

WHY AM I BURNOUT AND ENGAGED? THE ROLE OF MOTIVATION AND PERSONALITY

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Abstract

This research answered why students were burnout and engaged through investigated the relation between personality, motivation, and academic outcome in 365 business students. Specifically, I investigated the relation between self-efficacy personality, self-determined motivation (intrinsic motivation, extrinsic motivation, and amotivation), academic engagement and students' burnout. Burnout and engagement were two contradictory things but both were essential for students' success in their learning process. Therefore, this study aimed to examine the importance of intrinsic and extrinsic motivation in improving academic engagement and proving that students' burnout is caused by amotivated students. Results of Pearson correlation showed that all self-efficacy, intrinsic motivation, extrinsic motivation, amotivation, academic engagement, and students' burnout variables are mutually correlated with each other. Implementing structural equation modeling (SEM) for causal relationship between self-efficacy personality and both academic engagement and students' burnout through mediator variable, namely intrinsic motivation, extrinsic motivation, and amotivation. I found that the proposed model has a good fit. Academic engagement is well explained by self-efficacy personality through intrinsic motivation and amotivation, but not extrinsic motivation. Students' burnout is also well explained by self-efficacy personality through intrinsic motivation and amotivation, but not extrinsic motivation. The results of this study support the results of previous research, that self-determination theory and social-learning theory underlie students' burnout and academic engagement.

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Introduction

The importance of student engagement with school is well known by educators as a result of the observation that too many students are bored, unmotivated, and uninvolved, and are not engaged or resigned from school. Engagement is characterized as energy, involvement, and efficacy and is a positive thought related to task or work (Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002). In addition to student engagement, recently researchers have also focused their research on students' burnout (*see e.g.*, Uludag & Yaratana, 2010; Neumann, Finaly-Neumann, & Reichel, 1990; Schaufeli & Salanova, 2007; Schaufeli, Salanova et al., 2002). Cases of students' burnout refer to feelings of fatigue associated with learning interests, cynicism towards what is learned, and feelings of awkwardness as a student (Schaufeli, Salanova et al., 2002).

Burnout will negatively correlate with academic success. However, when students are engaged in their studies, their academic performance will increase (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002). Therefore, burnout is also referred to as a reduction in academic engagement (Schaufeli, Martinez et al., 2002). Although burnout and engagement are two opposite variables, a careful review of the literature shows that both variables are negatively correlated but not perfectly related (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Several previous studies have suggested a negative influence of burnout on engagement (*see e.g.*, Bakker, Demerouti, & Schaufeli, 2005; Langelaan et al., 2006; Schaufeli & Bakker, 2004, Schaufeli, Martinez et al., 2002).

Why are students burnout or engaged? Burnout is also often referred to as reduced efficacy characterized by incompetent feeling and unsolved problems (Schaufeli, Salanova et al., 2002). Previous studies have suggested that self-efficacy is negatively associated with burnout (Evers, Browsers, & Tomic, 2002; Friedman, 1995; 2002; Skaalvik & Skaalvik, 2010). Individuals with high self-efficacy encourage greater effort and perseverance that will show a positive perception of their ability (Federici & Skaalvik, 2012). In addition, individuals with high self-efficacy will also experience higher levels of

engagement and lower levels of burnout (Federici & Skaalvik, 2012; Tschannen-Moran & Gareis, 2004).

Meanwhile, one of the most important psychological concepts in education is motivation. The concept of motivation can be learned from several perspectives. One of the relevant concepts of motivation in the domain of education is intrinsic motivation, extrinsic motivation, and amotivation. One of the motivational theories that contribute to understanding burnout is self-determination theory (Ryan & Deci, 2000). Self-determination theory argues that the quality of motivation is graded from a more self-determined to less self-determined source of motivation. Previous researchers have also stated that self-determination theory affects burnout (*see e.g.*, Cresswell & Eklund, 2005a; b; Lonsdale, Hodge, & Rose, 2009; Hodge, Lonsdale, & Yohan, 2008). Another important motivational construct for understanding student achievement is self-efficacy or the belief that the individual is capable of successfully performing and completing a particular task (Bandura, 1997).

Burnout

Burnout is a psychological phenomenon of exhaustion and disinterest (Gonzales-Roma, Schaufeli, Bakker, & Lloret, 2006; Maslach, Schaufeli, & Leiter, 2001). Studies have demonstrated that students' burnout is associated with dropouts (Deary, Watson, & Hogston, 2003). Academic burnout referring to the psychological syndrome that occurs is associated with academic pressure and course load. It is manifested as an emotional exhaustion due to the demands of study, attitudes toward duty, and reduced efficacy as a student (Gan & Zhang, 2007; Zhang, Gan, & Cham, 2007). Burnout can produce negative consequences for employees, managers, teachers, and students. Although loss cycle of burnout can be seen, but little or rarely is it empirically studied (Schaufeli, Bakker, & Van Rhenen, 2009). One personal factor that allows the effect of loss cycle of burnout is motivation (Fernet, Guay, & Senecal, 2004).

