

The Dimensionality of Student Engagement and Burnout: A Conceptual and Empirical Extension

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Abstract: Student engagement and burnout have received considerable attention from higher education researchers, but there is a dearth of research on the relationships between engagement and burnout dimensions. Accordingly, the present study aims to investigate the relationships between (a) student engagement dimensions, (b) student burnout dimensions, and (c) student engagement and burnout dimensions taken together. A proposed conceptual framework was tested using 207 undergraduate students from British universities. Using structural equation modeling, the findings largely supported the conceptual framework by showing that (a) cognitive engagement is likely to act as a catalyst for emotional and behavioral engagement, (b) exhaustion is likely to precede cynicism, and (c) burnout is likely to result from an erosion of emotional engagement. This study contributes to higher education research by adding to the limited body of work that proposes a more nuanced dimensional perspective on student engagement and burnout research. A limitation and suggestions for future research, as well as practical recommendations, are outlined.

Keywords: student engagement, student burnout, engagement dimensions, burnout dimensions, higher education.

Introduction

Student engagement is a popular concept in higher education research and practice. Despite student engagement's popularity over the last several decades, there is a lack of scholarly consensus regarding the definition and coverage of this complex term (Alrashidi et al., 2016). Alrashidi et al. (2016) reviewed the wide range of engagement conceptualizations, and uncovered similar themes between terms like school engagement, study engagement, and educational engagement. These themes include participation, identification, psychological investment, energy, commitment, and a motivational mindset, all in relation to school and school-related activities (Alrashidi et al., 2016). Even though student engagement can be broadly defined according to these themes, the present study focuses specifically on student course/module¹ engagement in a higher education context (Handelsman et al., 2005). To define student engagement in this context, it is important to first examine its dimensionality.

Researchers generally agree that engagement is a multidimensional concept. However, researchers have generally proposed two- and three-dimensional models² (Alrashidi et al., 2016; Appleton et al., 2008). The two-dimensional model proposes that engagement is composed of behavioral (e.g., participation and effort) and psychological/affective (e.g., interest and identification) dimensions (Finn, 1989; Marks, 2000). Following these two-dimensional models, Schaufeli et al. (2002) proposed that engagement is a persistent cognitive-affective state comprising vigor (i.e., a high level of energy and mental resilience in the application of work efforts), dedication (i.e., high involvement in one's work that is accompanied by enthusiasm and pride), and absorption (i.e., a deep level of focus and

¹ When describing a unit of teaching over an academic term, 'course' is typically used in the US and Canada, whereas 'module' is typically used in the UK and Australia. Moreover, in the UK, a course is used to refer to an entire program of modules. Because this study was conducted in a British context, I use the term module throughout the paper.

² Few researchers propose a four-dimensional model. Appleton et al. (2006) proposed a fourth dimension called 'academic engagement', but this dimension has been subsumed under behavioural engagement (Alrashidi et al., 2016). Reeve and Tseng (2011) proposed a fourth dimension called 'agentic engagement', but further research is needed for this new concept (Alrashidi et al., 2016), especially given that it appears to overlap with behavioural engagement (e.g., class participation).

concentration on one's work). Even though Schaufeli et al.'s (2002) three engagement dimensions are well accepted in the literature, Cole et al.'s (2012) meta-analytic findings confirmed suspicions that the content dimensions underlying Schaufeli et al.'s (2002) construct of engagement are not distinctive to those from another well-established concept called burnout (which is discussed later on). Therefore, even though Schaufeli and colleagues along with other engagement researchers argue that engagement is a standalone concept, the three dimensions proposed by Schaufeli et al. (2002) are not independent of burnout.

To address this theoretical flaw in Schaufeli et al.'s (2002) three-dimensional model, Cole et al. (2012) suggested that engagement conceptualizations needed greater theoretical clarity. One way forward, according to Cole et al. (2012), is to revisit Kahn's (1990) conceptualization of engagement as the harnessing of oneself to one's work role, which is characterized by emotional, behavioral, and cognitive energy. In line with Kahn's (1990) conceptualization, Fredericks et al. (2004) advanced the concept of student engagement by disentangling it from its antecedents and outcomes.

