

EFFECT OF PEER MENTORS ON ACADEMIC PERFORMANCE

Elizabeth Bonin[§]

Doctoral Student, Ed.D. Program in Leadership and Learning, Rivier University

Keywords: *peer ment*, college student, GPA, grade, tutor**

Abstract

Undergraduate peer mentoring programs strive to retain students who solve their own problems, develop options, unravel obstacles, and establish a process of figuring out solutions. A crucial component of obtaining that goal is to effectively train peer mentors to serve as advocates to freshman undergraduate students. Terrion and Pillion (2008) note “that mentor training is indispensable in providing tools and techniques that mentor will use in their mentoring function [including] an ongoing and formal training program which emphasized an experiential and self-reflexive approach.” Undergraduates benefit from the experience and skills of peer mentors who are able to create a safe environment for freshmen to share their questions and concerns. Relationship building includes being present for the other, a behavior at the heart of peer mentoring programs. Teaching peer mentors to listen with empathy is an important component the relationship building process. In addition, peer mentors trained in conflict resolution, giving and receiving feedback, and team building will be better prepared to assist undergraduates to navigate the transition into college life. A future study may include research on leadership training with an emphasis on service and its effect on peer mentoring programs.

Introduction

In undergraduate education, the definition of peer mentoring remains inconsistent. A commonly acknowledged description of a peer mentor is a guide who helps freshmen navigate through academic, social, and personal difficulties. The common objective of peer mentoring is to transition students from secondary school into college by decreasing stress through informal, caring relationships. Peer mentors are trained to promote positive academic behaviors that may have an advantageous effect on the freshman’s motivation level and method of study. According to Whitney, Hendricker, and Offutt (2011), secondary school students with close relationships to their peer mentors report “greater psychological well-being, including increased self-esteem, greater life satisfaction, fewer depressive symptoms, and lower levels of suicide ideation and substance use.” The psychosocial benefits of a peer mentoring program are discussed in much of the literature. Mentees report feeling more confident and comfortable in their new college environment because they have an upperclassman to advise them on topics ranging from roommate issues to contacting a professor.

The development of undergraduate peer mentoring programs includes several interrelated factors. Formal peer mentor training is consistently identified as a crucial component to peer mentoring programs (Terrion & Pillion, 2008). Peer mentor training includes effective communication, time management, problem solving, decision making, and study skills. Another key component to effective peer mentoring programs includes establishing a consistent time and place to meet face-to-face. At some colleges and universities, the mentors and mentees are matched before the beginning of the first semester to provide an opportunity for contact by phone or social networking over the summer. Once the semester begins, there are planned meetings for the mentor and mentee to connect and engage in

conversation and establish a trusting relationship. According to the literature, informal peer mentor relationships achieve far less success than the formally established programs (Roger & Tremblay, 2003; Terrion & Pillion, 2008). A few of the reasons for the less effective peer mentor-mentee relationships include an inconsistent time and place to meet, limited response from the peer mentor or mentee, and the peer mentor's unfamiliarity of the mentees academic courses.

The purpose of this literature review is to examine the effectiveness of peer mentoring programs on the academic performance of undergraduate students. The lack of documentation and inconsistent methodological practices combined with the varied definitions for peer mentoring programs makes it difficult to quantify the influence that peer mentoring has on retaining undergraduate students.

Methods

The literature review process consisted of a structured search of online academic databases, combined with specific inclusion and exclusion criteria. First, the following search criteria included five keyword search terms: *peer mentor**, *college student*, *GPA*, *tutor**, *grade*. The time period of the studies ranged from 2001-2012 and the Boolean term "and" was used for each combination of keyword search terms. These five search terms were chosen because they focused on the three critical components of this literature review: peer mentors, college students, and grades. The data found in *Descriptive Characteristics of Selected Studies* (see Table 1) was recorded on individual coversheets for each article. This data was used to determine themes, trends, findings, limitations, and ideas for future research. Each article was listed with its title, author, and copyright date in an Excel spreadsheet. Intercoder reliability was conducted by a doctoral student utilizing a random sampling approach in the keyword database searches. No missing data was identified.