According to van Beek, Hu, Schaufeli, Taris and Schreurs (2012) and Zhang et al. (2007), academic burnout among college students shows a feeling of exhaustion due to demands in studies or mental resources depletion, cynical and indifferent, detached to cynicism, and feeling incompetent as a student. Burnout reflects incapacity and unwillingness to perform the task or withdrawal (Schaufeli & Taris, 2005). Burnout on university students has not been paid much attention as to employees or athletes. However, academic burnout is an

important issue that is also associated with low self-efficacy (Yang & Fern, 2005).

Academic Engagement

Academic engagement is the core of learning and has done much research on it. In addition to burnout, engagement also plays a role in dropouts (Salanova, Schaufeli, Martinez, & Bresó, 2010). Academic engagement demonstrates mental enthusiasm and tenacity while learning (vigor), feeling meaningful, enthusiastic, inspired while studying (dedication), full concentration and feeling happy when learning (absorption) (Schaufeli, Salanova et al., 2002). Schaufeli, Salanova et al. (2002) defines engagement as a positive feeling associated with his work. They also stated that engagement and burnout are two independent variables although they are related. Previous researchers have also stated that burnout and engagement are opposite and independent (Maslach & Leiter, 2008; Uludag & Yaratán, 2010). Consistent with the conservation of resource theory, engagement and burnout are inversely or contrary (Uludag & Yaratán, 2010; Shih, 2015).

Engaged individuals experience high self-esteem, self-efficacy, and optimism, and are confident in their ability and optimism with their future (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Engagement is characterized by capability and willingness, involvement, or dedication. Under certain conditions, engagement causes burnout and vice versa. Based on social exchange perspective, lack of reciprocity will cause burnout (Schaufeli, 2006). When students have tried and used all the personal resources, they have in learning but not received satisfactory results, then students will experience burnout. Contrary to burnout, the engaged individual will create more resources in the environment and invest resources with social support (Alarcon, Edwards, & Menke, 2011).

Self-Determination Motivation

The concept of motivation is at the core of teaching and learning (Maehr & Meyer, 1997). Motivated means being moved to do something or have the energy to move. According to Ryan and Deci (2000), people who feel uninspired to act are characterized as unmotivated. Self-determination theory provides an important and comprehensive theoretical framework that helps in clarifying different types of motivation. In self-determination theory, intrinsic motivation and extrinsic motivation differences are in different reasons or

objectives to perform activities (Ryan & Deci, 2000a). Through self-determination theory, individuals perform activities based on choice and to show that the individual is intrinsically motivated, and shows self-regulated behavior. Motivation can also have an external source. Individual can perform activities because of external reasons and indicate externally motivated behavior that is not self-regulated.

Intrinsic motivation refers to voluntary activities or behaviors for their own desires and attaches to joy, satisfaction, interest, and enjoyable because of their participation. Individuals are intrinsically motivated by finding challenges and improving the ability to learn new things (Ryan & Deci, 2000a). In addition, intrinsically motivated individuals will participate voluntarily in activities and do not expect rewards (Vallerand & Bissonnette, 1992). Vallerand, Pelletier, Blais, Briere, Senecal, and Valliers (1992) divide intrinsic motivation into three types: intrinsic motivation to know (individual involvement in activities to learn or discover something new from their participation in the activity), intrinsic motivation toward accomplishment (individual involvement in activities to enjoy the achievement of goals), and intrinsic motivation to experience stimulation (the optimal experience that individuals experience when participating in activities). In education, intrinsic motivation to know is related to curiosity, exploration, and the need to know and understand. Intrinsic motivation to accomplishment focuses more on the process of activity rather than the outcome of the activity. Meanwhile, intrinsic motivation to experience stimulation shows involvement to experience pleasure, excitement, and positive sensation. More specifically, intrinsically motivated students are motivated to learn, perform, or succeed, and feel satisfied (Deci & Ryan, 2000; Gottfried, 1985).

Extrinsic motivation refers to activities that are engaged to ways to get the final result, gain respect or avoid criticism, and not to satisfy the activity. Ryan and Deci (2000b) divide the extrinsic motivation into three types: identified regulation (motivation to participate in activities to successfully gain new skills but not to enjoy the activity), introjection (motivation to perform well to avoid negative emotions such as anxiety or humility), and external regulation (motivation derived from the need to get rewards or punishment). Extrinsic motivation is associated with reduced engagement, performance, stability, focus, and increased fatigue (ten Brummelhuis, van Hoeven, Bakker, & Peper, 2011).

