The relationship between optimism and engagement: the impact on student performance

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ABSTRACT

The concepts of optimism and employee engagement as mechanisms to improving individual performance have been discussed in the management literature. Though studies concerning optimism in the workplace are relatively limited, evidence certainly exists that links the concept to improvement in individual academic and workplace performance. Significantly more has been written, particularly since 2000, regarding employee engagement. Since the Gallup Organization's development of the Q12 (a survey instrument to measure employee engagement) over a decade ago, articles in the area of employee engagement--ranging from the benefits of increased employee engagement to ways to improve the level of engagement--have increased and intensified dramatically. Based on the number of studies in the literature, evidence appears clear that high levels of employee engagement are associated with improved individual employee performance. This paper explores the possibility that these relationships may also exist in the academic setting by examining the relationship between student engagement and student optimism and the impact on individual academic performance. Results indicate that similar relationships exist in the academic setting with engagement positively influencing optimism significantly which in turn positively influences student perceptions of performance.

Keywords: optimism, engagement, student performance

INTRODUCTION

The concepts of optimism and employee engagement as mechanisms to improving individual performance have all been discussed in the management literature. Though studies concerning optimism in the workplace are relatively limited, evidence certainly exists that links the concept to improvement in individual academic and workplace performance. Significantly more has been written, particularly since 2000, regarding employee engagement. Since the Gallup Organization's development of the Q12 (a survey instrument to measure employee engagement) over a decade ago, articles in the area of employee engagement--ranging from the benefits of increased employee engagement to ways to improve the level of engagement--have increased and intensified dramatically. Though relatively few empirical studies exist, the evidence appears clear that high levels of employee engagement are associated with improved individual employee performance. Additionally, studies exist that relate academic performance and student engagement.

HYPOTHESES DEVELOPMENT

Engagement and Optimism

Definitions of engagement have primarily been offered by consulting houses or in practitioner publications. Perhaps the most extensively used definition of an engaged worker was offered by the Gallup organization. They define an engaged employee as a worker who is fully involved in and enthusiastic about his or her work (Tritch, 2003). HR Magazine's February cover story (Bates, 2004) focused on employee engagement and its role in the workplace. Engagement was essentially defined as "an innate human desire to contribute something of value in workplace." Crawford (2006) defined engagement as a measure of the energy and passion workers have for their organization. The article stressed clearly that diminished individual performance was a consequence of lack of employee engagement. Gubman (2004) defined engagement as a heightened personal attachment to the organization. Harley, Lee, and Robinson (2005), while not specifically defining the term, did identify a profile of an "engaged work" and also listed various aspects of engagement that have been used within organizations the measure engagement. Konrad (2006), while not providing a definition, discussed engagement as having a cognitive, an emotional, and a behavioral aspect. Seijts and Crim (2006) defined an engaged worker as one who is "fully involved in, and enthusiastic about, his or her work." In addition to articles offering definitions/explanations of engagement, the literature offers a plethora of information regarding ways to improve engagement (Fenci and Masarech, 2008; Jakobson, 2008; Cartwright and Holmes, 2006; Konrad, 2006; Robison, 2006; Seijts and Crim, 2006; Harley, et. al., 2005; Sensis, 2005; Erickson, 2004; Tritch, 2003 to name a few). In addition, numerous studies have linked high levels of employee engagement to improved employee performance (Smythe, 2008; Walters, 2008; Chang, 2006; Crawford, 2006; Echols, 2005; Tasker, 2004; Luthans and Peterson, 2003; Tritch, 2003). The literature also has a limited number of studies relating learning with student engagement (Roders, 2009; Weiss, et. al. 2010; Ward, et. al., 2009; Handelsman, et. al., 2005).

Generally speaking, optimism is the tendency for an individual to believe in the best possible outcomes in the face of uncertainty (Peale, 1956). Furnham (1997) states that optimists emphasize favorable aspects of situations, actions, and events while believing in the best possible

outcomes in the future. Optimism is closely related to the concept of self-efficacy—a belief in how successful one can be in terms of task accomplishment (Gist and Mitchell, 1992).). Optimism, while not discussed nearly as much in the literature, has also been linked to higher levels of employee performance (Jensen, et al., 2007; Dixon and Schertzer, 2005; Green, et al., 2004; Chemers, et. al., 2000; Schulman, 1999; Sujan, 1999; Rich, 1999; Scheier, et. al., 1994; Strutton and Lumpkin, 1993; Seligman and Schulman, 1986). Studies also indicate that academic performance is positively associated with optimism (Norem and Chang, 2002; Siddique, et al., 2006).