Table 1. Descriptive Characteristics of Selected Studies

Descriptive Feature	No. of Studies (%)
Location	
Urban College/ University	9 (53%)
International College/University	8 (47%)
Undergraduate Division	
Academic Administration	13 (76%)
Student Life	2 (12%)
Other	2 (12%)
Methodology	
Quantitative	3 (18%)
Qualitative	10 (59%)
Field notes	1 (10%)
Surveys only	3 (30%)
Interviews and surveys	5 (50%)
Interviews only	1 (10%)
Other	4 (23%)

Only peer reviewed articles were included in this study. The eligible research designs were quantitative, qualitative, correlational, and mixed designs. The 17 databases and 1,313 raw hits were originally sorted into 41 articles to be examined for this literature review (see Table 2). The exclusion criteria include faculty as mentors, peers exclusively working as tutors, academic subject specific studies

that limited the role to tutor, and editorials. An ancestral search was completed and revealed three articles that met the inclusion criteria of comprehensive peer mentor annotated bibliographies (Gray, W. A. & Gray, M. M., 1986), comprehensive literature reviews (Jacobi, M, 1991), and extensively cited articles within the 17 articles used in the literature review (Whitney, S., Hendricker, E., & Offutt, C, 2011). These three articles are included in this article's introduction to provide background information in mentoring, but not as a part of the data reported in this literature review.

Table 2. Database and keyword search

Database	Key Words Used	Boolean	Search Limiters
ED Proquest	peer ment*, college student	and	peer reviewed, 2001-2012
ED Proquest	peer ment*, GPA	and	peer reviewed, 2001-2012
ED Proquest	peer ment*, grade*	and	peer reviewed 2001-2012
ED Proquest	peer ment*, tutor*	and	peer reviewed 2001-2012
ED ASP	peer ment*, college student	and	peer reviewed 2001-2012
ED ASP	peer ment*, GPA	and	peer reviewed 2001-2012
ED ASP	peer ment*, grade*	and	peer reviewed 2001-2012
ED ASP	peer ment*, tutor*	and	peer reviewed 2001-2012
ED ASCD	peer ment*, college student	and	peer reviewed 2001-2012
ED ASCD	peer ment*, GPA	and	peer reviewed 2001-2012
ED ASCD	peer ment*, grade*	and	peer reviewed 2001-2012
ED ASCD	peer ment*, tutor*	and	peer reviewed 2001-2012
ED Career & Education	peer ment*, college student	and	peer reviewed 2001-2012
ED Career & Education	peer ment*, GPA	and	peer reviewed 2001-2012
ED Career & Education	peer ment*, grade*	and	peer reviewed 2001-2012
ED Career & Education	peer ment*, tutor*	and	peer reviewed 2001-2012
ED Credo Reference	peer ment*, college student	and	peer reviewed 2001-2012
ED Credo Reference	peer ment*, GPA	and	peer reviewed 2001-2012
ED Credo Reference	peer ment*, grade*	and	peer reviewed 2001-2012
ED Credo Reference	peer ment*, tutor*	and	peer reviewed 2001-2012
ED Research Complete	peer ment*, college student	and	peer reviewed 2001-2012
ED Research Complete	peer ment*, GPA	and	peer reviewed 2001-2012
ED Research Complete	peer ment*, grade*	and	peer reviewed 2001-2012
ED Research Complete	peer ment*, tutor*	and	peer reviewed 2001-2012
Education: SAGE Full Text	peer ment*, college student	and	peer reviewed 2001-2012
Education: SAGE Full Text	peer ment*, GPA	and	peer reviewed 2001-2012
Education: SAGE Full Text	peer ment*, grade*	and	peer reviewed 2001-2012
Education: SAGE Full Text	peer ment*, tutor*	and	peer reviewed 2001-2012
ED ERIC	peer ment*, college student	and	peer reviewed 2001-2012
ED ERIC	peer ment*, GPA	and	peer reviewed 2001-2012
ED ERIC	peer ment*, grade*	and	peer reviewed 2001-2012
ED ERIC	peer ment*, tutor*	and	peer reviewed 2001-2012
Gale Virtual Reference Library	peer ment*, college student	and	peer reviewed 2001-2012