Meanwhile, amotivation refers to unmotivated behavior both intrinsically and extrinsically, but amotivated behavior are non-regulated and non-intentional. Amotivation is characterized by the absence of intrinsic and extrinsic motivation or a non-self-determined form of motivation (Stavrou, 2008). Individuals are amotivated when they do not perceive the situation between results and actions. Amotivated individuals encounter incompetence feeling and hope that no one controls (Vallerand et al., 1992). Generally, amotivated individuals also feel unacceptable and start asking themselves why they should go to school. In general they do not want to participate in academic activities. According to Bakker (2004), little attention of researchers is directed to the role of amotivation in determining educational outcomes. This is due to many studies using motivation as unidimensional measurement. In self-determination theory, intrinsic and extrinsic motivational processes are not antagonistic. Both intrinsic and extrinsic motivation have an important influence on educational outcomes (Bakker, 2004). By using students as samples, amotivation or the absence of motivation has an opposite effect on either intrinsically or extrinsically motivated behavior. Amotivated individuals feel incompetent and out of control, and perceive their behavior due to forces beyond their control.

Self-Efficacy Personality

Other constructs essential to understanding student achievement are self-efficacy, or the belief that the individual is capable of successfully performing and completing a particular task (Bandura, 1997). Recent studies also use personality roles such as self-efficacy as potential antecedents of burnout (Alarcon et al., 2009). Individuals are said to have high self-efficacy when they believe they have the essential ability to successfully complete the task. According to Bandura (1997), the belief influences the choice of activities, how much effort can be done and how long the individual will diligently do so. Those who are not convinced that they have such an important ability will be referred to as having low self-efficacy (Walker, Greene, & Mansell, 2006). Both motivational theory and self-efficacy theory suggest that students' beliefs about abilities and desires to be part of the activity will be positively related to performance (Greene & Miller, 1996; Deci & Ryan, 2000). Self-efficacy can explain students' motivation and achievement behaviors in education or other physical activities.

Relationship between Self-Efficacy Personality, Self-Determination Motivation, Burnout, and Engagement

Burnout and engagement correlate negatively and moderately (Maslach & Leiter, 1997; Schaufeli & Bakker, 2004; Schaufeli, Martinez et al., 2002; Schaufeli, Salanova et al., 2002; Zhang et al., 2007). The development of research on burnout stated that burnout is the opposite of engagement (*see e.g.*, Maslach, Schaufeli, & Leiter, 2001; Demerouti, Bakker, de Jonge, Jansen, & Schaufeli, 2001). According to Deary, Watson, and Hogston (2003), student burnout is associated with drop outs. Meanwhile, Salanova et al. (2010) states that engagement plays a role in the drop out. Meanwhile, Vallerand et al. (1992) found that students who drop out have amotivation.

Self-determination theory is a useful theoretical framework for testing potential motivational antecedents for burnout (Cresswell & Eklund, 2005a; Lemyre, Treasure, & Roberts, 2006). Burnout is often associated with increased amotivation and external regulation in extrinsic motivation. According to self-determination theory, high amotivation and external regulation will show increased burnout over time (Londsdale & Hodge, 2011). Intrinsic motivation is negatively associated with burnout, whereas amotivation is positively associated with burnout (Cresswell & Eklund, 2005a; b; Raedeke & Smith, 2001). In contrast, the relationship between burnout and extrinsic motivation is not consistently predictable with self-determination theory. The previous researchers showed an insignificant or moderate negative correlation between burnout and extrinsic motivation (*see e.g.*, Goodger, Harwood, & Lavalee, 2007, Holmberg & Sheridan, 2013). Meanwhile, Gould, Udry, Tuffey, and Loehr (1996) reported that individuals who are under pressure to participate in activities because of external factors are susceptible to burnout as an indication of perceived pressure.

Furthermore, self-efficacy, intrinsic motivation, and extrinsic motivation will be positively correlated with cognitive engagement (Walker et al., 2006). However, self-efficacious students will be less affected by burnout (Alarcon et al., 2009). Self-efficacy is also associated with burnout (Consiglio, Burgogni, Alessandri, & Schaufeli, 2013). Self-efficacy has a strong direct connection with burnout because self-efficacy helps in managing stress. Meanwhile, motivational and burnout relationships can be derived from the conservation of resources model of motivation (Halbeshleben, 2003). Some previous studies have found that personality is positively associated with

engagement and negatively related to burnout (*see e.g.*, Llorens, Schaufeli, Bakker, & Salanova, 2007; Salanova et al., 2010; Xanthopoulou et al., 2007; Ventura, Salanova, & Llorens, 2015).

Objectives

According to Alarcon, Eschleman, and Bowling (2009), personality such as self-efficacy can also predict burnout and engagement, but few are examining it in college students. In general, individual jobs, tasks and responsibilities are influenced in opposition by burnout. Indicators of burnout include lower motivation, dissatisfaction, and lower efficacy (Uludag & Yaratan, 2010). This study aims to re-affirm the influence of dispositional factors, namely motivation and self-efficacy personality of students' burnout and academic engagement of university students in Indonesia. This is due to the suspicion that the weight of the curriculum at the level of elementary education in Indonesia will lead to reduced student motivation and low self-efficacy to pursue higher education. This is what causes low academic engagement and high students' burnout in Indonesia. This study also aims to examine the relationship model of self-efficacy personality as an independent variable and students' burnout and academic engagement as dependent variables with self-determination variables as mediating variables.