In so doing, Fredericks et al. (2004) and, more recently, other researchers (Balwant, 2018; Burch et al., 2015; Fredricks et al., 2019; Kahu, 2013) align student engagement with the psychological perspective of engagement to propose a three-dimensional model that is composed of emotional/affective, behavioral, and cognitive dimensions. Emotional engagement refers to activated feelings and emotions in a module (e.g., enthusiasm, excitement, energy, etc.) (Balwant, 2018; Fredricks et al., 2019). Behavioral engagement refers to activated actions in a module (e.g., the intensity of effort, full efforts, working hard, etc.) (Balwant, 2018; Fredricks et al., 2019). Cognitive engagement refers to a psychological investment in the learning process (e.g., being absorbed in readings or devoted attention to module-related work) (Balwant, 2018; Fredricks et al., 2019; M.-T. Wang & Eccles, 2012). Overall, the three dimensions of student engagement describe a positive, activated state. Moreover, like most earlier models of engagement, Fredericks et al.'s (2004) three-dimensional model includes a behavioral component, which is absent from Schaufeli et al. (2002) cognitive-affective concept. Following Fredericks et al.'s (2004) early work along with recent advances in the

higher education literature, student course/module engagement can be defined as “highly activated and pleasurable emotional, behavioral and cognitive involvement” in module-related activities (Balwant, 2018, p. 7). On the flip side, the negative antipode to student engagement is student burnout.

The concept of burnout originated in the 1970s as a psychological syndrome, primarily experienced by employees in human services and helping professions (e.g., doctors, lawyers, teachers, etc.) (Schaufeli et al., 2009). Since then, there has been a proliferation of research on burnout in a range of occupations and contexts beyond helping professions. One context in which burnout has received moderate attention is in higher education, particularly with respect to student burnout (Balogun et al., 1996; Schaufeli et al., 2002).

Student burnout is defined as a “tri-factorial, psychological syndrome characterized by an exhaustion state due to coursework demand, a cynical and detached attitude towards the college degree, and a feeling of low efficacy and academic achievement” (Maroco & Campos, 2012, p. 814). This definition points to three burnout dimensions as originally proposed by Maslach and Jackson (1981). First, emotional exhaustion means that a student’s emotional resources are used up and, thus the student becomes worn out (Cole et al., 2012; Maslach & Jackson, 1981). Cynicism or depersonalization means that the student becomes dehumanized or distant in their interactions with others (e.g., educators, administrative staff, colleagues, family, etc.) (Cole et al., 2012; Maslach & Jackson, 1981). Inefficacy or personal accomplishment means that a student develops feelings of incompetence and failure (Cole et al., 2012). Even though both student engagement and burnout have received substantial attention, the literature remains unclear about the precise manner in which engagement and burnout unravel. As such, the present study aims to investigate the relationships between the dimensions underlying both student engagement and burnout.

The relationship between student engagement dimensions

Some researchers explain that the dimensions of engagement can be interrelated. For engagement, the move to re-conceptualize engagement as consisting of cognitive, emotional, and behavioral

dimensions has been accompanied by few discussions regarding the relationships between said dimensions. Harter et al. (2002) explain that an individual must make a personal decision to become engaged. From this perspective, cognitive engagement occurs silently and on a personal level as an individual decides to become engaged (Shuck & Wollard, 2010). Shuck and Wollard (2010) argue that cognitive engagement acts as a catalyst for emotional and behavioral engagement, and is “the most powerful of the three” (Shuck & Wollard, 2010, p. 106). Following this notion, it is likely that as students consciously immerse themselves in a higher education module, they feel more enthusiastic and positive about the module and exert more energy and effort. Hence, the following is proposed:

H1a: There is a positive relationship between cognitive engagement and emotional engagement.

H1b: There is a positive relationship between cognitive engagement and behavioral engagement.

