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Class Size and Nursing Students' Perception of Empowerment

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**SAN JOSE STATE UNIVERSITY
SCHOOL OF NURSING**

**MASTER'S PROGRAM PROJECT OPTION (PLAN B)
PROJECT SIGNATURE FORM**

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The project and the manuscript have been successfully completed and meet the standards of the School of Nursing University. The project demonstrates the application of professional knowledge, clinical expertise, and scholarly thinking. An abstract of the project and two copies of the manuscript are attached.

Marian K. Guder

5-20-09.

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Class Size and Nursing Students' Perception of Empowerment

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Abstract

Due to increases in enrollment and budget cuts in some states, college class sizes are reaching unprecedented levels (Carpenter, 2006). Schools are looking for ways to stay within their budgets while providing cost-effective education for students. Nursing schools are also facing new challenges with student enrollment growth. Limited research has been conducted in the area of the effects of class size on nursing students' perception of empowerment. Conger (1989) defines empowerment as the act of reinforcing one's belief in his or her perception of competence. To prepare nurses for roles in which they may successfully exercise the power to create change, they need to first experience empowerment during their education (Clay, 1992). To achieve the optimal learning experience in face of increasing class size, it is important to explore how nursing students experience learning in both small and large class environments. This study surveyed 71 BSN students enrolled in both small and large-size classes on their perceptions of empowerment.

Class Size and Nursing Students' Perception of Empowerment

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Key Words: Nursing Students -- Class size -- Empowerment -- Learning Experience

Abstract

Due to increases in enrollment and budget cuts in many states, college class sizes are reaching unprecedented sizes (Carpenter, 2006). Nursing schools are facing the same challenges. Only limited research has been conducted on the effects of class size on nursing students' perception of empowerment. Conger (1989) defines empowerment as the act of reinforcing one's belief in his or her perception of competence. Empowerment is important for nursing students' education (Chally, 1992). To achieve the optimal learning experience in face of increasing class size, it is important to explore how nursing students experience learning in both small and large class environments. This study surveyed 71 BSN students enrolled in both small- and large-size classes on their perceptions of empowerment. The study's findings showed statistically significant differences in favor of small classes positively impacting the students' perceptions of empowerment and the quality of their individual learning experiences.

Research Problem

Colleges and universities across the nation are experiencing significant growth in student enrollment. This increase in enrollment coupled with cuts in the college budgets in a number of states has resulted in class sizes reaching unprecedented sizes (Carpenter, 2006). Nursing schools are facing the similar challenge of educating more students with less money and are similarly not immune to the resultant increase in class sizes. While much research has been done by other disciplines such as sociology and education on the impact of students' learning experience in larger classes, there is very little such research specifically addressing the effects of class size on nursing students' learning experience (Leufer, 2007). To achieve the optimal learning experience in face of increasing class sizes, nursing educators should explore nursing students' perceptions about their learning in both small-and large-class environments.

One of the only studies on class size in nursing education was done by Leufer in 2007. In the Republic of Ireland, Leufer surveyed 67 second-year nursing students about their learning experiences in a large-class setting in which the numbers of students ranged from 60 to 149. Leufer's study suggested that certain factors affecting learning are accentuated in a large-class setting, the most notable being class participation. Leufer's data showed that over 55% of students surveyed felt they would participate more

if classes were smaller. Leufer acknowledged that a comparison between students' learning experiences in a small-class setting versus a large-class setting, which was beyond the scope of her study, would be "useful." This study builds upon Leufer's work by surveying 71 second-year nursing students in a northern California University about perceptions on the effect of class size on a critical factor for an effective learning experience: student empowerment.

Research Question and Definition

The purpose of this study was to investigate the influence of class size on nursing student empowerment. The aim of the study was to compare nursing students' perception of empowerment in a large-size class verses a small-size class.

This study utilized the term empowerment as defined by Conger (1989), which is the act of reinforcing one's beliefs in his or her perception of competence. Empowerment through teaching is built on the belief that successful and effective learning emerges from meaningful connections between students and faculty. Empowerment results from teaching that is characterized by caring, commitment, creativity, and interactivity. Teaching that is supportive of the humanity of both teacher and students also engenders student empowerment. The tools that both students and teachers must possess or acquire for empowerment include positive self-concept,

creativity, resources, information, and support resulting in the process of learning (Espeland & Shanta, 2001; Chally, 1992). For this study, Mateo and Fernandez's (1996) categories of class size will be utilized as follows: classes with 3-9 students are considered "very small;" 10-29 students "small;" 30-59 students are "medium;" 60-149 students are "large;" and 150 or more students are "very large."