Specific objectives

1. To examine positive relationship between self-efficacy and intrinsic and extrinsic motivation.
2. To examine negative relationship between self-efficacy and amotivation.
3. To examine positive relationship between intrinsic motivation and academic engagement.
4. To examine negative relationship between intrinsic motivation is and students' burnout.
5. To examine positive relationship between extrinsic motivation is and academic engagement.

6. To examine negative relationship between extrinsic motivation and students' burnout.
7. To examine negative relationship between amotivation and academic engagement.
8. To examine positive relationship between amotivation and students' burnout.
9. To examine positive relationship between self-efficacy and academic engagement.
10. To examine negative relationship between self-efficacy and students' burnout.
11. To examine negative relationship between students' burnout and academic engagement.

Method

Participants

This study was conducted on undergraduate students at the Faculty of Economics and Business in Yogyakarta. Yogyakarta is named as a student city that encourages everybody especially senior high school graduates to come and study in Yogyakarta. Therefore, students who study in Yogyakarta come from various regions throughout Indonesia. The selection of students in the undergraduate program of the Faculty of Economics and Business is based on the consideration that they are required to become an independent entrepreneur. An entrepreneur must be motivated, self-assured, able to manage stress so as not to experience burnout, and has a high attachment to his duties and responsibilities.

This study aims to examine the relationship between self-efficacy personality, intrinsic motivation, extrinsic motivation, amotivation, students' burnout, and academic engagement. In addition, this study also aims to examine the relationship model of self-fficacy personality as an independent variable as well as students' burnout and academic engagement as dependent variables, with intrinsic motivation, extrinsic motivation, and amotivation as mediating variables. Furthermore, this study used survey method using

questionnaires distributed to undergraduate students at the Faculty of Economics and Business in Yogyakarta. The survey was conducted by researchers from February to April 2017 by distributing questionnaires. According to Cooper and Schindler (2008), Neuman (2006), and Sekaran and Bougie (2013), a survey conducted by researchers using a direct questionnaire is better than a telephone survey, correspondence, as well as various other social media.

This study uses the individual as unit of analysis by determining the number of respondents at least five times the question items in the questionnaire (Hair, Black, Babin, Anderson, & Tatham, 2006). Questionnaires used in this study as many as 61 items, then the number of respondents at least 305 people. In addition, because this study uses factor analysis for validity testing, the number of respondents at least 300 people (Hair et al., 2006). Methods of data collection using non probabilistic sampling technique, with criteria of students who have entered in the third year who declared eligible as respondents. They are generally aged between 19 and 21 years. This is because students who have entered their third year in college will get more tasks and feel greater stress. Within three months, researchers managed to collect data of 365 respondents.

Measures

This study uses the individual as the unit of analysis required to fill in the questionnaire given during the study hours on campus. As a screening, they will be asked how many semesters they have taken. Measuring tool of this research is a questionnaire taken from previous researchers. The intrinsic motivation, extrinsic motivation, and amotivation questionnaires were taken from the questionnaires used in Herath (2015). The self-efficacy questionnaire was derived from the questionnaires used in Dull, Schleifer, and McMillan's (2015) research. Meanwhile, a questionnaire on academic engagement was taken from a questionnaire used in Salanova, Agut, and Peiro (2005). While the questionnaire about students' burnout taken from the questionnaire used in research Fynchina (2012). The questionnaire was used after it was translated into Bahasa Indonesia. The questionnaire uses a five-point Likert scale starting from strongly disagree given a 1 score to 5 score for strongly agree, except for a reverse question item, the judgment is reversed. This research uses content validity and construct validity.

Procedures

Exploratory studies in this study were used as a preliminary study to get a clear picture of the research problem. With exploratory studies, researchers develop concepts more clearly, so as to set priorities, can develop operational definitions, and can improve the final research design (Cooper & Schidler, 2008). Exploratory studies are open, creative, flexible, and can explore all sources of information (Neuman, 2006). Therefore, exploratory studies often used qualitative data. Exploratory studies conducted by researchers aim to reveal the possibility of students experiencing burnout and academic engagement and the factors that influence both. In addition, exploratory studies also intend to reveal the reasons why students learn and attend college on campus and how students' beliefs about their ability to do the task. To conduct this exploratory study, researchers used in-depth interview techniques. The results of exploratory studies showed that students have experienced burnout and academic engagement. Burnout is generally caused by the difficult task, the desire to not want to do the task, feel not motivated to do the task, feel tired with the material and the task of college, feel unable to do the tasks, or there are other activities more interesting such as the streets. Meanwhile, the academic engagement experienced by students is generally caused by students' wishes, expectation of higher achievement index, or feel confident that they are capable of doing the task.

In the questionnaires that have been compiled completely done some validity and reliability testing. Content validity examines items of questionnaires that measure a concept and reflects how well the dimensions and the elements are described (Sekaran & Bougie, 2013). Content validity also shows the level of a construct represented by the questionnaire items referring to the construct (Garver & Mentzer, 1999). Content validity was done by discussing questionnaires with experts in organizational behavior and educational psychology. In addition, 20 students were asked to provide input on the questionnaires used in this study so that the questionnaire of this research can be better understood by the students. This is in accordance with the research stages suggested by Sekaran and Bougie (2013). Students provide suggestion about the sentence in the questionnaire to be easily understood.

