Mentoring Style, Self-Description, and Academic Achievement in English Class.

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ABSTRACT

The study intended to examine student mentoring, self-description, and academic achievement in a selected private university in Jakarta, Indonesia. There were 150 respondents in the study. The 2 instruments used for collecting data were adopted from Cohen (1995) for identifying the mentoring style of the mentors of the students, and from Marsh (1999) for identifying self-description of the students. The analysis of data employed descriptive statistics (independent *t*-test) as well as *Chi*-square, One-way ANOVA, and two-way ANOVA. The research inquiries focused on the following issues: (1) identifying the mentoring style, self-description, and academic achievement of the students; (2) the relationship of mentoring style, self-description, academic achievement, and demographic profiles; and (3) the interactive effects—individual and joint—of mentoring style, self-description, and student academic achievement. The findings of the study showed that 2 mentoring styles were predominant among their mentors: relationship emphasis and mentor model; students perceived themselves with a self-description focused on spiritual values, and students had high academic performance. Both male and female students perceived similar mentoring styles among their mentors, while, 1st year and 2nd-year students perceived mentoring style to be different among their mentors. In self-description, differences were found between genders while there was no difference found between 1st and 2nd-year students. There was no difference found between gender and year of study in the academic achievement, the students showed high performance. Mentoring style and self-description did not have a significant individual or joint difference in academic achievement. Since the students, as a whole had high academic achievement, this study seemed to suggest that the different mentoring styles did not have a difference in their academic achievement. However, that did not mean that mentoring did not work. On the contrary, it seemed that mentoring, regardless of style—based on the high academic achievement scores—did work. However, there was also the possibility that high achieving students might not need mentoring for improving their academic achievement.

Keywords: mentoring style, self-description, academic achievement

INTRODUCTION

Amid global competition in education, "teachers are thus instructed to better prepare students for the new world of work" (Flynn, 1995, p. 53). Indonesian colleges and universities, facing global competition in education, have been reported as being ranked as one of the lowest in their performance (Asiaweek, 2000). This makes Indonesia a particularly appropriate place to

do this study since differences created by mentoring might be more visible. Also, Indonesian colleges and universities in some way could benefit or be challenged by the findings of this study, and it might help them improve in facing the global competition of education.

With the improvement of the student mentoring services and self-description, the students of the selected university, in particular, would be better guided or directed to achieve success in their academic and social life. As a result, the university would also benefit in terms of increase in student enrollment and proficient graduates, more specifically in curriculum awareness and students' holistic development. In general, other colleges or universities of similar characteristics might find the results of this study useful for their improvement.

Student academic achievement, which is regarded as one of the major indicators of student success, has been traditionally associated with student mentoring and self-description, in spite of the controversial findings. It has also been identified as one of the relevant indicators of quality of schooling (Cleary, 2001).

The present study primarily investigated student mentoring and self-description in a selected private university in Jakarta, Indonesia. Specifically, it examined the extent of the effect of mentoring style and self-description on student academic achievement. It also investigated the effect of mentoring style on student achievement based on self-description.

Mentoring

Experts on mentoring have identified various mentoring style. It is important to choose a style of mentorship that works best between the mentor and the mentee. A set of mentoring style suggested by Anderson and Shannon (1988) present a continuum that ranges from (1) directing (where the mentor tells the mentee exactly what to do in a situation; this type of mentorship is more formal) to (2) coaching (where the mentor gives suggestions and examples, encouraging the mentee to practice the lessons; the relationship between the two is friendly and rather casual) to (3) support (where both the mentor and mentee work together, with the mentee praising the mentee's success experiences; the mentor may even assist the mentee with certain selected tasks) to (4) delegating (where the mentor gives more freedom to the mentee to work on his/her own with the mentor giving advice in certain crucial situations; the mentee is expected to make most of the decisions on his/her own).