The relationship between student burnout dimensions

For burnout, researchers have generally considered exhaustion to be the first stage of the burnout process (Cordes & Dougherty, 1993). Therefore, exhaustion is considered key to experiencing burnout (Cordes & Dougherty, 1993), and is typically followed by cynicism (Maslach et al., 2001). According to Maslach et al. (2001), cynicism follows exhaustion because the immediate reaction to exhaustion is to distance oneself. This distancing notion is in line with the predictions of the conservation of resources (COR) theory (Hobfoll, 1989). The premise of the COR model is that “people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources” (Hobfoll, 1989, p. 516). Hobfoll (1989) explains that resources can include the energies of an individual. Building on this notion, Halbesleben and Bowler (2007) state that emotional exhaustion represents the loss of valued energies. COR then predicts that emotionally exhausted or burnt-out employees will become protective of their remaining resources and carefully choose how to invest these remaining energies or resources. To conserve

remaining resources, employees may use cynicism in an attempt to distance themselves from the work role (Halbesleben & Bowler, 2007). While the sequential link between exhaustion and cynicism is well-established, the link between inefficacy and other burnout dimensions remains uncertain. Maslach et al. (2001) explain that research on burnout generally supports the notion that inefficacy occurs parallel to exhaustion and cynicism, and not sequentially. Given these arguments, the following is proposed:

H2: There is a positive relationship between exhaustion and cynicism.

The relationship between student engagement and burnout dimensions

Even though Schaufeli and colleagues propose that engagement and burnout are independent concepts, they also assert that they are related. However, few studies examine student engagement and burnout simultaneously (e.g., Duran et al., 2006; J. Wang et al., 2021) and even fewer studies examine the relationships between engagement dimensions and burnout dimensions (e.g., Morales-Rodríguez et al., 2019)³. Two arguments support the notion that engagement negatively predicts burnout. First, Conservation of Resources theory posits that “people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources” (Hobfoll, 1989, p. 516). Hobfoll (1989) explains that resources can include the energies of an individual. Building on this notion, Halbesleben and Bowler (2007) state that emotional exhaustion represents the loss of valued energies, by which engagement is characterized. Therefore, it is likely that as these energies corrode, engagement may convert into burnout, but, burnout decreases may not likely turn into energy in one’s work role (Singh et al., 2021).

Second, Maslach et al. (2001) posited that burnout results from an erosion of engagement. This argument is in line with the view that “[y]ou have to have been on fire in order to burn out” (Maslach et al., 2001, p. 405). While this is not necessarily always the case, the

³ Unlike the present study, Morales-Rodríguez et al. (2019) examined engagement as composed of vigor, dedication, and absorption and their findings were similar to that of Cole et al. (2012), thus supporting the concerns raised earlier about Schaufeli et al.’s (2002) model.

assertion is that highly activated or energized individuals can become overachievers, and “end up doing too much ... thus leading to exhaustion and eventual cynicism” (Cordes & Dougherty, 1993; Maslach et al., 2001, p. 405). For instance, a student may work too hard, and if accompanied by unmet expectations, behavioral engagement may erode until the student becomes exhausted or loses confidence in their ability to tackle the higher education module (Cordes & Dougherty, 1993). Similarly, a student who becomes uninterested and unenthusiastic in a higher education module may experience a drain on their cognitive resources, and thus eventually becomes emotionally exhausted. Overall, it is likely that when engagement erodes, an individual can spiral into a state of burnout. Given that (a) cognitive engagement is expected to be a precursor to behavioral and emotional engagement, (b) exhaustion is expected to be a precursor to cynicism, and (c) inefficacy occurs in parallel to the other burnout dimensions, the following is proposed:

H3a: There is a negative relationship between behavioral engagement and inefficacy.

H3b: There is a negative relationship between behavioral engagement and exhaustion.

H4a: There is a negative relationship between emotional engagement and inefficacy.

H4b: There is a negative relationship between emotional engagement and exhaustion.

The hypothesized model is presented in Figure 1.