Furthermore, this study also used construct validity for testing whether question items in the questionnaire fit the theory (Sekaran & Bougie, 2013). Construct validity aims to find empirical evidence to support constructive

relationships, namely in the same construct (within-network relations) and between constructs (between-network relations) (Byrne, 2001). The construct validity method used in this research was factor analysis with varimax rotation and loading factor at least 0.5 as suggested by Hair et al. (2006) which means practically significant for samples of 100 or more. According to Hair et al. (2006), factor analysis is a powerful and indispensable method for testing construct validity.

In addition to testing the validity of the measuring instrument, researchers also conducted internal stability and consistency testing with Cronbach's alpha for demonstrating the reliability of the measuring instrument used. Prior to conducting model testing with Structural Equation Modeling (SEM) with AMOS program, this study examined the correlation between two variables used in this study. To test the relationship model, this research used SEM with AMOS program. The model test included modeling the relationship between self-efficacy as an independent variable and students' burnout and academic engagement as a dependent variable with intrinsic motivation, extrinsic motivation, and amotivation as a mediating variable.

Results

Validity and Reliability Analysis

This study used questionnaires developed by previous researchers to translate from the original language into Bahasa Indonesia. Content analysis was done by asking to linguist to correct the translation of the questionnaire from English to Bahasa Indonesia. This study also used factor analysis for examining the construct validity. To further simplified the interpretation and found a simpler structure, this study used a technique of orthogonal and varimax rotation. Factor analysis is also performed on the construct being investigated. Extraction executed and each eigenvalue factor greater than one will be adopted. Varimax rotation performed to reveal each variable. Recorded using loading factor above 0.40 as suggested by Hair et al. (2006) which is referred to as the construct validity of the test results are practically significant. Loading factor for items questionnaires used in this study recorded between 0.500 and 0.872. Given all of the items are extracted 0.5, so that there are some

items that turned out to be deleted because it is declared invalid. Eligible items in construct validity based on the factor analysis then tested for reliability.

Furthermore, to assess the reliability of the questionnaire of all variables tested internal consistency with Cronbach alpha values. Cronbach alpha values of reliability tests measuring instrument in this study resulted in a score of 0.809 for intrinsic motivation, 0.849 for extrinsic motivation, 0.850 for amotivation, 0.833 for self-efficacy, 0.925 for students' burnout, and 0.883 for academic engagement. Based on the results of testing the reliability of all variables are stated that the reliability of the measuring instrument was far above of the cut-off line reliability as recommended by Sekaran and Bougie (2013). According to Sekaran and Bougie (2013), reliability of less than 0.6 is less good, reliability of 0.7 is acceptable and reliability above 0.8 is good. Table 1 below presents the loading factor and Cronbach alpha for each construct or variable used in this study.

Table 1. Valid and Reliable Questionnaires, Loading Factor, and Cronbach Alpha

Questionnaires	Intrinsic Motivation	Extrinsic Motivation	Amotivation	Self-Efficacy	Burnout	Engagement
Intrinsic Motivation1	0.648					
Intrinsic Motivation2	0.653					
Intrinsic Motivation3	0.582					
Intrinsic Motivation4	0.603					
Intrinsic Motivation5	0.561					
Intrinsic Motivation6	0.741					
Intrinsic Motivation7	0.679					
Intrinsic Motivation8	0.663					
Intrinsic Motivation9	0.500					
Intrinsic Motivation10	0.569					
Extrinsic Motivation1		0.667				
Extrinsic Motivation2		0.722				
Extrinsic Motivation3		0.737				
Extrinsic Motivation4		0.726				
Extrinsic Motivation5		0.660				
Extrinsic Motivation6		0.688				
Extrinsic Motivation7		0.617				
Extrinsic Motivation8		0.577				
Extrinsic Motivation9		0.549				
Extrinsic Motivation10		0.587				
Amotivation1			0.865			
Amotivation2			0.793			
Amotivation3			0.872			

Table 1. Valid and Reliable Questionnaires, Loading Factor, and Cronbach Alpha - *continued*