Another mentoring style that meets the needs of adult learners is suggested by Cohen (1995). He developed the following six discrete mentor functions, which he named the Principles of Adult Mentoring Scale:

1. *Relationship Emphasis*, in which the mentor genuinely understands and accepts the feelings of the mentee through active and empathetic listening. The purpose of this relationship is to establish a psychological trust in which they honestly share and reflect upon their personal experiences (negative and/or positive) as adult learners. In this case, the mentor is expected to practice skills such as (a) listening responsively, (b) understanding and using verbal and non-verbal reactions, (c) asking open-ended questions, (d) providing descriptive feedback based on the observation rather than inferences or motives, and (e) using perception checks to ensure comprehension of feelings. (Adapted from Cohen, 1995, pp. 20, 48)
2. *Information Emphasis*, in which the mentor offers suggestions or advice to the mentees about their current plans in achieving their personal, educational, and career goals. The

mentor's advice is based on the information given by the mentee. In this case, the mentor is expected to (a) ask questions to understand the factual current condition of the mentee, (b) review relevant background to develop adequate personal profile, (c) probe questions which require concrete answers, (d) offer comments and solutions to the current problems, and (e) make decisions based on facts. (Adapted from Cohen, 1995, pp. 21, 60)

3. *Facilitative Focus*, in which the mentor facilitates the mentees through review and exploration of their interests, abilities, ideas, and beliefs relevant to academia or the workplace. The purpose of this facilitation is to assist the mentees in considering alternative views and options in making their own decisions. In this case, the mentor is expected to (a) pose hypothetical questions to broaden individual views, (b) make assumptions based on experience and information, (c) offer multiple viewpoints before making decisions and choices, (d) examine the seriousness of commitment to goals, (e) analyze reasons for current pursuits, and (f) review recreational and vocational preferences. (Adapted from Cohen, 1995, pp. 22, 74)
4. *Confrontative Focus*, in which the mentor challenges the mentees' explanations for their decisions and actions concerning their academic development. This is to help mentees attain insight into unproductive strategies and behaviors and to evaluate their need and capacity to change. In this case, the mentor is expected to (a) assess carefully the psychological readiness of the mentee to benefit from different viewpoints, (b) reveal the possible negative consequences of constructive feedback on the relationship, (c) confront the primary goal of self-assessment of apparent discrepancies, (d) focus on most-likely strategies and behaviors for meaningful change, (e) use only the carefully stated feedback necessary for change, and (f) offer comments (before and after confrontative remarks) to reinforce belief in a positive potential for mentee future growth. (Adapted from Cohen, 1995, pp. 22, 91)
5. *Mentor Model*, in which the mentor shares appropriate life experiences and feelings as a role model to the mentees to personalize and enrich their relationship. The purpose is to motivate the mentees to make decisions and take the necessary action. In this stage, the mentor is expected to (a) offer personal thoughts and feelings to emphasize the value of learning from unsuccessful or successful experiences; (b) select relevant examples and experiences from his/her own life or other people's; (c) provide a realistic assessment and positive belief in the mentee's ability to attain goals; (d) express a confident view of appropriate risk-taking as necessary for personal, educational, training, and career development; and (e) encourage the mentee to act in order to attain the goals. (Adapted from Cohen, 1995, pp. 22, 107)
6. *Mentee Vision*, in which, the mentor stimulates the mentees' critical thinking concerning envisioning their future and to developing personal and professional potential. The purpose is to encourage the mentees to function as independent adult learners. In this stage, the mentor is expected to (a) make statements which require reflection on present and future educational, training, and career attainments; (b) ask questions to clarify perceptions about his/her personal ability to manage change; (c) review individual choices based on a reasonable assessment of options and resources; (d) make comments on the analyses of problem-solving and decision-making strategies; (e) express confidence in carefully thought-out decisions; and (f) encourage mentee to develop talents and pursue dreams. (Adapted from Cohen, 1995, pp. 23, 121).

From a search of the literature (Cohen, 1995; Foster, 2001; Otto, 1999), the most common model of student mentoring is a one-to-one relationship between a more experienced mentor

and a less experienced mentee, who needs the mentor's support to achieve personal, academic and social development, and career goals.

There was a variety in mentoring models, but the two basic categories of models related to student mentoring are formal and informal. Floyd's (as cited in Brewster & Fager, 1998) three general types of mentoring might overlap with each other in a given student mentoring relationship. The present study focused on two of Floyd's three types of mentoring: academic and personal development mentoring, leaving aside the idea of career guidance mentoring since the respondents were the fulltime university students. It also explored mentoring style using Cohen's six principles of adult learner mentoring.