Background/Literature Review

Class Size

There is significant information on the effects of class size and student learning in the general education databanks (Prensky, 2001). While new data is being published in the area of teaching strategies in nursing education, there is little information available on the impact of class-size environment on the learning experience of college nursing students (Teeley, 2007; Hall, 2009).

Although a number of studies have explored the effects of class-size environment on student learning in general (Billson, 1986; Blatchford, Bassett, Brown, Martin, & Russell, 2004), these studies did not focus specifically on a particular major or education specialty. Recent studies have shown class size has an effect on quality and effectiveness of teaching (Weaver & Qi, 2005). In large groups, students were found to have a more passive role, whereas in smaller classes, students were more likely to

interact in an active way (Blatchford et al., 2004). Encouraging participation can facilitate the learning process and promote deep learning in students (Beeks, 2006). Large size classes may not be conducive to student participation. Levels of participation have been shown to vary in quality, quantity, and duration depending on class size (Blatchford et al., 2004). In classes in which student participation is encouraged, the learning process facilitated and promoted deep learning in students. Research suggests that levels of participation and interaction are related to the amount of learning that takes place (Boman, 1986; Leufer, 2007).

Some research suggests that students who actively participate in the learning process learn more than those who do not (Weaver & Qi, 2005). Active involvement in class facilitates critical thinking and the retention of information that might otherwise be lost (Gardside, 1996; Ormrod, 2008). Small class size can enhance teaching effectiveness by improving student participation level, increasing individual and group motivation, stimulating enthusiasm, and facilitating communication in the classroom (Billson, 1986). Lack of participation or engagement in the class may lead to insufficient learning, which can then lead to lack of perceived empowerment. Students who are unsure of themselves tend to work more slowly and make more errors (Kanter, 1993). Although most instructors acknowledge the value of active participation in the college classroom, achieving this success appears very difficult (Weaver & Qi, 2005).

For instructors and students, the classroom is akin to the workplace: individual's respective status is defined, and goals, tasks, and rules are specified (Weaver & Qi, 2005). Weaver & Qi (2005) found as class size grows, professors tend to resort to lecture-text teaching and this may limit students' opportunity to participate. It also becomes more difficult for faculty to develop close mentoring relationships with students in larger classes where anonymity, for the most part, prevails. Large classes permit greater anonymity by enabling students to seat themselves along the perimeter of the classroom, allowing themselves to disengage in class (Weaver & Qi, 2005). On the other hand, smaller classes not only make general student participation feasible but also make passive withdrawal in class less possible. Therefore, greater opportunities for student participation are seen in smaller classes (Weaver & Qi, 2005).

The one study that specifically addressed the issue of class size was Leufer (2007). She examined nursing students' learning experiences in a large-size class. The study investigated experiences of 67 second-year nursing students in Ireland. Nursing education in Ireland had recently changed from a hospital-based program to a university setting. With universities interested in greater efficiency and effective use of resources, this change affected the learning environment of nursing students by introducing many more large-size classes. Leufer (2007) explored how the change in class size affected students' perceptions of learning.

Class size is an integral element of any academic environment, and the potential impact on students' perceptions cannot be overlooked (Leufer, 2007). Leufer (2007) found a significant correlation between student participation and class size. Existing literature in the area of large-group learning suggests a relationship between class size and participation levels (Weaver & Qi, 2005). The findings showed that participation levels in large size classes were lower than in the smaller classes students were attending. Leufer (2007) found that students in smaller classes were more likely to participate in class and interact with instructors and peers. Leufer's (2007) findings showed that these behaviors in students (i.e., increased participation and interaction with instructors) allowed them to perceive higher learning accomplishments.

Empowerment

Empowerment is an increasingly popular theme in nursing education (Kalb, 2008; Johnson, 2009). Empowerment, as defined by Conger (1989), is the act of reinforcing one's belief in his or her perception of competence. Empowerment has also been defined in nursing education as an attachment between students and teachers (Chally, 1992; Leyshon, 2002). When students are empowered, they feel autonomous and are more likely to be engaged with the world and are inclined to bring about change (Tinto, 1997). Autonomy is the ability to think, decide, and act confidently and

independently (Gillon, 1985; Ormrod, 2008). Confidence enhances the belief that the instructor or classmates will favorably receive one's remarks or questions, adding a form of "social energy" that invigorates the classroom (Weaver & Qi, 2005). The characteristics seen in empowered nursing students are high self-esteem, motivation for learning, and feelings of personal growth (Bradbury et al., 2007).