Questionnaires	Intrinsic Motivation	Extrinsic Motivation	Amotivation	Self-Efficacy	Burnout	Engagement
Amotivation4			0.793			
Self-Efficacy1				0.660		
Self-Efficacy2				0.689		
Self-Efficacy3				0.751		
Self-Efficacy4				0.743		
Self-Efficacy5				0.752		
Self-Efficacy6				0.559		
Self-Efficacy7				0.701		
Self-Efficacy8				0.576		
Students' Burnout1					0.648	
Students' Burnout2					0.661	
Students' Burnout3					0.758	
Students' Burnout4					0.805	
Students' Burnout5					0.829	
Students' Burnout6					0.821	
Students' Burnout7					0.853	
Students' Burnout8					0.787	
Students' Burnout9					0.818	
Students' Burnout10					0.764	
Students' Burnout11					0.677	
Students' Burnout12					0.596	
Students' Burnout13					0.530	
Academic Engagement1						0.629
Academic Engagement2						0.752
Academic Engagement3						0.814
Academic Engagement4						0.819
Academic Engagement5						0.577
Academic Engagement6						0.730
Academic Engagement7						0.597
Academic Engagement8						0.563
Academic Engagement9						0.509
Academic Engagement10						0.692
Academic Engagement11						0.587
Academic Engagement12						0.624
Academic Engagement13						0.631
Cronbach Alpha (α)	0.809	0.849	0.850	0.833	0.925	0.883
N of items	10	10	4	8	13	13

Descriptive Statistics

This current study uses a series of statistical analysis of the relationship between all the constructs or research variables by using correlation analysis. Correlations are also used to ensure that there is no multicollinearity among the

independent variables used in this study. This can be seen from the correlation values not greater than 0.8 as suggested by Hair et al. (2006). Correlation between variables or constructs used in this study, mean, and standard deviation for each variable is presented in Table 2.

Tabel 2. Mean, Standard Deviation, and Inter correlations among All Variables

	M	SD	1	2	3	4	5
Intrinsic Motivation	3.981	0.431	1.000				
Extrinsic Motivation	4.222	0.523	0.453**	1.000			
Amotivation	2.112	0.835	-0.310**	-0.191**	1.000		
Self-Efficacy	3.949	0.463	0.488**	0.480**	-0.211**	1.000	
Burnout	2.728	0.743	-0.276**	-0.121*	0.573**	-0.235**	1.000
Engagement	3.415	0.555	0.638**	0.404**	-0.337**	0.484**	-0.358**

Note: ** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)

Based on Table 2, the mean of intrinsic motivation, extrinsic motivation, and self-efficacy are high (between 3.667 and 5.000). The mean of burnout and engagement are moderate (between 2.334 and 3.666), and the mean of amotivation is low (less than 2.334). In addition, the data that can be collected shows quite low standard deviation, except for the amotivation and students' burnout constructs having a standard deviation above 0.5. In addition, all correlations are not too strong. This shows the absence of multicollinearity among the independent variables used in this study. Furthermore, this study used 365 students from Yogyakarta. Table 2 shows that all variables used in this study correlated with various significance levels, 0.05 and 0.01. In addition, the correlation between variables studied also varied, namely positive and negative correlation.

Based on Table 2, the correlation between self-efficacy and intrinsic motivation is significantly positive ($r=0.488$, $p<0.01$). Similarly, the correlation between self-efficacy and extrinsic motivation is significantly positive ($r=0.480$, $p<0.01$). The correlation between self-efficacy and amotivation is significantly negative ($r=-0.211$, $p<0.01$). The correlation between self-efficacy and academic engagement is significantly positive ($r=0.484$, $p<0.01$), while the correlation between self-efficacy and students' burnout is significantly negative ($r=-0.235$, $p<0.01$). Furthermore, the correlation between intrinsic motivation and academic engagement is significantly positive ($r=0.638$, $p<0.01$) and correlation between intrinsic motivation and students' burnout is significantly negative ($r=-0.276$, $p<0.01$) The correlation between extrinsic motivation and

academic engagement is significantly positive ($r=0.404$, $p<0.01$) and correlation between extrinsic motivation and students' burnout is significantly negative ($r=-0.121$, $p<0.05$).

Meanwhile, the correlation between amotivation and academic engagement is significantly negative ($r=-0.337$, $p<0.01$) and correlation between amotivation and students' burnout is significantly positive ($r=0.573$, $p<0.01$). Furthermore, students' burnout and academic engagement is correlated significantly negative ($r=-0.358$, $p<0.01$).

Testing Model

This study also examines the model of the relationship between self-efficacy in academic engagement and students' burnout with intrinsic motivation, extrinsic motivation, and amotivation as mediating variables. This study explored relationships among variables using SEM with AMOS software. The test results of the relationship model are presented in Table 3 and Figure 1.

Table 3. Analysis Mediating Model

	Beta (β)	Critical Ratio
Self-Efficacy \rightarrow Intrinsic Motivation	0.618**	11.324
Self-Efficacy \rightarrow Extrinsic Motivation	0.558**	10.172
Self-Efficacy \rightarrow Amotivation	-0.269**	-4.497
Intrinsic Motivation \rightarrow Academic Engagement	0.665**	12.873
Intrinsic Motivation \rightarrow Students' Burnout	-0.166**	-3.064
Extrinsic Motivation \rightarrow Academic Engagement	0.134**	2.818
Extrinsic Motivation \rightarrow Students' Burnout	0.064	1.205
Amotivation \rightarrow Academic Engagement	-0.169**	-3.710
Amotivation \rightarrow Students' Burnout	0.599**	11.838