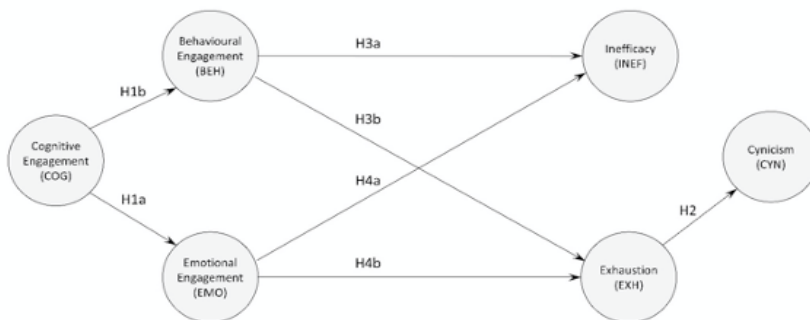


Figure 1. Hypothesized model for the relationships between student engagement and burnout dimensions

Methods

Participants

The present study utilized a portion of the dataset examined in Balwant et al. (2018), albeit with different measures and analyses⁴. The sample was composed of 207 students studying at universities located in England (n = 193, 93.2%), Scotland (n = 7, 3.4%), Wales (n = 6, 2.9%), and Northern Ireland (n = 1, 0.5%). The students were from various faculties including Social Sciences (n = 54, 26.1%), Natural Sciences (n = 36, 17.4%), Arts and Humanities (n = 35, 16.9%), Medicine, Dentistry, and Health (n = 19, 9.2%), Engineering (n = 16, 7.7%), Law (n = 9, 4.3%), Film (n = 7, 3.4%), and other faculties (n = 5, 2.4%). The sample included 53 males (mean age = 22 years) and 127 females (mean age = 20 years).

⁴ The dataset formed part of a doctoral research project that examined multiple research questions. Although I used the same measure of student engagement as in Balwant et al. (2018), this paper examines the dimensionality of student engagement, rather than the overall construct. In the previous paper, I examined the construct of student engagement in relation to instructor-leadership, leader distance, and academic performance. Moreover, in comparison to Balwant et al. (2018), this paper includes unique variables (i.e., the dimensions of student burnout), a larger sample size, different findings, and different theoretical and practical implications.

Materials

Student engagement. I measured student engagement using Rich et al.'s (2010) Job Engagement Questionnaire, which was adapted to the higher education module context (Balwant, 2018; Burch et al., 2015; Peters, 2014). Rich et al.'s (2010) measure comprised of 18 items that were represented on a 7-point continuum⁵ (1 = never; 2 = rarely; 3 = occasionally; 4 = sometimes; 5 = frequently; 6 = usually; 7 = always). The inventory comprised three subscales, including (a) behavioral engagement (6 items, e.g., "I worked with intensity for <Name>'s module") ($\alpha = 0.94$); (b) emotional engagement (6 items, e.g., "I was enthusiastic in <Name>'s module") ($\alpha = 0.96$); and (c) cognitive engagement (6 items, e.g., "My mind was focused on <Name>'s module") ($\alpha = 0.95$). Cronbach's α for the 18-item scale was .97.

Student burnout. I measured student burnout using the Maslach Burnout Inventory – Student Survey (MBI-SS) (Schaufeli et al., 2002), which was then adapted to a higher education module context. I used the MBI-SS because this measure of student burnout has been validated for student samples across three different European countries (after allowing correlations between error terms belonging to the same subscale or contain domain) (Schaufeli et al., 2002). The MBI-SS comprised 15 items on a 7-point continuum (1 = never; 2 = rarely; 3 = occasionally; 4 = sometimes; 5 = frequently; 6 = usually; 7 = always). In addition, the MBI-SS comprised three subscales including (a) exhaustion (5 items, e.g., "I felt emotionally drained by my studying for <Name>'s module") ($\alpha = 0.91$); (b) cynicism (4 items, e.g., "I became less interested in <Name>'s class since the beginning of the module") ($\alpha = 0.95$); and (c) efficacy (6 items, e.g., "I believe that I made an effective contribution to the classes that I attended for <Name>'s module.") ($\alpha = 0.77$). Efficacy was reverse coded to represent inefficacy. Cronbach's α for the 15-item scale was .91.