Theoretical Framework

The guiding theoretical framework for this study was Kanter's Theory of Structural Empowerment. Kanter's (1993) Theory of Structural Empowerment comes from the schools of business and sociology. Kanter designed this framework for the workplace, after spending much time studying men and women's behavior in corporate America. The framework identifies six structural organizational conditions conducive to workplace empowerment. The six tenets of her framework are formal power, informal power, opportunity, information, support, and resources. Kanter (1977) states that access to these empowerment structures shape work attitudes or behaviors and, most importantly, work effectiveness. Pursuant to her theory, Kanter (1977) states that work behaviors and attitudes are determined by the amount of power to which individuals have access within their work settings. Employees who have access to support, information, resources, and opportunities feel a greater sense of empowerment, and thus appear to

work more effectively (Sui, Laschinger, & Vingilis, 2005). Kanter (1977) maintains that power is the ability to get things done and to access resources in order to meet individual goals.

Kanter's Theory of Structural Empowerment has been applied to the nursing classroom in an attempt to assess the impact of student empowerment on learning (Sui, et al. 2005). When applied specifically to nursing students, researchers found that structural empowerment increases student motivation, confidence and self-direction for learning (Sui, et al. 2005). The researchers (Sui, et al., 2005) believed that these findings were consistent with Kanter's theory that empowering environments promote individuals' actual and perceived learning effectiveness and improve accomplishment of personal learning goals. (Kanter, 1993). Kanter (1993) described support as endorsement, backing, approval, and legitimacy. Teachers give support to students through personal, specific ways - - a smile, feedback on a paper, acknowledgment of frustration, revising due dates because of deadlines in other classes, or discussing class assignments on a one-to-one basis (Chally, 1992).

Methodology

Sample and Setting

Data were collected from full-time nursing students enrolled in their second year of a generic baccalaureate nursing program in a California public university. Students attended both small and large classes. The convenience sample consisted of 71 second-year nursing students present in class on the day of the study. Of the 65 nursing students who provided demographic information, 54 were female and 11 male. By ethnicity, 25 were Caucasian, 24 Asian, 6 Pacific Islander, 3 Hispanic, and 2 Black. Thirty-seven of the students were between the ages of 21- 24, 16 between ages 25-30, 3 between ages 31-35, 3 between ages 36-40, and 4 between ages 41-50. Sixteen of the students considered English their second language (ESL).

Instrument

For use in this study, this researcher developed the Nursing Course Experience Questionnaire (NCEQ), which was adapted from Ramsden's (1991) Course Experience Questionnaire (CEQ). Since 1992, the CEQ has been administered to Australian university graduates in order to obtain data on students' perceptions of their learning experiences. After Institutional Review Board approval of this study, the NCEQ was distributed to the students during class. The questionnaire took the students approximately 15

minutes to complete. This questionnaire was designed to measure students' perceptions regarding various aspects of both their nursing seminar class (small-size class of 24 students) and nursing theory class (large-size class of 72 students). Students were instructed to consider overall experiences in each of the courses rather than focusing on individual instructors or topics. The responses were anonymous and no identifying information was associated with their responses. The questionnaire was designed to elicit quantitative data and contained questions that used Likert-type scales to measure responses. The 14-item instrument was scored on a 5-point Likert-style scale, with scores ranging from 1 (strongly agree) to 5 (strongly disagree).

Data analysis

Descriptive statistics were used to describe the sample and perceptions of empowerment. A survey design, which is primarily used to measure characteristics of a population, was used to gather data (DePoy & Gitlin, 2005). Data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 16.0, which provided descriptive statistics regarding the sample. Dependent sample or paired sample t tests were performed. According to DePoy & Gitlin (2005), two-tailed t-tests are appropriate to compare the two sample means from the one population to show the

differences between the two sample ratings. The two samples consisted of small and large class-size data.