Self-Description

The terms *self-esteem* and *self-concept* which stand for self-description have been used interchangeably and inconsistently (Reasoner, n.d.; Strein, 1995), when they may relate to different ideas about how people view themselves. Self-description is the information that someone has about himself or herself, the perceptions of himself or herself which is based on experience and interpretations of the environment including ideas, feelings, and attitudes about self (Zahra, Arif, & Yousuf, 2010). Thus, self-description is the sum of both self-esteem and self-concept. The difficulty here is that the meanings of these terms have changed over time depending on the particular definition and measure used in the analysis.

The global view of self-concept is self-esteem or general self-concept. It is an overarching, global characteristic of an individual or a set of self-evaluations specific to different domains of behavior. The famous Rosenberg Self-Esteem Scale (n.d.) is a very good example of showing the essence of the global self-concept idea. On the other hand, self-concept refers to a conscious, cognitive perception of how one sees oneself. So, it could be said that an individual had multiple self-concepts with academic, social, physical, and religious aspects (Reasoner, n.d.; Strein, 1995).

Marsh, Craven, and Debus (1999) have developed three multidimensional measurements of self-concept based on the model proposed by Shavelson, Hubner, and Stanton (1976): SDQ I, II, and III. The SDQ-I questionnaire has been designed to measure multiple dimensions of self-concept of preadolescent primary school students, SDQ-II for adolescent high school students, and SDQ-III for late adolescents and young adults. Each of the three instruments is made up of the following 13 scales: math, verbal, academic, problem solving, physical ability, physical appearance, same-sex peer relations, opposite-sex peer relations, parent relations, emotional stability, spiritual values/religion, honesty/trustworthiness, and general esteem.

Self-concept is important because it is viewed as a desirable outcome of education (Snow et al., 1996; Tracey, 2002). When self-concept was improved, it would yield improvement in the student motivation for learning, and thus academic performance.

METHODS

Research Design

This is a cross-sectional survey research design. Data was collected through questionnaires in the same period. The study investigated the responses of college students to a questionnaire to determine their perceptions about mentoring practices and further to identify the practices and

other background factors that were associated with establishing high self-description and high academic achievement. In particular, this study investigated the strength of associations among student perceptions of student mentoring, student self-description, and student academic achievement. Overall, several statistical tools were employed to answer the three research questions stated in this study. The statistical tools included descriptive as well as inferential statistics.

Respondents

The sample of this study was the undergraduate students enrolled for the second semester of school year 2010-2011 school year at a selected private university in West Indonesia. The university was selected purposively due to its mentoring program, an important criterion to serve the purpose of the study. This study conveniently selected students who were involved in the mentoring program. There were 400 questionnaires distributed equally to males and females (200 males and 200 females).

Instrument

The questionnaire consisted of the following sections: Respondent's Identification Number, Mentoring Style Questionnaire, and Self-Description Questionnaire. The instrument provided to each respondent had a cover page, a letter to briefly describe the purpose of the study, and instructions on how to complete the instrument. Since English is the medium of learning in the university where the respondents studied, it was not necessary to translate the questionnaire into the Indonesian language.

The respondent's Identification Data (ID) is needed because it would reveal the student's academic achievement.

In the Mentoring Style Questionnaire, the responses to the questionnaire items were indicated by a 5-point Likert-scale with the following description: 1 (*Never*), 2 (*Infrequently*), 3 (*Sometimes*), 4 (*Frequently*), and 5 (*Always*). The mentoring questionnaire was about the way the respondents perceive the mentoring relationship. The mentoring style section was the instrument from Cohen's (1995) Principles of Adult Mentoring Scale: Postsecondary Education instrument. It was designed to measure six behavioral factors with 55 items. The six behavioral functions were made up of the relationship emphasis (10 items), information emphasis (10 items), facilitative focus (6 items), confrontative focus (12 items), mentor model (6 items), and student vision (11 items). Cohen (1995) reported that the reliability coefficient of the whole original scale was .95, which meant that as a whole the instrument was used to measure the complete mentor role competencies.

The self-description instrument was adopted from Marsh's (1990a) Self-Description Questionnaire III (SDQ III) had 13 factors with 136 items. Ten of the 13 factors consisted of 10 items in each factor, and the remaining three of the 13 factors consisted of 12 items in each of the factors. The 10 factors with 10 items each were the following: math, verbal, academic, problem solving, physical ability, physical appearance, same-sex peer relations, opposite-sex peer relations, parent relations, and emotional stability. The three factors with 12 items each were the following: spiritual values/religion, honesty/trustworthiness, and general esteem. Negative and positive items were included in each scale. As a whole, the questionnaire was designed to measure how people describe themselves and to find the most important characteristics of how people thought and felt about themselves (Marsh et al., 1999).

