievement, we extend the literature, research, and products that created a base for our research study. Thus, the questionnaire is capable of providing information regarding students' sense of belongingness and confidence in academic achievement by the creation of a peer learning community.

The questionnaire was accepted by Experts 2 and Expert 3 to examine the perceptions of belongingness and confidence in academic achievement among students. It is anticipated that with the application of the suggested modifications, the questionnaire will also be accepted by Experts 1 and Expert 4. Incorporating these suggestions will ensure that this questionnaire will be a strong instrument for measuring the perceptions of belongingness and confidence in academic achievement among students. It is recommended the Family and Consumer Sciences department administer the questionnaire to measure students sense of belongingness and confidence in academic achievement.

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APPENDICES

Exhibit 1: 11-item Peer Learning Community Questionnaire

Course:

Peer Learning Facilitator:

For each of the following statements, please circle the most suitable number.

1. I feel I am a part of the Family and Consumer Sciences discipline, after taking the current course with Peer Learning Facilitator (PLF).

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

2. I feel I am more a part of my area of study within Family and Consumer Sciences (Apparel Design and Merchandising; Consumer Affairs; Family and Consumer Sciences Education, Family Studies; Interior Design; Nutrition, Dietetics and Food Science) after taking this course with PLF.

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

3. I believe my Peer Learning Facilitator supported my success in the course.

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

4. I feel more encouraged to take courses offering a Peer Learning Facilitator option after taking this course.

5	4	3	2	1
Strongly	Agree	Neither Or	Disagree	Strongly
Agree		N/A		Disagree

5. I feel more confident about the completion of my degree program with the support of the Peer Learning Facilitator.

5	4	3	2	1
Strongly	Agree	Neither Or	Disagree	Strongly
Agree		N/A		Disagree

6. I feel I am a part of the CSUN learning community.

5	4	3	2	1
Strongly	Agree	Neither Or	Disagree	Strongly
Agree		N/A		Disagree

7. My Peer Learning Facilitator offered beneficial assistance, such as help me to feel more comfortable completing assignments or taking exams.

5	4	3	2	1
Strongly	Agree	Neither Or	Disagree	Strongly
Agree		N/A		Disagree

The following items are only for students enrolled in FCS 380.

8. How many Peer Learning Facilitator lead workshops did you attend this semester? (Choose the best approximate answer.)

10	9	8	7	6	5	4	3	2	1	0
or										
More										

9. Attending a Peer Learning Facilitator lead workshop was convenient for me.

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

10. Peer Learning Facilitator lead workshop made me feel welcomed to the PLF session.

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

11. I feel my performance in the course improved by attending a PLF workshop.

5	4	3	2	1
Strongly Agree	Agree	Neither Or N/A	Disagree	Strongly Disagree

Is there anything you would like to share about the Family and Consumer Sciences Learning Community Project?

Exhibit 2: Email

Hello,

My name is Divjot Kaur, and I'm a candidate for the Master of Science in Family and Consumer Sciences. I've been working with Dr. Jongeun Kim and Dr. Yoko Mimura on developing a peer learning community in our department. This interest led me to focus my thesis project on perceptions of belongingness and confidence in academic achievement among students through the creation of a peer learning community. To evaluate the impact of attending workshops and office hours led by peer facilitators on students, I've developed an 11-item Peer Learning Community questionnaire.

Your previous work and expertise are repeatedly mentioned by many, especially Dr. Kim and Dr. Mimura. I humbly request you to volunteer to serve as one of the three experts on the evaluation panel. You would evaluate the "Peer Learning Community" questionnaire using an Evaluation Survey. I'll attach the two documents to this email for your reference. I'm approaching you with high hopes and would appreciate any feedback.

If you're available to assist in the betterment of my "Peer Learning Community" questionnaire, please let me know. My request is to have your evaluation returned by October 20th, 2020. If you have any questions or concerns, please email me. Thank you for your time and consideration.

Best Regards,

Divjot Kaur

Exhibit 3: Expert Evaluation Survey

Directions: Please circle a number to indicate your level of agreement. If for any statements your level of agreement is ≤ 3 , your constructive feedback would be appreciated for the betterment of the "Peer Learning Community" questionnaire.

		Strongly Agree			Strongly Disagree	
1.	Question 1 of the evaluation captures sense of belonging. Feedback:	1	2	3	4	5
2.	Question 2 of the evaluation captures sense of belonging. Feedback:	1	2	3	4	5
3.	Question 3 of the evaluation captures confidence in academic achievement. Feedback:	1	2	3	4	5
4.	Question 4 of the evaluation captures confidence in academic achievement. Feedback:	1	2	3	4	5
5.	Question 5 of the evaluation captures confidence in academic achievement. Feedback:	1	2	3	4	5
6.	Question 6 of the evaluation captures sense of belonging. Feedback:	1	2	3	4	5
7.	Question 7 of the evaluation captures					

confidence in academic achievement. 1 2 3 4 5

Feedback:

8. Question 10 of the evaluation

captures sense of belonging. 1 2 3 4 5

Feedback:

9. Questions 11 of the evaluation captures

confidence in academic achievement. 1 2 3 4 5

Feedback:

10. The "Peer Learning Community"

questionnaire content is easy to
understand. 1 2 3 4 5

Feedback:

11. Would you recommend use of the
"Peer Learning Community" questionnaire to
examine the perceptions of belongingness and
confidence in academic achievement among
students?

Yes No

Feedback:

**Questions 8 and 9 of the "Peer Learning Community" questionnaire were intentionally omitted from this evaluation as they are irrelevant to the contents of perceptions of belongingness and confidence in academic achievement.*

Please provide any additional comments:

Exhibit 4: Revised 11-item Peer Learning Community Questionnaire

Course:

Peer Learning Facilitator:

For each of the following statements, please circle the most suitable number.

1. I feel more connected to the Family and Consumer Sciences discipline, after taking the current course with Peer Learning Facilitator (PLF).

6	5	4	3	2	1
Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

2. I feel more connected to my area of study within Family and Consumer Sciences (Apparel Design and Merchandising; Consumer Affairs; Family and Consumer Sciences Education, Family Studies; Interior Design; Nutrition, Dietetics and Food Science) after taking this course with PLF.

6	5	4	3	2	1
Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

3. I believe my Peer Learning Facilitator is supportive towards my success in the course.

6	5	4	3	2	1
Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

4. After taking this course with a Peer Learning Facilitator, I am more likely to take course with a Peer Learning Facilitator.

6	5	4	3	2	1
Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree

5. Due to the support of the Peer Learning Facilitator, I feel more confident about the completion of my degree program.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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6. After taking this course with a Peer Learning Facilitator, I feel I am a part of the CSUN learning community.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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7. I feel my Peer Learning Facilitator offered beneficial assistance, such as helping me to feel more confident completing assignments or taking exams.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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The following items are only for students enrolled in FCS 380.

8. How many Peer Learning Facilitator lead workshops did you attend this semester? (Choose the best approximate answer.)

10	9	8	7	6	5	4	3	2	1	0
or										
More										

9. Attending a Peer Learning Facilitator lead workshop was convenient for me.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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10. Peer Learning Facilitator lead workshop made me feel welcomed to the PLF session.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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11. I feel my grade in the course improved by attending a PLF workshop.

6 Strongly Agree	5 Agree	4 Slightly Agree	3 Slightly Disagree	2 Disagree	1 Strongly Disagree
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Is there anything you would like to share about the Family and Consumer Sciences Learning Community Project?