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Impact of Resilience on Academic Burnout-Student Engagement Relationship: An Empirical Study

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Abstract:
This study attempts to study the relationship between Academic Burnout and student engagement in students pursuing management courses In Delhi NCR. This study also dug into the moderating role of Resilience on this relationship. In this study we tried to understand the impact of stress on psyche of budding future professionals. Descriptive statistics, correlation and moderated regression analysis was used The study found a positive association between student engagement and resilience, a negative association between academic burnout and student engagement and a moderating impact of resilience on academic burnout and student engagement relationship.

Keywords*: Academic Burnout, Student Engagement, Resilience, Management Students, India.*

Introduction

Education has measurable goal and objectives, institutions have set curriculum which includes various activities and projects, it prepares the students for professional world. Students spend most of their time in these demanding activities in order to accomplish their academic goals. But sometimes in this process they get emotionally and physically tired and their energy depletes which leads to academic burnout Schaufeli, Pinto, Salanova and Bakker (2002). Academic burnout can be explained the mental and physical exhaustion due to rigorous academic activities which induces boredom, pessimism and frustration among the students. Although all the students go through same challenges and situations, but some get stressed out and experience burnout while some resilient learners who are resilient and having good coping mechanism view challenges as opportunities and benefit themselves from these opportunities (Santhosh & James, 2013) . Resilient students are adaptive to change and stressors do not affect their abilities, in fact they recoversoon from threatening situations and respond positively to the situations. (Santhosh & James, 2013). Therefore students with higher level of resilience have higher academic motivation and perform well despite all odds . Past researches have also confirmed the moderating role of resilience in academic burnout García-Izquierdo et al., 2015),it predicts the academic achievements of students. Abolmaali & Mahmudi, 2013; Mwangi, Okatcha, Kinai, & Ireri, 2015).

Academic burnout has been researched quite well in the past but only few attempts have been there the role of resilience as a predictor of academic achievement.

One of the most important stakeholders in management education is the student. Thus, an important objective of any management institution is to strengthen academic and co-curricular processes with a view to contribute to the student's learning and development. The key to academic achievement is student engagement. It is not sufficient to simply tell the student to learn and grow. The student has to be actively engaged in the teaching learning process and be motivated to act as a self-driven learner. It is

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being observed that the students these days are perceiving an immense amount of burnout because of the work pressure or detached attitude towards studies or may be because of incompetency as a student (Stoeber et al., 2011; Mostert et al., 2007). This burnout not only affects the students 'potential, it also hampers the effectiveness of the management institutions. Resilience, is the ability to cope up with the stress (Smith, Epstein, Ortiz, Christopher, & Tooley, 2013; Thomas, 2011).

Objective of the Study

The thrust of the study is to understand the psyche of the budding professionals who are perceiving increased stress and pressure. The excess baggage is narrowing down their focus and attention causing them to be less creative, collaborative and innovative and thus making them disengaged. Thus, the objective is to understand how the presence of Resilience will reduce the Academic Burnout and thus make the students more engaged.

Theoretical Framework

The present study was based on the COR theory (conservation of resource theory) by Hobfall (1989) to support the coping mechanisms used by the students during challenging situations. The philosophy of COR lies in the notion that individuals protect and retain resources which they feel important for their well-being. Hobfoll (2002) asserts that "…the degree to which individuals appraise something as threatening, and the coping choices they make, are largely determined by the resources they have" (p.312). If they are not able to protect their valuable resources, they experience burnout. (Hobfoll, 1989). Taking this theory into consideration, academic burnout can be considered as the resource loss, which happens due to high level of academic pressure on students which debilitates their capabilities to sustain their resilience (which is their own resource) which helps them to cope up with the stressors. Hobfoll (2011) stated that students with higher Resources (resilience) are better at coping up with the challenges and are less susceptible to the resource loss , in fact can help in resource gain in terms of confidence and skills which protects them from burnout. COR theory provides the detailed approach to academic burnout. Past researches have also used COR theory to explain this phenomenon of burnout and engagement among students. Alarcon (2011) explained job demand, attitude and their relationship with burnout with the help of this theory and concluded that high demand, less resources and less adaptive attitude have significant role in burnout.

Review of Literature

Academic Burnout

Schaufeli et al. (2002a) asserted academic burnout as, "burnout refers to feeling exhausted because of study demands, having a cynical and detached attitude toward study, and feeling incompetent as a student" (p. 465).(Freudenberger, 1974) defined it as "to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources" .