The reliability coefficient of the SDQ-III was high, with Cronbach alpha = 0.89 and the correlation coefficient between the factors was low, $r = 0.09$ (Marsh & O'Niel, 1984). An 8-point Likert scale used in the original Self-Description Questionnaire III was indicated as follows: 1 (*definitely false)*, 2 (*false)*, 3 (*mostly false)*, 4 (*more false than true)*, 5 (*more true than false)*, 6 (*mostly true)*, 7 (t*rue)*, 8 (*definitely true).*

Data Analysis and Interpretation

The data was analyzed by using the software *StatistiXL* to firstly find the frequency, percentage, mean, and standard deviation which described the respondents. In testing the hypotheses, inferential data analysis techniques of *t*-test, chi-square test of independence, and ANOVA were used. The chi-square test of independence was found to be suitable for this study of nominal variables—self-description, and mentoring style.

If the sample data in the contingency table, the expected frequency count is less than 5, it must be removed, or the expected frequency must be 5 or more. In the data analysis where the expected frequency count is less than 5, it was removed.

Levels of mentoring effectiveness were based on the mean scores of the students' perception for each of the six factors as suggested by Cohen (1995). A score that fell in the category of *not effective* and *less effective* indicated a need for professional improvement. A score in the *effective* category indicated a general competency with opportunity for improvement, and *very effective* and *highly effective* as indicating positive mentoring behavioral competency (Cohen, 1995, p. 168).

RESULTS

Pallant (2007) asserted that a two-way ANOVA can be used to "look at the individual effect and joint effect of two independent variables on one dependent variable" (p. 257). Hence two-way ANOVA was used to test the effect of mentoring and self-description on academic achievement. The results of this test will be presented as follows: The individual effect of mentoring style on academic achievement and the individual effect of self-description on academic achievement

The Effect of Mentoring Style on Academic Achievement

The null hypothesis was formulated and there was no effect of mentoring style on academic achievement and was also tested using a two-way ANOVA. Two-way ANOVA is appropriate when you have one measurement variable and two nominal variables. The assumption was variance was homogeneous among variables. However, since two-way ANOVA is robust, though heterogeneity, "variation among the results beyond that expected from chance alone" (Engels et al., 1999, p. 4) was found, it did not affect the result. For a 3 X 5 between-subject factorial, ANOVA was calculated to find out the effect of mentoring style on academic achievement. Out of the six categories of mentoring style, three categories were removed. This reduction of categories from six to three was due to few factors of mentoring styles in the removed categories. The remaining categories were mentor model (35), relationship emphasis (33), and information emphasis (22), which all in all had 90 respondents out of 150.

The findings showed that there was no significant effect of mentoring style on academic achievement $F(2) = 0.38$, $p = 0.68$ (see Table 1). This indicates that none of the mentoring style had a different impact on the respondents' academic achievement. Since the respondents had

high academic achievement, one can assume perhaps that the different mentoring styles worked for these students.

The effect of mentoring style on academic achievement was seen as not significant implying that the six categories in mentoring style did not make any difference in respondent academic achievement. No study was found that indicated the effect of mentoring style on academic achievement. The closest studies to this finding (Campbell & Campbell,1997; Lechuga, 2011; Santos & Reigadas 2005; Sorrentino, 2006) all show positive correlations between mentoring and GPA.

Table 1

Test of Effects of Mentoring Style and Academic Achievement

Source	*Df*	*F*	Prob.
Mentoring style	2	0.384	0.682

The Effect of Self-Description on Academic Achievement

It was hypothesized that there was a significant effect of self-description on academic achievement. The null hypothesis was formulated that there was no effect of self-description on academic achievement. The null hypothesis was tested using two-way ANOVA. The assumption was that variance was homogeneous among variables. However, two-way ANOVA was robust.

For a 3 X 5 between-subject factorial, ANOVA was calculated to know the effect of self-description on academic achievement. Out of 13 categories of self-description, eight categories were removed. This reduction of categories from 13 to five was due to few factors of self-description in the removed categories. The remaining categories were spiritual values/religion (34), parent relations (18), general esteem (16), physical ability (13), and same-sex peer relations (9), which all in all was 90 out of 150. The finding shows that there was no significant effect of self-description on academic achievement $F(4) = 1.86$, $p = 0.13$ (see Table 2). This indicated that none of the self-description affected the respondents' academic achievement. It implies that the way the respondents described themselves did not make any change in their academic achievement. Their academic achievement was still high.