Findings

Of the 14 items surveyed, the students' answers to 8 of them showed a statistically significant difference in the students' perceptions of empowerment in large versus small class size ($p < .05$). Small class size appears to have favorably impacted the students' experiences relating to the following 8 survey items, which are listed here by their corresponding number from the survey and as also reflected in Figure I: (1) The instructor put a lot of time into commenting on my work; (2) The instructor gave me helpful feedback on how I was doing; (4) I was given enough time to understand the things I had to learn; (5) The class helped me develop my ability to work as a team member; (6) The instructor motivated me to do my best; (10) The instructor [in the large class versus the small class] was more interested in testing what I had memorized than what I had understood; (11) The instructor made efforts to understand difficulties I might be having with my work; (12) The class improved my skills in written communication. The students' responses to the remaining 6 survey items, on the other hand, reflected no statistical difference between small and large class size.

Discussion

This study provided useful findings on the student learning experience with regard to perceptions of empowerment depending on class size. Specifically, the 8 survey items with responses that reflected a statistically significant difference between class size suggest that students perceive themselves to be more empowered in small classes. In the small class, compared to the large class, students perceived that they had a more meaningful and productive relationship with their instructor. Specifically, in the smaller class the students reported that the teacher motivated them more, invested more time in providing helpful feedback on their work, and made better efforts to understand difficulties they faced with the class materials. In addition, it was not surprising, given the other results, that the students perceived that teacher was more interested in what they understood rather than only what they had memorized. In addition to a more productive relationship with the instructor, the students identified other aspects of the smaller class size than made it more conducive to effective learning. The students reported that their small class gave them enough time to learn and was less focused on pure memorization of material. The ability to work as a team member was developed better in the small class. Writing skills, they also said, were better taught in the small class.

The survey results showing students' perception of being more empowered in the smaller class because of a more meaningful and productive relationship with the instructor is consistent with previous findings in the literature (Leyshon, 2002). Student empowerment results from teaching that is caring, committed, creative, interactive, and that also recognizes the humanity of both teacher and student (Espeland & Shanta, 2001; Chally, 1992). Nothing in this survey said more about student empowerment than the findings that in the instructor in the smaller class was better able to motivate the students to learn and to focus on the actual learning process.

Survey results on 6 of the 14 items did not reflect a statistically significant difference in the students' perceptions in small versus large class size. The items that surveyed neutral include sharpening of analytical skills, development of problem-solving skills, and development of skills to plan the students' own work. This researcher was surprised that the students' perception of development of these specific skills did not appear to be enhanced in the small class. With Conger's definition of empowerment as the act of reinforcing one's belief in his or her own perception of competence (1989), this researcher would have expected the students' perceptions of development of their problem-solving, analytical, and planning skills, all of which support competence, to reflect the enhanced empowerment generally found in small versus large classes.

Limitations

Although the study provided useful insight into student perceptions of empowerment, generalization is limited because the sample included 71 students from just one semester in one college. Additionally, although the questionnaire expressly directed the students to answer the questions based on their overall experience in the respective courses rather than focusing on the instructors, there is still a possibility that student bias might have influenced their perceptions and resultant answers. Such bias might be unintended. To address the above limitations, the study should be replicated using a larger sample of students from several nursing programs. With regard specifically to potential teacher bias, a study could be applied to small and large classes taught by the same instructor.

Conclusion

This study's findings suggest that small class size enhances student empowerment and therefore positively affects the students' learning experience. Specifically, the findings support the conclusion that a smaller class causes the students to perceive a more productive and meaningful relationship with their instructors. Additionally, students perceived the smaller class to give them sufficient time to learn the material rather than simply memorize it.

This study's findings build on the conclusions reached by Leufer (2007). Leufer (2007) stated that providing a high quality learning experience is essential, not only for the nursing student, but ultimately for the patient. It is essential that nursing students develop effective skills to deliver safe, competent care to their patients. Specifically, Leufer found that the quality of the learning experience in a large class was adversely impacted. This study builds on Leufer's article by exploring what that author expressly recognized was beyond the scope of her research: a comparative sampling of students' perceptions of their respective experiences in a small versus a large class. In addition, this study explored students' perceptions about class size using a sample from the United States and now reaffirms in two countries the implications for nursing education in colleges and universities facing today's global economic challenges.