Maslach and her colleagues studied academic burnout and improvised the definition of burnout as "…a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach, Jackson, & Leiter, 1996, p. 4). Academic burnout leaves a demeaning effect on mental and sometimes on physical health of the students and therefore researchers need to focus on the factors causing this burnout. Past researches have also found out that physical activity and mental toughness are the potential predictors of academic burnout. Physical activity reduces the impact of mental stress and in a cross sectional survey of 177 candidates resulted in reduction of burnout(Lindwall et.al, 2012). Longitudinal survey studies on burnout reveal that there exists a moderate relationship between physical activity and burnout.(Naczenski et.al, 2017)). Mental

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Toughness is about being in control, confident and determined in stressful circumstances (Crust,2008 ; Mack & Ragan, 2008) and this has been widely observed in sports psychology (Crust, 2007). Studies also reveal that increased level of burnout has been observed among peer group with low level of mental toughness, although this has been studied among the students with high level of stress. Therefore, resilience or mental toughness provides a buffer to academic burnout.

Burnout can be described as a state of emotional fatigue resulting due to chronic stress, high pressure due to role and deadlines and also the lack of resources. Fredenberger was the first one to propose the concept of burnout in 1970. Burnout is the unavoidable effect of stress. Earlier the researches focussed on interpersonal relationships between supplier and receiver 3 but now researchers have started studying burnout in other situations as well including academic burnout. In recent years, numerous researchers have studied the impact of burnout on engagement (i.e., Schaufeli, Martínez, Marqués-Pinto, Salanova, & Bakker, 2002; Schaufeli, Salanova, González-Romá, & Bakker, 2002). A study by Van der Merwe & Rothmann, (2003) found that Burnout impacts the skill and capability of the students' in performing good at academics.l.). According to the National Survey on Student Engagement (NSSE), a major organisation involved with the measurement of student engagement across different educational institutional in the United States, student engagement is the frequency in which a students gets actively involved in activities that represent effective educational practices and conceives of it as a pattern of involvement. Students' involvement is reflected through "devotion of substantial time and effort to academic tasks, when they care about the quality of their work, and when they commit themselves because the work seems to have significance beyond its personal instrumental value" (Newmann, 1986, p. 242).

Student Engagement

Student engagement is a well researched topic since 1990s, how to engage students with their studies, contribution that universities and teachers can make to improve student involvement as well as engagement, different researchers had different approaches. Some consider student agency and encouragement or motivation as engagement factors (Schuetz, 2008) , others emphasize on the educators way of practising and developing relationship with students (Kuh, 2001; Umbach and Wawrzynski, 2005). Institutional structure, level of discipline and internal culture and climate also impacts student engagement (Porter, 2006). Environment , family and its financial situation also affects the engagement of students (Law, 2005; Miliszewska and Horwood, 2004). Chapman (2003) defined student engagement as "students' cognitive investment in, active participation in and emotional commitment to their learning". The Australian Council of Educational Research Process proposed that students' active participation in activities may improve the quality of learning(ACER, 2008: vi). Both definitions provide varied range of perspective which can be considered for research.

It becomes important for the institutions to have innovative ways of student engagement since it is the core of the pedagogy that focuses on effective learning with the help of engagement, dialogues between facilitators and students and working in collaboration (Shor and Freire, 1987). The effective pedagogy requires the active involvement of students rather than just listening to the lectures (Freire, 2000). This will not only help them to attain innovatiove thought process and will help them improve the quality of their learning (Cole et al., 2014). As per Freire, universities and institutions should adopt strategies that can improve student engagement. But the expansion of universities/ institutions blurs the imperative need of excellence in teaching and developing strategies for student engagement, it is then where the voice of students

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becomes important for the effective governance in institutions of modern times (Senior et al., 2014).

Universities have had various approaches to encourage students to involve in various activities and organizational processes that are the part of curriculum of all the main stream universities. Involving students in research activities of the academic workforce not only develops mutual dialogue but also creates team spirit among the students (Towl and Senior, 2010). It also helps in advancement of scientific understanding among student and academic staff together (Pritchard, 2004). Students involvement in research activities develop the sense of professionalism among students which motivates them to engage more with governance processes in their institutions (Tissington and Senior, 2017; senior et,al , 2018). A study done by Martin & Bollinger (2018) done on online learning environment they found that appropriate usage of online tools as well as learner to instructor strategies of engagement are of great importance.