Table 2

Test of Effects of Self-Description and Academic Achievement

Source	*Df*	*F*	Prob.
Self–description	4	1.863	0.126

The Interactive Effect of Mentoring Style and Self-Description on Academic Achievement

The final hypotheses highlighted the interactive effect of mentoring style and self-description on academic achievement and stated that there is no such interactive effect. The null hypothesis was tested using ANOVA and is described below.

For a 3 X 5 between-subject factorial, ANOVA was calculated to know the effect of mentoring style and self-description on academic achievement. After removing three categories, the remaining categories were spiritual values/religion, parent relations, general esteem, physical ability, and same sex peer relations.

The findings show that there was no significant interactive effect of mentoring style and self-description on academic achievement $F(8) = 0.67$, $p = 0.72$ (see Table 3). This indicates that neither the mentors' mentoring style nor the respondents' self-description affected the respondents' academic achievement. It implies that respondents were already smart, even without mentoring style or ability to describe themselves. The mentoring style and the way they describe themselves did not make a difference to their academic achievement.

Table 3

Test of Effects of Mentoring Style and Self-Description on Academic Achievement

Source	*Df*	*F*	Prob.
Mentoring style*self-description	8	0.666	0.720

DISCUSSION

As one of the significant indicators of student success, student academic achievement has had contentious findings related to student mentoring and self-description. This present study was an endeavor to investigate student mentoring and self-description about student academic achievement in a selected private university in Jakarta, Indonesia.

Undergraduate students enrolled for the second semester of school year 2010—2011 at a selected private university in Indonesia were the population for this study. The purposively chosen university closely followed a mentoring program, which was an essential criterion for this study. The students were selected using convenience sampling and numbered 400 (200 males and 200 females). During the research procedure of data gathering and data processing, some respondents were eliminated as outliers. The final number of respondents used for the statistical analysis was 150 with 100 females and 50 males.

The three parts of the instrument were information about self (the demographic profiles), mentoring style which was adopted from Cohen (1995), and self-description which was adopted from Marsh (1990a). Mentoring Style of Cohen (1995) contained six factors with 55 items was used to study the variable of mentoring. The SDQ III of Marsh (1990a) had 13 factors with 136 items and was used to study self-description.

Due to some limitations of this study, several recommendations are made for further studies:

1. Use purposive sampling for selecting the respondents than by other sampling types to get individuals with certain selected criteria with mentoring. Fraenkel and Wallen (2003) specified that in purposive sampling the researchers "use their judgment to select a sample that they believe, based on prior information; will provide the data they need" (p. 105). Even though in purposive sampling there is weakness in the researcher's judgment, a proper number of respondents can be directly taken based on the need for the study.
2. For improved outcomes, the administration of the questionnaires needs to be reconsidered. Attention must be given so that respondents can clearly understand the items in the questionnaire, feel more comfortable during the process of filling out the questionnaire, and have enough time to answer the questionnaire.
3. Select a larger population for the study that includes several tertiary institutions where mentoring is practiced. Generalization can be more definitely possible with much larger groups.
4. In this study, it is not clear whether it is mentoring that helped to produce high achievement. Taking tertiary institutions with lower academic admission criteria to see the effect of mentoring on academic achievement would be helpful to find this.

CONCLUSION

Several significant findings were identified in this study. *Mentoring style,* the focus of this study, was investigated from the vantage point of the students, the mentees, unlike most studies that reported the data from the mentors themselves. That the students in the study showed high academic achievement pointed out different possibilities about the mentoring style.

One possibility is that students achieved well whatever the mentoring style of their mentors be, proving that mentoring style seems to have differentiated and inclusive characteristics. In other words, mentoring helps in high achievement through the use of different mentoring styles of the mentors or it does not matter at all when the students are really good in academic achievement. This would be true if the academic achievement was proven to have improved compared to before mentoring. But this study did not focus on that aspect. Therefore, the other possibility could also be true. That is, the students in the mentoring program started as high achievers and remained so in spite of the different mentoring styles. Whichever it is, the findings are significant, and for high student achievement is the acid test of quality education. Therefore, this study indicated that mentoring is a practice that must be encouraged in tertiary levels, whatever the mentoring style of the mentors.