GFI = 0.958 CFI = 0.931 Chi Square = 48.050 Df = 6

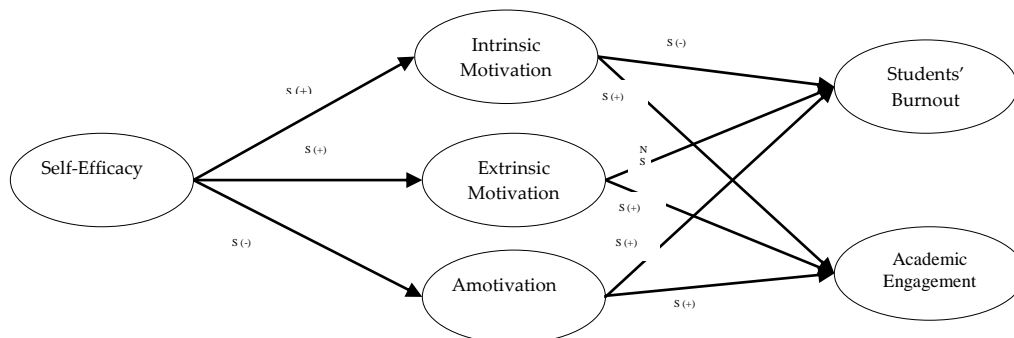


Figure 1. Relationship Model among research variables

Based on the results of model testing using SEM, this study found that self-efficacy personality affects the three dimensions of motivation, namely intrinsic motivation, extrinsic motivation, and amotivation significantly. The influence of self-efficacy personality in both intrinsic and extrinsic motivation is significantly positive, while the influence of self-efficacy personality on amotivation is significantly negative. The results of testing model also show that academic engagement is significantly affected by intrinsic and extrinsic motivation and significantly negative by amotivation. Meanwhile, students' burnout was significantly influenced by amotivation and significantly negative by intrinsic motivation. The results of this study also show that extrinsic motivation has no effect on students' burnout. In other words, intrinsic motivation and amotivation fully mediate the influence of self-efficacy personality on academic engagement and students' burnout. Meanwhile, extrinsic motivation also fully mediates the influence of self-efficacy personality in academic engagement, but partially mediates the effect of self-efficacy personality on students' burnout.

Discussion

In this study, statistically significant finding of the relationships between university students' self-determination theory of motivation, self-efficacy personality, academic engagement, and students' burnout scores have been obtained. The results of this study indicate that one important result of motivation is the attachment in learning tasks. In more detail, the results of this study indicate that intrinsic motivation correlates significantly positive with academic engagement and positively affects academic engagement. This is consistent with the opinions of Deci and Ryan (2000) who argue that intrinsic motivation is an autonomous motivation that reflects fully self-regulated engagement in activities beyond the spontaneous interests and pleasure experienced by the individual. This is also consistent with Lee's (2005) research results which suggest that intrinsically motivated individuals are characterized by spontaneous and absorbed attachment in the activity.

Furthermore, the results of this study indicate that intrinsic motivation is associated significantly negative with burnout and is effected significantly negative on students' burnout. The negative relationship between intrinsic motivation and students' burnout is consistent with previous research results (see e.g., Lemyre, Robert, & Stray-Gunderson, 2007; Hodge, Lonsdale, & Ng,

2008; Lonsdale, Hodge, Rose, 2009; Holmberg & Sheridan, 2013). In general, individuals who are engaged in activities out of desire, joy, satisfaction or interest will make the individual feel emotionally tired. The individual has never experienced psychological distress due to his activities. Instead, the individual actually feels able to do his job, even feel attached to the task. Intrinsic motivation also correlates significantly positive with self-efficacy. Carry out activities based on needs or interests also relate to individual beliefs about their ability to perform the task.

Meanwhile, the results of this study found that extrinsic motivation is positively associated with academic engagement and positively influences the academic engagement. Extrinsically motivated students will experience academic engagement to achieve something desirable or get an external reward (Walker et al., 2006). The results of this study found that extrinsic motivation was significantly associated with burnout, but did not affect burnout. This is consistent with the results of Holmberg and Sheridan (2013) research. However, the results of this study contradict the results of previous research by researchers who found that extrinsic motivation was significantly associated with burnout (*see e.g.*, Hodge et al., 2008; Perreault, Gaudreau, Lapointe, & Lacroix, 2007; Lonsdale et al., 2009; Fernet, Senecal, Guay, Marsh, & Dowson, 2008). The results of this study also contradict the results of the study of ten Brummelhuis, ter Hoeven, Bakker, and Peper (2011) which states that extrinsic motivation is related to reduced engagement and improved students' burnout.

In education generally, students are not only motivated intrinsically. The desire to get awards and not want to be rated bad also motivates students to be academically tied to campus activities. This is consistent with the research results of Ariani (2016) which shows that students not only require intrinsic motivation, but also extrinsic motivation in achievement. Meanwhile, although it is negatively correlated with burnout, extrinsic motivation does not affect burnout significantly. For students, rewards will not affect students' emotional fatigue or students' attitudes toward campus academic activities. Self-determination theory as a motivational theory proves that high self-determined motivation or autonomous motivation plays an important role in the learning success shown by high academic engagement. Meanwhile, low self-determined motivation or other-determined motivation is still a debate that requires in-depth study.