Resilience

The term resilience represents a very broad perspective and and becomes difficult to define it in words (Gibson & Tarrant, 2010; KPMG, 2007, March; TISN, 2007). ".Oxford,(2010) said "quality to recover back or thrive in crisis or adverse situations, or try to be unaffected by any misfortune or illness". Poolen and Cohey (2010) described it as the organization's capability of effieciently using the available resources in order to face developmental challenges. Resilience in context of organization implies the capability of the organization of being adaptive, pro-active and responsive in handling the challenges and threats (Sutcliffe & Vogus, 2003). There have been so many researches about resilience and researchers have come out with various dimensions and arguments (Dugan, T., & Coles, R., 1989; Glantz, M., & Johnson, J., 1999; Joseph, 1994; Taylor& Wang., 2000; Thomsen., 2002; Unger, 2005). It is not possible to define resilience in single definition as it is too broad perspective to be explained with single definition. Various researchers have defined it in multiple ways (Carle & Chassin, 2004). Richardson et.al (1990) explained it as the coping ability of the person in adverse or threatening situation and enhancing his experience of handling difficult situations so that the person comes out stronger. Wolins (1993) stated that resilience is the ability to recoil and fight difficulties and heal oneself after that or in the process.

Various researchers have worked upon the definition on resilience but there has been little hint on how to define or explain adversity. If we talk about school settings, studies consider reports from state testing as a scale of positive adaptation .(Jew, Green & Kroger, 1999). Garde et.al (2017) noted that self-regulation acts as a predictor for Resilience. Students learn from mistakes which lead to improved coping mechanism, confidence and adaption. While studying resilience, much emphasis has been put on the relationship between resilience and positive adaptation (Dishion and Connell, 2006).

Methodology and Model

Studies done in the past have investigated the relationship between academic resilience, academic motivation and academic achievement of students (Mwangi et al., 2015; Mutweleli, 2014, Winga et al. (2016, Kamalpour, Azizzadeh-Forouzi and Tirgary (2017) and found a positive association between the stated variables.

Hypotheses

There are various researches which agree that students' engagement Fredricks, Blumenfeld, & Paris, 2004), their devotion, persistence (Martin & Marsh, 2009)and academic coping (Hess & Copeland, 2001) are the predictors of their academic success. Sometimes disengagement can be caused due to apathy, boredom and frustrations can lead to unpredictable behaviour and underachievement in studies(Blondal & Adalbjarnardottir, 2012; Henry,

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Knight, & Thornberry, 2012; Li & Lerner, 2011; Morrison, Robertson, Laurie, & Kelly, 2002).

Researches also reveal that students who have productive and better ways of coping stress , emotional regulation (like self efficacy and commitment) are more engaged unlike those who do not have good coping mechanism and resort to blame game , rumination and self pity. These coping mechanisms can be describes as resilience and the strategy one chooses to counter stressors decide engagement in academic activities(Boekaerts, 1993).

Pitzer & Skinner (2017) conducted their study on the relationships that exist between students' motivational resilience and found that students' motivational resilience acts as a predictor for academic achievement. Students who had higher level of motivational resilience reflected feeling of relatedness, autonomy , competence and improved academic success. On the other hand, students with higher vulnerabilities reflected decline in their academic success and lacked the sense of comfort with their facilitators. This gives us our first hypothesis:

H1: There is a positive association between resilience and student engagement

Much has not been studied about the relationship between academic burnout and academic achievements of the student. Past studies showcase that students who face academic burnout showcased poor academic performance activities (Akbay and Akbay, 2016; Winga et al., 2016). Kay and Wanjohi (n.d) mentioned that those students who faced burnout reflected depression, anxiety, boredom and frustration therefore they are irregular in attending classes, no active participation in class therefore poor performance in academics. Researchers have found that students with higher resilience are able to cope up with academic stressors (Kamalpour, Azizzadeh-Forouzi & Tirgary, 2017; Kotzé & Kleynhans, 2014). This has simple meaning that student with high level of resilience will have better academic motivation and perform well despite of challenges and difficult situation they face. Resilience have a moderating impact on academic burnout García-Izquierdo et al. (2015) and acts as a predictor for academic performance (Abolmaali & Mahmudi, 2013).Yaghoobi, et.al (2017) revealed that resilience has a significant role in academic achievement . Their analysis noted that resilience is a predictor of academic burnout and suggested that resilience can be considered in terms of self efficacy that students can prevent in educational environment which includes burnout as well. Thus our second hypothesis is:

H2: There is a negative relationship between academic burnout and student engagement