The various definitions/explanations as well as all of the 12 questions on Gallup's Q12 survey are related to optimism. This leads to our first hypothesis:

Hypothesis 1. Employee engagement is a significant, positive predictor of student optimism.

Optimism and Performance

Intuitively, it is easy to accept a link between optimism and employee performance. In practice, this relationship has rarely been examined. Studies exist that indicate that academic performance is positively associated with optimism (Bressler, et. al, 2010; Kluemper, et al., 2009; Norem and Chang, 2002; Siddique, et al., 2006;). Studies that have focused on the optimism-performance have primarily been in the sales literature (Seligman and Schulman, 1986; Rich, 1999; Schulman, 1999; Scheier, et al., 1994; Sujan, 1999; Dixon and Schertzer, 2005; Strutton and Lumpkin, 1993). Each reports that positive performance outcomes are associated with salespeople who are optimists. Green, Medlin, and Whitten (2004) examined the relationship between optimism and performance in manufacturing settings. Results indicated that there is a "very positive link" between employee optimism and level of performance.

This leads to our second hypothesis:

Hypothesis 2. Individual optimism is a significant, positive predictor of student academic performance.

METHOD

Participants and Procedure

Students in seven sections of a central U.S. university were administered an in-class survey containing questions designed to measure engagement, optimism, perceptions of performance and various demographic information. One hundred forty-five individuals turned in completed surveys. Of these respondents 73 (50.3%) were male and 72 (49.7%) were female. Their average age was 25.7 years (*sd* = 7.24) with a range of 18 to 51. The majority of the students (79.7%) were full time students (defined as currently enrolled in 12 or more credit hours) with the majority (80%) of the students working outside of the home either part-time (defined as working less than 30 hours per week; 36.6%) or full-time (43.4%). On average, the students had attended the university for 3.6 years (*sd* = 2.13) with a range of one semester to 12 years. These students represented every level with the majority being seniors (52.4%) with juniors also being well represented (31%) leaving the remaining respondents as sophomores (7.6%) and freshmen (9%).

Measures

Measurement scales were adapted from previous scales used to measure employee engagement (Buckingham & Coffman, 1999), workplace optimism (Medlin & Green, 2010), and individual performance (Green, et al., 2004). The changes were designed to reflect an academic setting rather than a working environment. Due to these changes, exploratory factor analyses were performed to assess the appropriateness of the measures to the current setting. In each case items were dropped from the analyses due to low communalities with the other items in measure in order to better capture the underlying factor (Hair, Jr, Anderson, Tatham, & Black, 1995). As an example, the fifth item in the individual performance measure was dropped because its communality with the other four items (.13) fell well below the standard of .50. This adjustment to the measure improved the amount of variance explained from 48.7% to 58.9%. A review of the items suggest that the four remaining items measure current or past performance while the fifth item required respondents to predict future performance.

Student engagement

Following the exploratory factor analyses, seven of the original twelve items from Buckingham and Coffman (1999) were retained to measure student engagement. Participants responded to items on seven-point Likert scales ranging from strongly disagree to strongly agree. A sample item is "In class, my opinion seems to count." Coefficient alpha for the scale was .83.

Optimism

Following the exploratory factor analysis, eight of the original eleven items from the Medlin and Green (2010) scale were retained to measure student optimism. Participants responded to items on seven-point Likert scales ranging from strongly disagree to strongly agree. A sample item is "I am excited about my degree because I expect to be successful." Coefficient alpha for the scale was .86.

Performance

Following the exploratory factor analysis, four of the five original items from Green, et al., (2004) were retained to measure individual student performance. Participants responded to items on seven-point Likert scales ranging from strongly disagree to strongly agree. A sample item is "I regularly accomplish my academic goals." Coefficient alpha for the scale was .76.

Analyses

To test the impact of student engagement on optimism and optimism's impact on individual student performance hierarchical regression analyses were run for each relationship with age, gender, course load, and academic level entered as control variables in the first step with the variable of interest (engagement or optimism) entered in the second step to measure change in R-squared.

RESULTS

Descriptive statistics and Pearson's correlation coefficients for the test variables are presented in Table 1. Each of the variables of interest is significantly correlated with the others consistent with prior expectations. Student engagement is positively correlated with Optimism ($r = .75$, $p < .001$) and Performance ($r = .38$, $p < .001$) while Optimism is positively correlated with Performance ($r = .54$, $p < .001$). See Table 1 in the Appendix.