Gale Virtual Reference Library	peer ment*, GPA	and	peer reviewed 2001-2012
Gale Virtual Reference Library	peer ment*, grade*	and	peer reviewed 2001-2012
Gale Virtual Reference Library	peer ment*, tutor*	and	peer reviewed 2001-2012
JSTOR	peer ment*, college student	and	peer reviewed 2001-2012 abstract
JSTOR	peer ment*, GPA	and	peer reviewed 2001-2012 abstract
JSTOR	peer ment*, grade*	and	peer reviewed 2001-2012 abstract
JSTOR	peer ment*, tutor*	and	peer reviewed 2001-2012 abstract
Mental Measurements Yearbook	peer ment*, college student	and	peer reviewed 2001-2012
Mental Measurements Yearbook	peer ment*, GPA	and	peer reviewed 2001-2012
Mental Measurements Yearbook	peer ment*, grade*	and	peer reviewed 2001-2012
Mental Measurements Yearbook	peer ment*, tutor*	and	peer reviewed 2001-2012
Project Muse	peer ment*, college student	and	peer reviewed 2001-2012
Project Muse	peer ment*, GPA	and	peer reviewed 2001-2012
Project Muse	peer ment*, grade*	and	peer reviewed 2001-2012
Project Muse	peer ment*, tutor*	and	peer reviewed 2001-2012
Prquest Central	peer ment*, college student	and	peer reviewed 2001-2012
Prquest Central	peer ment*, GPA	and	peer reviewed 2001-2012
Prquest Central	peer ment*, grade*	and	peer reviewed 2001-2012
Prquest Central	peer ment*, tutor*	and	peer reviewed 2001-2012
ProQuest Dissertations & Theses	peer ment*, college student	and	peer reviewed 2001-2012
ProQuest Dissertations & Theses	peer ment*, GPA	and	peer reviewed 2001-2012
ProQuest Dissertations & Theses	peer ment*, grade*	and	peer reviewed 2001-2012
ProQuest Dissertations & Theses	peer ment*, tutor*	and	peer reviewed 2001-2012
PsycARTICLES	peer ment*, college student	and	peer reviewed 2001-2012
PsycARTICLES	peer ment*, GPA	and	peer reviewed 2001-2012
PsycARTICLES	peer ment*, grade*	and	peer reviewed 2001-2012
PsycARTICLES	peer ment*, tutor*	and	peer reviewed 2001-2012
Psychology Journals (ProQuest)	peer ment*, college student	and	peer reviewed 2001-2012
Psychology Journals (ProQuest)	peer ment*, GPA	and	peer reviewed 2001-2012
Psychology Journals (ProQuest)	peer ment*, grade*	and	peer reviewed 2001-2012
Psychology Journals (ProQuest)	peer ment*, tutor*	and	peer reviewed 2001-2012
PsycINFO	peer ment*, college student	and	peer reviewed 2001-2012
PsycINFO	peer ment*, GPA	and	peer reviewed 2001-2012
PsycINFO	peer ment*, grade*	and	peer reviewed 2001-2012
PsycINFO	peer ment*, tutor*	and	peer reviewed 2001-2012
Research Library	peer ment*, college student	and	peer reviewed 2001-2012

Results

The largest amount of data published pertaining to the search criteria in this literature review (N=15, 35%) occurred during 2006-2008. The most recent data published from 2010-2012 comprised the second largest amount of data (N=12, 29%). The results in 2004-2006 (N=7, 18%), 2008-2010 (N=5, 12%), and 2002-2004 (N=3, 6%) contained the remaining data. There were two types of locations for the colleges listed in this study. In the United States 53% (N=22) of the colleges were located in urban areas. There were no rural or suburban colleges included. The international schools contained the remaining 47% (N=20) of the colleges.

The studies contained in this literature review were predominantly conducted in one of two divisions within the universities and colleges (see Table 1). Academic administration conducted 76% (N=32) of the studies and Student Life conducted 12% (N=5) of the studies. The other 12% (N=5) of the studies were held in various individual divisions. Two types of methodology comprised 76% (N=32) of this literature review. The qualitative studies 59% (N=25) were used more extensively than the quantitative studies 18% (N=8). The remaining studies were divided among correlational and mixed designs. The type of data from the qualitative studies were collected through field notes 10% (N=4), surveys only 30% (N= 12), interviews and surveys 50% (N=21), and interviews only 10% (N=4). The results of the qualitative studies indicate that students benefit from the relationships that evolve from a peer mentor relationship. There was no clear correlation between a peer mentor's role with a student and the student's academic performance. These results remained static across the college locations. The overall positive results of this body of research showed that peer mentors developed the undergraduate students' interactions with students in their age group. Students reported in their interviews, surveys, and journal entries improved self-confidence and self-esteem (Whitney, Hendricker, & Offutt, 2011; Smith-Jentsch, Scielzo, Yarbrough, & Rosopa, 2008).