Burnout and engagement are the two sides of the same coin, this problem becomes more evident in university students. Burnout in students is the exact opposite of student engagement Maslach and Leiter (1997). Student burnout is the problem while student engagement denotes the level of satisfaction and success (Pascarella & Terenzini, 2005). Gan, Yang, Zhou and Zhang (2007b) explained student engagement as a positive extension of burnout. Researchers also mentioned that the reason behind the burnout is when students face more hurdles and less facilitators to guide. Burnout can be reduced by increasing the facilitators guidance and therefore decreasing the obstacles, this will eventually improve student engagement (Salanova et al., 2010). Burnout and engagement may have different meaning for different students depending on their dispositional characteristics. Self efficacy, burnout nand engagement are interconnected with each other, tho who score higher on self efficacy or resilence show lesser burnout (Ever, Brouwers, & Tomic, 2002) and higher engagement levels (Linnenbrink & Pintrich, 2003). Students who engage more in university activities will be better at managing their coursework. Student engagement also improves

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student well being (Gan et al., 2007a), coping mechanisms their confidence and self esteem, in turn improving the efficiency of university as well (Strydom, Kuh & Mentz, 2010). Kuh, Cruce, Shoup and Kinzie (2008), suggested that effectiveness of university can be examined by the educational practices they follow and student's devotion can be examine by their energy and time investment in their studies. Krause, Hartley, James and McInnes (2005) noted student engagement is the result of students active participation in academic and social activities. Kuh et al. (2008) and Law (2007) stated that student engagement has positive connection with the academic outcomes and devotion of students while participating in educational activities. Therefore, we get our third and fourth hypothesis:

H3: There is a negative association between resilience and academic burnout

H4: Resilience moderates the relationship between academic burnout and student engagement

Measures

Singh's and Srivastava's fourteen items **Student Engagement (SES) scale,** the items reduced from 14 to 10 (Cronbach α=.82),

Resilience Scale 6 Items from Smith's Brief Resilience Scale (2006) , items reduced to 5 (Cronbach α=.78)

31-item Scale by **Maslach (1997) for Burnout Inventory- Student Survey (MBI-SS)** .All the items were deemed fit. (Cronbach α=.80)

Methodology

Data Collection: Sample Size: 325; Sampling Design: Convenience; Sampling Unit: Students

Study Area: Delhi/NCR; Method of Analysis; Descriptive, Correlation, EFA, Test of Validity and Reliability, Confirmatory Factor Analysis, Moderated Regression Analysis; Demographic: 210 Males, 115 Females

Findings

Table 1: Reliability and Convergent Validity Analysis

S.No.	Item	Factor Loading Range	Cronbach alpha	AVE	CR
1	Student Engagement	0.70-0.85	.82	.80	.85
2	Resilience	0.76-0.80	.78	.71	.83
3	Academic Burnout	0.76 - 0.81	.80	.72	.84

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Table 2: Measurement Model Results: Measurement Model Results

Fit Indices	Measurement Model	Structural Model	Recommended Value	References
	4.416	4.561	<5	Bentler, 1989
GFI	.973	.989	>0.90	Hair et al., 2010
AGFI	.912	.944	>0.80	Gefen et al., 2003
NFI	.954	.972	>0.90	Bentler, 1992
CFI	..913	.913	>0.90	Bentler, 1992
RMSEA	.073	.078	<0.08	Hu and Bentler, 1999

Reliability and Validity Analysis

In order to assess the inter-item consistency, composite reliability is used using Cronbach's α. We followed Fornell and Larcker's (1981) suggestion of considering reliability coefficient values of 0.70 or higher than it. The Composite reliability (CR) of all scales was also found to be more than .70.

In order to ascertain that the scale items are measuring the theoretical construct, construct validity was tested. Test of construct validity requires testing of convergent validity as well as discriminant validity (Campbell and Fiske, 1959). We assessed convergent validity by observing the item loading and the loading of 0.7 indicates that about one-half of the item's variance (the squared loading) can be attributed to the construct (Fornell and Larcker, 1981).

Discriminant validity of a construct is considered as adequate when the AVE of each construct is greater than the correlation

Assessment of the Effect of Common Method Variance

In order to overcome the problem of common method variance in our study which might have occurred due to self-reported measures by the same respondents, we used Harman's one factor test as per the recommendation of Podsakoff et al. (2003). The notion that more than 50% of the variance in single factor confirms the presence of common method variance was rooted out in our study as the first emerging factor explained only 34.56%.

