Examining the usefulness of a points system in a residential college

Rishi Sriram
Emily Rose

Available at: https://works.bepress.com/rishi_sriram/35/
Examining the Usefulness of a Points System in a Residential College

Emily Rose, Rishi Sriram

Journal of College Student Development, Volume 57, Number 3, April 2016, pp. 280-284 (Article)

Published by Johns Hopkins University Press
DOI: 10.1353/csd.2016.0031

For additional information about this article
https://muse.jhu.edu/article/615300
Examining the Usefulness of a Points System in a Residential College

Emily Rose  Rishi Sriram

Leaders of higher education value student engagement because of its measured effects on student outcomes such as retention and academic success. To increase engagement, institutions implement measures such as living-learning programs, which combine the residential experience with an academic focus (Arboleda, Wang, Shelley, & Whalen, 2003; Zhao & Kuh, 2004). Institutions also employ residential colleges based on the early structures of Oxford and Cambridge (O’Hara, 2012; Ryan, 2001). To encourage and measure engagement, some residential colleges utilize a variant of a points system, which tracks attendance at community events and other forms of involvement. A points system is (a) a measure of the physical involvement of students (which activities they take part in) and (b) a potentially motivating factor for involvement. There are potential benefits and drawbacks to a points system. It is possible that students who desire to earn rewards or avoid punishments associated with a points system will experience increased extrinsic motivation, leading to psychological engagement as a by-product of their physical participation. However, it is unclear whether such a system can effectively benefit intrinsic motivation in addition to measuring physical participation (Deci & Ryan, 2002).

We examined a residential college that implemented a points system as an accountability and measurement tool. Although residential colleges use points systems to track and reward student participation, extant research does not examine the relationship between points and student engagement. Therefore, the primary question of this study is: How do experiences measured by a points system and demographic factors relate to and predict student engagement in a residential college?

INvolvement AND Motivation MODELS

Astin (1984) brought to the forefront of scholarship the concept of college student involvement and its benefits 30 years ago. His work provides a foundation for understanding student involvement, defining it as “the investment of physical and psychological energy in various objects” (p. 298), specifically those relating to the academic experience. Involvement, which can be measured quantitatively and qualitatively, moves along a continuum. Many years earlier, Lewin (1936) set forth a model for a similar view of involvement comprising psychological perceptions and physical behaviors, suggesting that behavior is the function of a person and his or her environment. Integrating the conceptualizations of Astin (1984), Lewin (1936), and Tinto (1993), Milem and Berger (1997) note that involvement helps students reach incorporation—the relinquishing of old associations and the adopting of “new norms and behavioral patterns . . . appropriate to the specific context of their college or university” (p. 389). The arguments of these
scholars overlap and integrate around an important concept: the psychological and behavioral aspects of involvement, while distinct, may be closely related. Specifically, behavior influences perceptions, which in turn influence continued (or discontinued) involvement, forming a behavior–perception–behavior cycle. Engagement is the term we use to convey the outcome of involvement converting into incorporation.

Kuh, Kinzie, Schuh, and Whitt (2005) provide two components of student engagement, the first of which is similar to Astin’s concept of involvement. This includes the time and effort students give to various activities that lead them to experiences that contribute to their success. The second component consists of the institution’s role—the resources provided to students to increase their participation in beneficial experiences. Notable retention scholars also advocate this two-party concept (Tinto, 1993; Braxton, 2000).

The terms involvement and engagement are often used interchangeably in the literature. Harper and Quaye (2008) note an important distinction, however. A student may be involved (participating in experiences designed to lead to success) without being engaged (putting forth effort into an experience that leads to meaning). Engagement is involvement plus incorporation, leading to sense of belonging, personal investment, and depth of experience (Wolf-Wendel, Ward, & Kinzie, 2009).

Demonstrating the link between depth of experience and intrinsic motivation, Jessup-Anger (2012) explored the effect of living in a residential college on students’ inclination to inquire and on their pursuit of lifelong learning. She found that motivation, college experience, and degree aspiration could explain much of the variation in her outcome variables. Therefore, we conceptualize engagement as the culmination of physical and psychological participation and effort with a depth of experience originating from a sense of belonging and personal investment. There remains no literature on whether there is a connection between participation measured by a points system and the broader construct of engagement.

METHODS AND RESULTS

Utilizing a cross-sectional, correlational research design, we sought to answer the following question: To what extent do points, classification, floor, and gender predict student engagement in a residential college? To answer this question, we administered a survey instrument to all 365 students living in a residential college at a research university in the Southwest. We received 105 initial responses (28.8% response rate), with 88 students providing usable data. Demographics of our sample included gender (male = 24, 27.3%, female = 62, 70.5%, unknown = 2, 2.3%), race (White = 67, 76.1%, Asian = 6, 6.8%, Latino/a = 5, 5.7%, multiracial = 5, 5.7%, Black = 1, 1.1%, Native American = 1, 1.1%, other = 1, 1.1%, unknown = 2, 2.3%), classification (first-year = 39, 44.3%, sophomore = 27, 30.7%, junior = 13, 14.8%, senior = 7, 8.0%, unknown = 2, 2.3%), and floor (first floor = 16, 18.2%, second floor = 21, 23.9%, third floor = 23, 26.1%, fourth floor = 25, 28.4%, unknown = 3, 3.4%).