The results of the regression analyses were as expected and supported both hypothesis 1 and 2. Student engagement significantly predicted optimism ($b = .68$, $t(145) = 13.39$, $p < .001$). Student engagement also explained a significant proportion of variance in optimism ($R^2 = .58$, $p < .001$) thus supporting hypothesis 1. Similarly, optimism significantly predicted performance ($b = .55$, $t(145) = 7.85$, $p < .001$). Optimism also explained a significant proportion of variance in performance ($R^2 = .57$, $p < .001$) thus supporting hypothesis 2.

CONCLUSIONS

This study successfully showed that results found in studies performed in the workplace are relevant in the academic setting. Student engagement does positively influence optimism in students and those students who are more optimistic tend to perform better, at least how they perceive their own performance. Other analyses performed using available objective measures of student performance, Overall GPA and class grade, produced interesting results. Perceived individual performance was positively correlated with both overall GPA ($r = .42$, $p < .001$) and class grade ($r = .26$, $p < .001$) but neither engagement nor optimism was positively related to either objective measure. That is, students who feel that they are more engaged and optimistic think that they perform better but may not actually do so. This may be of concern as objective performance is generally what is desired. However, it may not be a problem as students may be more concerned with their own personal perception of what is "good" performance and this may be what is of primary importance when influencing their behavior.

One behavior of primary importance on most, if not all campuses is retention. Much attention is given to the ability of universities and colleges to keep the students they have through graduation. Although not formally investigated, a three-item measure of turnover intentions was included in the survey and provides some support for ongoing efforts to increase student engagement. Turnover intention was negatively related to student engagement ($r = -.31$, $p < .001$), optimism ($r = -.39$, $p < .001$), and perceived individual performance ($r = -.22$, $p < .01$) while not significantly correlated with the objective measures of performance. From these results, it seems that it is the student's perception of how engaged they are by the university among other things that is most important not actual performance in regards to their thoughts of leaving the university.

Limitations

While the findings of the study were encouraging, several shortcomings of the research should be taken into account. First is that the findings may be a result of common method bias as all the measures were derived from the same self-report survey of the respondents perceptions. This is of particular concern as the analyses using objective measures were produced very

different results. A way to potentially investigate this concern is to keep track of those individuals who actually stay and leave the university and relate it to the turnover intentions reported in the survey. Another concern is that the sample was based on a single university. The student body used in the study is more non-traditional than average and has open enrollment. The perceptions of this sample might be very different than what might be found on a more traditional campus in another part of the country. Confidence in the findings should take into account these limitations and others surely to exist.

Future Research

As this study was an initial attempt to determine whether findings in the workplace regarding the relationships between engagement, optimism, and performance generalize to the academic environment many future steps can be taken to gain confidence in the findings. First, efforts should be undertaken to refine the measures so that they better fit into the academic environment. This study attempted to simply change the wording of the pre-existing measures to fit the academic environment. Additional items should be added to these scales in order to increase the ability of the measures to capture the constructs in question. A second direction for future research would be to expand the sample beyond a single university in one part of the country. Some considerations that should be taken into account when expanding the sample would be: size of university; private versus public, open versus restricted enrollment; university mission and geographic location of the university. A final avenue of future research would be to further investigate the relationship between the perceptual measures and objective measures of such behaviors as performance and turnover

.**Discussion**

Based on the results of this study, efforts to increase student engagement on campuses across the country seem to be well founded. Many universities have put much time, effort, and money into increasing student engagement in order to keep students and bolster academic performance. These results suggest that engagement does positively influence academic performance, at least as perceived by the student, by increasing student optimism. This should increase the knowledge that is acquired by the students in the classroom. Another goal of efforts to increase student engagement is to boost retention rates. The results suggest that more engaged students are less likely to drop out, or at least think about it less. Now that there is some evidence for the success of engagement efforts, the key concern for universities is to determine what actions actually increase student engagement and focus resources on these activities. If successful, universities should have a more engaged student body with higher levels of optimism which is composed of students who perform better and are less likely to drop out.

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APPENDIX

Table 1. Correlations and Descriptive Statistics

	Mean	SD	1	2
1. Engagement	5.25	1.08		
2. Optimism	5.30	.98	.75	
3. Performance	5.58	.97	.38	.54

N = 145; all correlations significant at $p < .001$