⁵ The engagement measure designed by Rich et al. (2010) is a 5-point Likert scale ranging from strongly agree to strongly disagree. For consistency between the engagement and burnout measures, and also because engagement and burnout scale anchors are traditionally measured as a frequency, I changed the engagement measure's scale anchors to a frequency scale.

Procedures

The questionnaire was distributed to undergraduate students, who were asked to rate instructors from the first semester of the academic year. This approach of examining a completed module ensured that (1) students were sufficiently familiar with their instructor; and (2) a grade could be provided for the module. Prior to distributing the questionnaire, a small pilot study with five students was conducted to check for understanding of item wordings, and no issues were identified. After the pilot study, the questionnaire was distributed in two ways.

First, an email was sent to all undergraduate students at a university located in England. In the email message, participants were given a brief description of the study, a link to an information sheet, a link to the online questionnaire, and details regarding the benefits of taking part. Each participant could opt to receive a free personality evaluation along with entry into a £40 prize voucher draw. The sample from this survey consisted of 102 students.

Second, the questionnaire was distributed to students at other UK universities via Qualtrics panel service. Qualtrics were paid US\$763.00 to source 100 undergraduate students from the UK, and each student was likely paid a small sum (less than £5) for completing the survey. Because each of the participants from the Qualtrics panel was likely rewarded with an external incentive, I used two attention filters in the questionnaire to improve the quality of the data (i.e., verify that respondents were reading the questions carefully and following instructions). An example of an attention filter was, “Please select ‘Strongly agree’ for this statement”. From the Qualtrics panel, 205 students completed the questionnaire, with 100 students being filtered out via the attention filters. Therefore, the Qualtrics panel was used to source a total of 105 students. Note that for the Qualtrics panel, participants were not (a) offered the option to receive a free personality evaluation and (b) entered into the prize draw.

Results

To test the model that was hypothesized in Figure 1, I used structural equation modeling. For the path model, I followed Anderson and

Gerbing's two-step process (Anderson & Gerbing, 1988). For the first step, I estimated the measurement model as shown in Table 1 (i.e., the baseline model). For the second step, I converted this measurement model into a structural model to test H1 to H4. The structural model showed good model fit (Satorra-Bentler χ^2 (419) = 556.17, $p < .05$, Robust CFI = .97, RMSEA = .044). However, H3b was not supported because the path from behavioral engagement to exhaustion was not significant, and thus this path was deleted.

To check the mediating effects in the structural model, the first step was to check whether the individual relationships were statistically significant. This analysis was conducted by checking (a) the direct unmediated relationships, (b) the relationship between the mediators and the 'input' constructs, and (c) the relationship between the mediators and the outcome constructs (Hair et al., 2009). All of these relationships were statistically significant. The second step was to add each of the direct unmediated relationships to the structural model (see Table 1). The Satorra-Bentler χ^2 difference test indicated that two of the direct unmediated relationships significantly improved the model (see path numbers 3 and 4 in Table 1). The direct path between emotional engagement and cynicism indicated that exhaustion was only a partial mediator in the relationship between emotional engagement and cynicism. When adding path 3 to the model, path 4 became non-significant. Therefore, I added only path 3 to the model, and the final model is shown in Figure 2. This model provides partial support for the hypothesized model Satorra-Bentler χ^2 (419) = 539.17, $p < .05$, Robust CFI = .97, RMSEA = .041. Specifically, all of the hypotheses except for H4b were supported.

Table 1. Model Comparisons of the Effect of Adding Direct Unmediated Relationships (Study 4)

| Path No. | Direct unmediated relationship | Satorra-Bentler χ^2 | df | Robust CFI | RMSEA | $\Delta\chi^2/\Delta df$ |
|----------|--------------------------------|--------------------------|-----|------------|-------|--------------------------|
| - | Baseline model | 559.00 | 420 | .964 | .044 | - |
| 1 | COG → INEF | 557.56 | 419 | .964 | .044 | 1.44/1 |
| 2 | COG → EXH | 556.83 | 419 | .965 | .044 | 2.17/1 |
| 3 | EMO → CYN | 539.17 | 419 | .969 | .041 | 19.83/1** |
| 4 | COG → CYN | 553.43 | 419 | .966 | .043 | 5.57/1* |