REFERENCES

Flynn, P. (1995). Global competition and education: Another sputnik? *The Social Studies, 86(*2), 53-55. DOI: pdf/10.1080/00377996.1995.9958370

Asiaweek. (2000). *Asia's best universities 2000: Overall ranking*. Retrieved from http://edition.cnn.com/ASIANOW/asiaweek/features/universities2000/schools/multi.overall.html

Cleary, T. S. (2001). *Indicators of quality*. Retrieved from http://www1.scup.org /downloads /portfolio/SCUP-TOC-Assessment-Quality.pdf

Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39*(1), 38-42.

Cohen, N. H. (1995). *Mentoring adult learners: A guide for educators and trainers*. Malabar, FL: Krieger.

Foster, L. (2001, March). *Effectiveness of mentor programs: Review of literature from 1995 to 2000*. Retrieved from http://www.library.ca.gov/crb/01/04/01-004.pdf

Otto, P. E. (1999). *Mentors and mentoring: A classic concept comes of age*. Retrieved from http://www.foodproductdesign.com/archive/1999/0599rd.html

Brewster, C., & Fager, J. (1998). *Student mentoring*. Retrieved from Northwest Regional Educational Laboratory's Information Service Web site http://www.nwrel.org/mentoring/pdf/mentoring.PDF

Reasoner, R. (n.d.). *What is self-esteem*? Retrieved from International Council for Self-Esteem Web site: http://www.self-es-international.org /content/1-what_is.htm.

Strein, W. (1995). *Assessment of self-concept*. ERIC Identifier: ED389962. Retrieved from http://www.ericdigests.org/1996-3/self.htm

Zahra, A. T, Arif, M., & Yousuf, M. I. (2010). Relationship of academic, physical, and social self-concepts of students with their academic achievement. *Contemporary Issues in Education Research, 3*(3), 73-78. Retrieved from http://journals.cluteonline.com/ index.php/CIER/article/view/190

Marsh, H. W., Craven, R., & Debus, R. (1999). *Separation of competence and affect components of multiple dimensions of academic self-concept: A developmental perspective*. Retrieved from http://www.aare.edu .au/99pap/deb99416.htm

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, *46*, 407-441.

Snow, R. E., Corno, L., & Jackson III, D. (1996). Individual differences in affective and conative functions. In D. C. Berliner, & R. C. Calfee (E.Ds.), *Handbook of educational psychology*. New York, NY: Simon & Schuster Macmillan.

Tracey, D. K. (2002). *Self-concepts of preadolescents with mild intellectual disability: Multidimensionality, measurement, and support for the big fish little pond effect*. Retrieved from http://self.uws.edu.au/Theses/Tracey/Chapter3.pdf

Pallant, J. (2007). *SPSS survival manual*. Berkhire, England: McGraw-Hill.

Engels, E.A. Schmid, C.H., Terrin, N., Olkin, I., & Lau, J. (1999). *Heterogeneity and statistical significance in meta-analysis: An empirical study of 125 meta-analyses.* A technical report, Department of Statistics, Stanford, California. Retrieved from http://www.stat.standford.edu

Campbell, T., & Campbell, D. (1997). Faculty/student mentor program: Effects on academic performance and retention. *Research in Higher Education, 38*(6), 727-742. DOI: 10.1023/A:1024911904627

Lechuga, V. (2011). Faculty-graduate student mentoring relationships: Mentors' perceived roles and responsibilities. *Higher Education*, *62*(6), 757-771. DOI: 10.1007/s10734-011-9416-0

Santos, S. J., & Reigadas, E. T. (2005). Understanding the student-faculty mentoring process: Its effects on at-risk university students. *Journal of College Student Retention: Research, Theory, and Practice*, *6*(3), 337-357. Retrieved fromhttp://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?nfpb=true&_&ERICExtSearch_SearchValue_0=EJ683630&ERICExtSearch_SearchType_0=no&accno=EJ683630

Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education* (5th ed; international edition). Boston, MA: McGraw-Hill.

Sorrentino, D. M. (2006). The SEEK mentoring program: An application of the goal-setting theory. *Journal of College Student Retention*, *8*(2), 241-250. Retrieved from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ744662&ERICExtSearch_SearchType_0=no&accno=EJ744662