References

- Beeks, W. (2006). The millionaire method for encouraging participation. *Active Learning in Higher Education*, 7(1), 25-36.
- Billson, J. (1986). The college classroom as a small group: Some implications for teaching and learning. *Teaching Sociology*, 14(3), 143-151.
- Blatchford, P., Bassett, P., Martin, C., & Russell, A. (2004). The effects class size on attainment and classroom processes in English primary schools (years 4 to 6). Research brief. London: Department of Education and Skills.
- Boman, J. (1986). Facilitating student involvement in large classroom settings. *Journal of Nursing Education*, 25(6), 226-229.
- Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2007). The meaning of empowerment for nursing students: A critical incident study. *Journal of Advanced Nursing*, 59(4), 342-351.
- Carpenter, J. (2006). Effective teaching methods for large classes. *Journal of Family and Consumer Sciences Education*, 24(2), 13-23.
- Chally, P. S. (1992). Empowerment through teaching. *Journal of Nursing Education*, 31(3), 117-120.

- Conger, J. (1989). Leadership: the art of empowering others. *The Academy of Management Executives*, 3, 17-24.
- Depoy, E. & Gitlin, L. (2005). Introduction to research: Understanding and applying multiple strategies (3rd ed.). St. Louis: Elsevier Mosby.
- Espeland, K. & Shanta, L. (2001). Empowering versus enabling in academia. *Journal of Nursing Education*, 40(8), 342-346.
- Gardside, C. (1996). Look who's talking: A comparison of lecture and group discussion teaching strategies in developing critical thinking skills. *Communication Education*, 45, 212-227.
- Gillon, R. (1985). *Philosophical medical ethics*. John Wiley & Sons, Chichester.
- Hall, W. (2009). Whither nursing education? Possibilities, panaceas, and problems. *Nurse Education Today*, 29(3), 268-275.
- Johnson, B. (2009). Empowerment of nursing educators through organizational culture. *Nursing Education Perspectives*, 30(1), 8-13.
- Kalb, K. (2008). Core Competencies of nursing educators: Inspiring excellence in nursing educator practice. *Nursing Education Perspectives*, 29(4), 217-219.

- Kanter, R.M. (1977). Men and women of the corporation. New York: Basic Books.
- Kanter, R.M. (1993). Men and women of the corporation (2nd ed.). New York: Basic Books.
- Leufer, T. (2007). Students' perceptions of learning experience in a large class environment. *Nursing Education Perspectives*, 28(6), 322-326.
- Leyshon, S. (2002). Empowering practitioners: An unrealistic expectation of nurse education? *Journal of Advanced nursing*, 40(4), 466-474.
- Mateo, M. A., & Fernandez, J. (1996). Incidence of class size on the evaluation of university teaching quality. *Education and Psychological Measurement*, 56(5), 771-778.
- Ormrod, J. (2008). Human Learning (5th ed.). Upper Saddle River, New Jersey: Pearson, Merrill, Prentice Hall.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
- Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The course experience questionnaire. *Studies in Higher Education*, 16(2), 129-150.

Siu, H.M., Laschinger, H.K.S., & Vingilis, E. (2005). The effect of problem-based learning on nursing students' perceptions of empowerment. *Journal of Nursing Education*, 44, 459-469.

Teeley, K. (2007). Designing hybrid web-based courses for accelerated nursing students. *Journal of Nursing Education*, 46(9), 417-422.

Tinto, V. (1997). Universities as learning organizations. *About Campus*, 1(2), 2-3.

Weaver, R., Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education*, 76(5), 570-601.

Figure I

Nursing Course Experience Questionnaire Results

Scale: 1=Strongly Agree; 5=Strongly Disagree

- 1) The instructor put a lot of time into commenting on my work.
- 2) The instructor gave me helpful feedback on how I was doing.
- 3) To do well in this course all you really need is a good memory.
- 4) I was given enough time to understand the things I had to learn.
- 5) The class helped me develop my ability to work as a team member.
- 6) The instructor motivated me to do my best.
- 7) The class sharpened my analytic skills.
- 8) The workload was too heavy.
- 9) The class developed my problem-solving skills.
- 10) The instructor was more interested in testing what I had memorized than what I had understood.
- 11) The instructor made efforts to understand difficulties I might be having with my work.
- 12) The class improved my skills in written communication.
- 13) As a result of this class, I feel confident about tackling unfamiliar problems.
- 14) This class helped me to develop the ability to plan my own work..

Results of t-tests showed a statistically significant difference in the means for items 1, 2, 4, 5, 6, 10, 11, and 12 ($p < .05$).