Instrument

We developed a 40-item instrument to measure student engagement. To ensure content validity, items from this instrument were based on the literature reviewed above. Two scales made up the instrument: one consisted of items regarding sense of belonging, which included the concepts of mattering and of students’ perception of the community, and the other consisted of items relating to motivation or a sense of agency in and care
for the community. Together these subscales provided the survey items to measure the latent variable of engagement.

Participants responded to items through a 6-point Likert-type scale that ranged from strongly disagree to strongly agree. To ensure construct validity, we conducted a principal components analysis with orthogonal rotation. The initial analysis identified five factors with eigenvalues greater than one. When analyzing the results, however, the first factor accounted for 59.8% of the variance, and all 40 items loaded on the first factor with loadings greater than .47. Therefore, we decided to extract only one factor, student engagement. Internal reliability analysis revealed excellent reliability for this scale (α = .98).

Variables

Our predictor variables were points, classification, floor, and gender. Points were earned by students based on the quantity of participation in events in the residential college. Student leaders determined point values for each role and event. We matched students’ survey responses with their point totals. The findings of other scholars led us to include classification (Pike, Kuh, & McCormick, 2011) and gender (Pike, Kuh, & Gonyea, 2003) as predictor variables. Our inclusion of floor as a predictor variable was exploratory in nature. Our outcome variable was student engagement, calculated by summing the items of our engagement scale.

Data Analysis and Results

We conducted a standard multiple regression in order to incorporate categorical variables. Classification and floor were recoded as dummy variables, using first-year students and first floor as baseline categories, respectively. As shown in Table 1, regression results indicated that the overall model significantly predicted student engagement, $R^2 = .44$, $R^2_{adj} = .38$, $F(8, 75) = 7.38, p < .001$. This model accounts for 44% of the variance in student engagement and identifies three significant predictor variables: points, second floor vs. first floor, and third floor vs. first floor.

DISCUSSION

The results of this study begin to fill the gap that exists in the literature concerning a theoretical
Points System in a Residential College

foundation for points systems. Amount of points was the strongest predictor of student engagement, with the floor students live on also serving as a meaningful predictor. The model has a large effect size on student engagement, and these findings have implications for both current practice and future research.

Implications for Current Practice
Although certain living-learning programs employ a points system to promote desired outcomes, we did not find any theoretical justification for a points system in the literature. At the least, a points system should bring forth conversations about the roles of extrinsic and intrinsic motivation in college student performance (Deci & Ryan, 2002). It is possible that student affairs professionals engage in such philosophical discussion on their campuses, but the lack of publication on this topic results in no resources to guide administrators as they discern the pros and cons of a points system approach.

This study found a high, positive correlation between total points and engagement scores. This means that points can predict engagement, but it does not necessarily follow that points directly result in higher engagement. Points are a representation of students’ participation—namely, attending events. One interpretation of the points–engagement correlation is that more participation leads to higher engagement; however, an equal interpretation is that students who are more engaged will by default accumulate more points. If there were not a significant and meaningful relationship between points and student engagement, points systems would add little value; however, the results indicate that points systems do add some value, at least in terms of measuring an aspect of student engagement. From an empirical perspective, points provide information about student engagement in a tangible manner. What remains unknown is whether points should then be utilized to reward, to punish, or to simply measure engagement without any consequences. This third approach could involve using points as a type of early-alert system. For example, if students do not accumulate many points in the first 6 weeks of the semester, student affairs professionals could proactively contact these students and discuss issues of engagement and belonging.

The other significant predictor in the model was floor. A key student leadership position on college campuses is the resident assistant. We wondered if engagement might change based upon the smaller floor communities in which students participate. We found that students on the second or third floor had higher engagement than those on the first floor. Fourth floor results were insignificant in this study. Something occurred on certain floors that led to higher engagement for those students. One interpretation of this finding is the variance in quality of resident assistants. These findings may serve as an indication of the importance of the resident assistant position, and the resident assistants on the second and third floor possibly employed strategies that contributed to higher engagement (Foubert, 2013). Attributing this difference to resident assistants is only a hypothesis, but the finding certainly warrants further research.

Implications for Future Research
The findings of this study lead to several research recommendations. The large effect size between the predictor and outcome variables of this study justifies the need for more research on how points systems and residential floor influence student engagement. Larger scale quantitative studies across multiple institutions would not only support or contradict these findings, but would also provide information as to the generalizability of these findings. In addition, qualitative studies could unearth
students’ perspectives on points systems. These investigations could also bring understanding as to why floor was a significant predictor.

CONCLUSION

For students, faculty, and even institutional health, on-campus living is clearly significant. Students benefit both academically and socially. In addition, the research supporting the living-learning concept is substantial and extends beyond the student affairs literature. Residential colleges contribute to the holistic development of students by valuing learning in every context—from the classroom to the home. The findings in this study help to fill the gap in the literature and to inform the practices of those administering points systems, as well as those endeavoring to increase overall student engagement in residential programs.

Correspondence concerning this article should be addressed to Rishi Sriram, Baylor University, One Bear Place 97312, Waco, Texas 76798; Rishi_Sriram@baylor.edu

REFERENCES