Note. COG = cognitive engagement; INEF = inefficacy; EXH = exhaustion; EMO = emotional engagement; CYN = cynicism

**p < .01 ; *p < .05

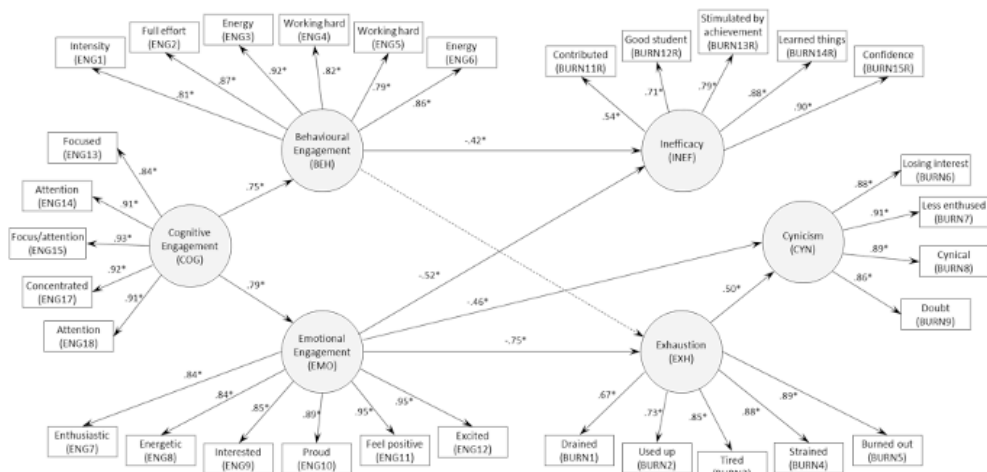


Figure 2. Structural model of the relationships between student engagement and burnout dimensions. Standardized maximum likelihood parameter estimates. Error variance values excluded for ease of readability. Dashed arrows indicate non-significant relationships. *p < .001

Based on contention in the literature, I further tested five competing structural models to determine whether the final model in Figure 2 was better than other potential alternative models (see Table 2). First, I reversed the direction of the pathways between student engagement and burnout to determine whether the proposed argument that student burnout is an erosion of student engagement was supported (Model 1). This reversed model fitted significantly worse than the baseline model. Moreover, in this model, exhaustion was not a

significant predictor of emotional engagement, and the other reversed paths were markedly weaker than the paths in the baseline model.

Second, I tested a model with emotional engagement as the first stage of the engagement process (Model 2). Even though organizational behavior theorists argue that cognitive engagement is a catalyst for emotional and behavioral engagement (e.g., Harter et al., 2002; Shuck & Wollard, 2010), Pekrun et al. (2002) state that emotional engagement can be a precursor for cognitive processes. Although Pekrun et al. (2002) did not provide a theoretical explanation for this relationship, discrete emotion theories describe emotions as an evolutionary adaptive response that elicits changes in behaviors and cognitions (but the evidence for this supposition is mixed) (Lench et al., 2011). This alternative model also fitted significantly worse than the baseline model.

Third, I tested three models for which inefficacy was predicted by exhaustion (Model 3), cynicism (Model 4), and both exhaustion and cynicism (Model 5). While inefficacy is generally assumed to develop in parallel to exhaustion and cynicism (Maslach et al., 2001), some researchers have shown that inefficacy can be a function of either exhaustion, cynicism, or both (e.g., Byrne, 1994; Lee & Ashforth, 1996). These three alternative models are based on Leiter and Maslach's (1988) original proposals that increased emotional exhaustion and cynicism are associated with impoverished personal relationships, which in turn weaken a sense of personal accomplishment, thus leading to work losing its meaning and increased feelings of inefficacy. However, these alternative models were based on the human services context, which is fundamentally different to student burnout. The findings indicated that all three of these models fitted equally as well as the baseline model, but none of the added paths were significant. Therefore, these findings suggest that inefficacy may indeed occur in parallel. Overall, the final model was a better representation of the relationships between student engagement and burnout dimensions than the five competing models.