Meanwhile, the results of this study showed that amotivation was significantly associated with students' burnout and academic engagement. Amotivation refers to the lack of motivation for activities (Martinez, Decret, Guillet-Destas, & Isoard-Gauthier, 2014). According to Martinez et al. (2014), amotivation in learning leads to devaluation of learning defined as negative attitudes toward learning. This is reflected with less concern about the performance of learning, feelings of inefficacy, and the tendency to evaluate negatively. This is what drives students' burnout. The results of this study are consistent with Hodge et al. (2008), Lemyre et al. (2006), Lonsdale et al. (2009) which states that amotivation is significantly associated with burnout. Unmotivated students also cause why students do not want to be engaged in the learning process. They tend to be passive and do not want to be involved in doing assignments or class discussions. This is what can also cause them to experience burnout as far from their colleagues.

The results of this study also show that self-efficacy personality factor also correlates significantly positive with academic engagement, but correlates significantly negative with students' burnout. The results of this study support of previous studies such as Skaavik and Skaalvik (2007) and Frederici and Skaalvik (2012). Previous research has shown that students with high self-efficacy will search and find challenges, and adopt strategies to address those challenges (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). This is why individuals with high self-efficacy will achieve higher academic performance and higher academic engagement (Ames & Archer, 1988; Greene & Miller, 1996; Prinrich & De Groot, 1990; Zimmerman & Martinez-Pons, 1990). The results of this study are consistent with the results of previous studies which suggest that self-efficacy is significantly associated with students' burnout (Salanova, Peiro, & Schaufeli, 2002).

The significant relationship between self-efficacy and burnout was based on the results of the Bresó, Salanova, and Schaufeli (2007) studies. They proved that one of the dimensions of burnout is a reduced personal accomplishment that refers to a feeling of decreased competence and productivity or a decrease in a sense of efficacy or so-called inefficacy. Bresó et al (2007) also stated that high self-efficacy will encourage engagement, while low self-efficacy will encourage burnout. Furthermore, the results of this study indicate that burnout and engagement correlates significantly negative. This is consistent with the results of research Bakker, Schaufeli, Leiter, and Taris

(2008) which states that engagement is the antipode of burnout. Meanwhile, in the study of Hultell and Gustavsson (2011) stated that attachment is the direct opposite of burnout. They also stated that individuals with low level of burnout indicate high level of engagement. The results of this study prove the opposite of burnout, namely engagement. This is consistent with the results of Maslach et al. (2001), Schaufeli, Martinez et al. (2002), Schaufeli and Bakker (2004), and Shih (2015). This can be explained by the conservation of resource theory in which burnout and engagement are described as low resource and resource gain (Schaufeli & Bakker, 2004).

Conclusions

The results of this study adds one more proof that intrinsic motivation has tremendous power in increasing individual engagement in the learning process and lower burnout. Especially for education that uses students as respondent, extrinsic motivation can also encourage engagement in academic activities. However, extrinsic motivation does not fully affect students' burnout. The amotivation will affect burnout. The results of this study also show that individuals who are not motivated are individuals who have low self-efficacy personality. Individuals with high self-efficacy are generally motivated both intrinsically and extrinsically. It also adds to one proof that personality traits affect engagement and burnout through the kind of motivation individuals have. The results of this study also adds one proof that in education, intrinsic motivation and extrinsic motivation can influence simultaneously and not contradict each other.

Some implications of the results of this study are, first, to prevent students' burnout, the university wants to focus on changes in students' perceptions of school demands. The results of this study indicate that students' burnout is caused by amotivated students. Therefore, students should always be motivated in the learning process, so there is no burnout. Second, the school must increase the intrinsic motivation of its students to have academic engagement. However, universities may also use extrinsic motivation to improve their students' academic engagement.

This research also can not be separated from various limitations. The first limitation is the cross-sectional nature of the current study. This research uses self-efficacy as independent variable, three motivation variables as

mediator, and burnout and engagement as dependent variable. To determine the influence of one variable on another variable would be better to use longitudinal study. In addition, to determine causation, experimental methods must be implemented. Second limitation is the reliance on self-report measure. Research using self-report for two or more interrelated variables will cause the common method variance (Spector, 2006). According to Podsakoff, MacKenzie, Lee, and Podsakoff (2003), measuring the corresponding variables at the same time and place and from the same source have the potential method of bias because they share systematic covariation due to the common measurement context or by respondent itself. In my study, the use of self-report was justified by the characteristics of the variables tested. In fact, the individual is the most accurate source of reporting in the assessment of internal conditions such as motivation, burnout, engagement, and self-evaluation (Spector, 2006). Third, assessing students' burnout and academic engagement in the early semester can not indicate that students have experienced pressure or burnout. Therefore, this study would be better if the questionnaire distribution and data collection were done at the end of the semester.

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