Discussion

Although the included qualitative studies examine the positive effects of both the social and academic influences of peer mentors, there remains a need for definitive, quantitative data to isolate key behaviors and factors of peer mentors that elicit the most academic success. The peer mentors' effect on the academic performance of undergraduate students remains statistically unclear. Qualitative research shows that the psychosocial component of the peer mentor's role helps new students confidently adjust to a college or university environment and subsequently reduces students' tendency to transfer or drop-out of school (Hall & Jaugietis, 2010). In Hall and Jaugietis (2010) study, an academically struggling undergraduate freshman states, "I think signing up for a peer mentor program is the best decision I have ever made." At other universities, undergraduate students maintain considerably higher grades when they participate in peer mentoring programs that emphasize on-campus student engagement (Smith-Jentsch, Scielzo, Yarbrough, & Rosopa, 2008). However, these results require more research to discern what influences freshmen student's participation (Rodger & Tremblay, 2003).

The majority of quality data identified by this literature review focused on the psychosocial aspect of the peer mentors' roles and responsibilities. Peer mentoring in undergraduate colleges is a relationship in which two students of similar age and/or experience meet either formally or informally (Terrion and Leonard, 2007). Due to their closeness in age and college-life experiences, peer mentors relate to the interpersonal challenges and feelings of college students more successfully than a college's faculty and/or staff members (Jacobi, 1991). Peer mentors identify impending obstacles to student success and propose potential alternatives (Harmon, 2006).

Peer mentors who seek to assist students' socialization and improve their learning experience provide emotional and moral support (McLean, 2004). The peer mentoring attitude is developed utilizing various techniques including impartiality, accountability, and understanding. Successful peer mentors are consistent in exhibiting these attributes with their undergraduate mentees. Peer mentors who develop a sense of connection with their mentees ease their tensions in regards to socialization which helps their peers adapt to their new environment (LeCornu, 2005; Young & Cates, 2005). Academic peer mentoring programs connected to undergraduate student success include a higher level of socialization as an aspect of the mentee's satisfaction with the college (Smith-Jentsch, Scielzo, Yarbrough, & Rosopa, 2008).

The research that discusses the academic effect of a peer mentor focuses on the mentors' role in the classroom and online. Colleges who include academic support in the role of the peer mentors note "the goal of mentoring related to helping students explore ways to solve their own problems, develop options, unravel obstacles, and lead them through the process of figuring out solutions" (Rubin, 2009; Hall & Jaugietis, 2010; Harmon, 2006). Ryes (2011) includes a peer mentor's response to mentoring as helping mentees "schedule their time around class not schedule their time around friends."

Mentors offer detailed guidance on challenging tasks in the classroom, providing rewarding learning experiences for students. On-line mentoring provides another level of support from peer mentors. It gives both mentor and mentees the opportunity to record online interactions which is helpful for the documentations and sustainability of mentoring programs and training (Harlow, Burkholder, & Morrow, 2006; Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011). Even traditionally successful students appreciate the assistance and availability of peer mentors in their classroom (Smith, 2007).

The limitations in determining the effect of peer mentoring on academic performance are the limited use of quantitative measures to prove that the undergraduates' grades improve as a direct result of working with their peer mentors. Hall (2007) discusses the lack of understanding and data regarding the "implementation problems and strategies for improving delivery" of a peer mentoring program in an undergraduate environment.

An objective of undergraduate peer mentoring is to retain students who solve their own problems, develop options, unravel obstacles, and establish a process of figuring out solutions. Terrion and Phillion (2008) note "that mentor training is indispensable in providing tools and techniques that mentors will use in their mentoring function [including] an ongoing and formal training program which emphasizes an experiential and self-reflexive approach." A crucial component of obtaining that goal is to effectively train peer mentors to serve as advocates to freshman undergraduate students.

Conclusion

This Literature Review adds to the body of research pertaining to peer-mentoring programs by including the socioemotional benefits of mentoring, importance of training mentors, and the need for quantitative research to identify trends. Peer mentors who are trained in using effective leadership skills are taught to create an environment where their mentees are more apt to openly discuss their questions and concerns. Relationship building is at the heart of the peer mentoring program, and mentors trained in conflict resolutions, giving and receiving feedback, and teambuilding will be prepared to assist undergraduates to navigate the transition into college life. The lack of quantitative research and documented methodologies limits the ability for researchers to analyze the trends and influence that peer mentoring has on retaining undergraduate students. Further quantitative research will benefit the leaders in

academic administration who use data to understand the effects of peer mentoring on undergraduates' academic performance and socio-emotional integration into college life.

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§ **ELIZABETH BONIN** holds a Masters of Arts in Teaching in English. She is currently a doctoral student in Rivier University's Ed.D. Leadership and Learning program. As the Director of Student Success at Rivier University, she oversees a multi-faceted, comprehensive program that strives to ensure academic, social, cultural, and spiritual development for first-year students.