Table 3: Means, Standard Deviations, Correlations and Discriminant Validity among the Variables (N=325)

S.No	Variables	Mean	SD	1	2	3	4	5

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1	Gender	1.48	.501	1				
2	Age	2.45	1.48	.12	1			
3	Student Engagement	53.34	7.73	.04	.06	**(.82)**		
4	Academic Burnout	36.14	7.79	.09	.13**	.-34**	**(.75)**	
5	Resilience	39.57	11.29	.11*	.18**	.43**	-.35**	**(.79)**

Note. **p<0.01; diagonal elements are square root of AVE values; Source: Authors' Survey

As observed from Table 3, all measures have obtained satisfactory internal consistency over .70, with student engagement (α = .82), academic burnout (α = .75) and resilience (α = .79). A positive and significant association is found between resilience and engagement, and a negative association is found between burnout and engagement and between burnout and resilience.

Moderated Regression Analysis

Model 1 in the PROCESS macro by Hayes (2013) was used to test for moderation The PROCESS macro utilized bootstrapping when testing for indirect effects. Bootstrapping provided combined estimates from 1,000 subsamples, which provided accurate estimated coefficients and their variability. Thus, bootstrapping was one way of validating the multivariate model

Table 4: Moderating role of Resilience in Academic Burnout-Student Engagement Relationship

Variables and Steps	Dependent Variable
Step 1: Controls	
Age	.06
Gender	.04
Step 2: Main effects of Predictor variables	
Academic Burnout	-.34**
Resilience	.43**
Step 3: Interaction	
Academic Burnout * Resilience	-.18**
R^2	0.36
R^2 Change	.11
F	41.38**

Notes N= 325, *p<.05; **p<.01

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The results of regression analyses (beta values) revealed that there was a significant impact of academic burnout and resilience on student engagement. The first hypothesis of the study is proven by the result which exhibited a positive association between resilience and student engagement (β=-.43; **p<.01). The findings of the present study depicted that Academic Burnout was negatively associated with student engagement (β=-.34;**p<.01), thus, proving the second hypothesis of the study. A negative association between resilience and academic burnout was also found in the result (β=-.35;**p<.01),thus, proving the third hypothesis. The study also witnessed a strong moderating role of resilience in reducing the impact burnout on student engagement where β value of -.34 (p<.01) was reduced to -.18 (p<.01).

Table 5: Hypothesis Testing results for the Structural Model

Hypothesis	Path	Path Coefficients	Interpretation
H1	**Resilience →Student Engagement**	**0.634*** **	**Supported**
H2	**Academic Burnout → Student Engagement**	**-0.797*** **	**Supported**
H3	**Resilience →Academic Burnout**	**-0.677*** **	**Supported**
H4a (moderating)	**Academic Burnout * Resilience→ Student Engagement**	**0.275** **	**Supported**

Hypothesized Model of the Present Study

Discussion

This study intended to find the connection or association between academic burnout and student engagement. Further, it purports to measure the moderating effect of resilience on academic burnout and student engagement relationship. The present study is the testimony of the contribution that resilience plays on academic burnout and engagement, while controlling the impact of demographic variables viz., sex and age. The results of the have confirmed burnout dimension is significantly associated with engagement dimension, thus, expanding previous studies. The result found a negative association between academic burnout and student engagement. Past researches have also confirmed the same. Burnout in students is the exact opposite of student engagement Maslach and Leiter (1997). Student burnout is the problem while student engagement denotes the level of satisfaction and

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success (Pascarella & Terenzini, 2005). Gan et al (2007b) explained student engagement as a positive extension of burnout. Burnout can be reduced by increasing the facilitators guidance and therefore decreasing the obstacles, this will eventually improve student engagement (Salanova et al., 2010).Therefore, the study indicated that findings are in synch with the studies done in the past and as per the results, one can conclude that academic resilience is of immense importance in protecting the students from academic burnout and thereby, leading to student engagement. Those students who are more participative and have active involvement in university activities are goog at managing their coursework. Student well-being also improves with engagement(Gan et al., 2007a), coping mechanisms their confidence and self esteem, in turn improving the efficiency of university as well (Strydom, Kuh & Mentz, 2010).

Implications for the Management

Academic resilience is of immense importance in protecting the students from academic burnout and thereby, leading to student engagement. The more the resilience, the more strengthen the student feels from inside and thereby, leading to a better well-being. The management, faculty and administrators should try impart training programs in strengthening the resilience skills of the future managers. Also, facilitators should also understand the psyche of students and try to engage them through various activities so that they do not lose interest in the subject. Facilitators should also explain students the benefits of having higher resilience and how it will help them reap success in future.

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