Table 2. Competing structures for the Student Engagement-Burnout Empirical Model

| Model No. | Model description | Satorra-Bentler χ^2 | df | Robust CFI | RMSEA | $\Delta\chi^2/\Delta df$ |
|-----------|--------------------|--------------------------|-----|------------|-------|--------------------------|
| | Baseline model | 539.17 | 419 | .969 | .041 | |
| 1 | Reverse paths | 549.22 | 416 | .966 | .043 | 10.05/3* |
| 2 | EMO as first stage | 569.31 | 417 | .961 | .046 | 30.14/2** |
| 3 | EXH – INEF | 538.95 | 418 | .969 | .041 | 0.22/1 |
| 4 | CYN – INEF | 539.26 | 419 | .969 | .041 | 0.09/0 |
| 5 | EXH + CYN – INEF | 538.95 | 418 | .969 | .041 | 0.22/1 |

Note. COG = cognitive engagement; INEF = inefficacy; EXH = exhaustion; EMO = emotional engagement; CYN = cynicism

**p < .01 ; *p < .05

Discussion

Overall, the findings highlight the relationships between the dimensions underlying student engagement and burnout. For student engagement, the findings showed that cognitive engagement may be a catalyst for emotional and behavioral engagement. For student burnout, cynicism was predicted by exhaustion, and inefficacy occurred in parallel, as expected. Finally, the idea that burnout can result from an erosion of engagement was mainly supported, with the only exception being that exhaustion was not associated with behavioral engagement. Taken together, the findings provided good support for the hypothesized model. Therefore, this study adds to the limited body of work on the relationships between engagement and burnout dimensions (e.g., Morales-Rodríguez et al., 2019), by showing how the process of engagement and burnout unfolds. In so doing, I use a more conceptually sound measure of student engagement that includes a behavioral component.

The primary limitation of this study is that cross-sectional data was used. Cross-sectional data are particularly problematic for drawing conclusions about the relationships between engagement and burnout dimensions. Cordes and Dougherty (1993) suggest that future research consider measuring the antecedents and consequences of burnout (and engagement) at two or more points in time (i.e., longitudinal research designs). For instance, student engagement and burnout can be measured at the beginning, mid-semester, and end of semester time

points. Such a research design would provide better evidence regarding the sequential order for the dimensions underlying student engagement and burnout.

Notwithstanding the need for further research on engagement and burnout dimensions, the present study has a few important practical implications for higher education institutions. First, the present study's findings suggest that, when evaluating the impact of student engagement initiatives, educators should first monitor changes in students' cognitive engagement. Once students make a conscious effort to invest their cognitive efforts, emotional and behavioral engagement are likely to follow. Second, in assessing and treating students' burnout, educators should not necessarily expect simultaneous changes in all three burnout dimensions. Instead, educators should first look for signs of exhaustion and inefficacy because they both seem to occur in parallel, and cynicism is likely to follow exhaustion. Therefore, exhaustion and/or cynicism may send early signals of burnout that can help alert educators as to when students may need to be directed toward a health professional such as the student counselor, psychologist, or psychiatrist. In other words, the findings assist with the early detection of burnout that may help to nip burnout in the bud before it manifests fully. Third, intermittent student engagement may be more desirable than continuous engagement. Specifically, the findings suggest that the burnout process may very well start with engagement wearing out (Schaufeli et al., 2009). As such, high levels of sustained student engagement may be harmful to students, and thus educators may need to strive to achieve student engagement in a more dynamic way that fluctuates over time (George, 2010).

In summary, student engagement and burnout are popular concepts, but little attention has been given to the interactions between engagement and burnout dimensions. Even though burnout can indeed result from an erosion of engagement, the dimensional lens in this study shows that, more specifically, all three dimensions of burnout can result from emotional engagement, which itself results from cognitive engagement. Practically, the present study's findings can be used to evaluate engagement initiatives, detect burnout at early stages, and monitor sustained engagement which may be dysfunctional.

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