# Teaching Emotions Mediate the Relationship between Self-Efficacy and Work Engagement

[1]Geraldine P. Go, [2]Imelu G. Mordeno, PhD, [3]Arriane Thea B. Batoy,
[4]Hazal Mae B. Echavez, [5]Yasmin I. Tago

College of Education
Mindanao State University-Iligan Institute of Technology

## Abstract

Teaching engagement is clearly an important element towards effective teaching. Teachers who are engaged exert more effort in their work performance and are likely to be productive in their work. One of the most notable factors that influence the high level of teaching engagement is self-efficacy. Numerous studies have shown that self-efficacy, acting as a self-motivating mechanism, increases teachers' engagement to their work. Although several studies have established the relationship between self-efficacy and work engagement, the mechanism that explains their link is yet to be explored. The present study aims to address the gap by examining the mediating role of teacher's emotions to self-efficacy and work engagement. A sample of 406 in-service public and private elementary schools answered as packet of questionnaires on teacher's self-efficacy, work engagement, and teacher's emotions. Results showed that teachers who believe on their capabilities to organize and perform their tasks will experience enjoyment, lower their anger which then increases their energy, devotion, and concentration in teaching. Results have implications to how teachers believe their competence and how engaged they are in teaching.

**Keywords**: self-efficacy, work engagement, teaching emotions

# INTRODUCTION

Teachers who are engaged exert more effort in their work performance and are likely to be productive in their work (Han et al., 2015). Teaching engagement represents the emotional commitment that a teacher renders in one's job (Kruse, 2012). This emotional commitment means that engaged employees actually care about their work (Upadyaya et al., 2016). Engaged teachers lead to higher service quality and productivity of which will result to a higher learner satisfaction and outstanding teaching performance (Berg et al., 2013; Kruse, 2012).

Previous studies reveal that self-efficacy is positively related to work engagement (Halbesleben 2010; Sweetman & Luthans 2011). Self-efficacy refers to the belief that one's self has the capability to organize and to deal with certain situation (Simbula et al., 2010). Numerous studies have shown that self- efficacy, acting as a self-motivating mechanism, increases teachers' work engagement (Federici & Skaalvik, 2011; Davids, 2011; Mehta et al., 2016; Simbula et al., 2010; Tim et al., in Yakin & Erdil, 2012). Although the relationship between self-efficacy and work engagement is well established (Bandura 1997, 2001; Bakker & Schaufeli, 2003; Lent et al., in Erdil & Yakin, 2012; Cherian & Jacob, 2013), the mediating role of teaching emotion is yet to be explored. Teaching emotions are known to be associated with self-efficacy (Sutton & Wheatley, 2003), work engagement (Chandani et al., 2016), teaching motivation (Pekrun et al., in Sutton & Wheatley, 2003), and teacher commitment (Cheng & Tsui, 1996).

Teaching is a profession charged with emotions, values and ideals. Teacher's emotions are pervasive in the workplace and play an important role in work performance, decision-making skills, team spirit, leadership, turnover and job satisfaction (Brigido et al., 2012; Owoseni, 2015). Studies show that positive emotions (i.e. pride, enjoyment) increase self-efficacy and negative emotions (i.e. frustration, guilt, anxiety, sadness, shame, boredom, and pity) reduce it. Teachers who experience positive emotions can also increase self-fulfilment, gratification, overall performance, and responsible work behavior in the classroom (Isen & Reeve, 2005). Teachers who experience negative emotions show aggression towards colleagues, dissatisfaction with the job, and conflict with others that may result to absenteeism (Devrukhkar, 2010).

Despite the relationship between self-efficacy and teaching engagement what links between them is yet to be explored. This study contends that emotions mediate the relationship between self-efficacy and teaching engagement. This suggests that those with high self-efficacy will experience more positive emotions, and in turn, will be more engaged in teaching. Alternatively, those teachers with low self-efficacy are likely to experience predominantly negative emotions, and consequently, will have lower teaching engagement.

Theoretical Framework

Social cognitive theory emphasizes the evolvement and exercise of human agency – an idea that people can exercise some influence over what they do (Bandura 1977; Bandura 1986; Bandura 1997, 2006a). The theory hypothesized that individuals are engaged in a process of exploring, manipulating, and influencing their environment. Self-efficacy, a key element of social cognitive theory, (Bandura, 1995) are individuals' beliefs about their abilities to yield desired levels of performance. It is a self-reflective mechanism that executes control over life events and determines how one would feel, reason, motivate and execute actions. Self-efficacy refers to people's confidence that they have the ability to perform certain behaviors (Bandura, 1986, 1997). In the

teaching context, self-efficacy refers to the extent to which teachers believe they can bring about change in students' learning outcomes and academic behavior (Gibson & Dembo, 1984). When people believe that they are able to accomplish something that could possibly change environmental events then they are more likely to act positively towards it which more likely ends up to a successful goal attainment (Bandura, 2001).

When people with high efficacy combined with a responsive environment, tasks are likely to be successful. When low efficacy is combined with a responsive environment, people may be depressed when they observe that others are successful at tasks that seem to be difficult for them. On the other hand, when people with high efficacy encounter unresponsive environment, they usually intensify their efforts to change the environment. However, if all efforts fail, one would take up a different course or will seek a more responsive environment. Finally, when low efficacy combines with an unresponsive environment, people are likely to feel apathy, resignation, and helplessness. Thus, the teacher's sense of self-efficacy is how the teachers influence decisions of behaviour in which cognitive, motivational, affective, and selective processes work to transform the individual's self-efficacy into action (Bandura, 1997).

Self-efficacy and Work Engagement

Teaching engagement is defined as "a positive, self-satisfactory and a work-related state of mind that is characterized by commitment, competence, and concentration" (Park & Gursoy in Yakin & Erdil, 2012; Schaufeli et al. in Federici & Skaalvik, 2011). Schaufeli et al., (2002) further discussed that engagement is not a temporary and specific state, but rather involves a more persistent and common affective-cognitive state that is not focused on any particular object, event, individual, or behaviour. The process of work engagement is produced from higher levels of self-efficacy. Self-efficacy greatly influenced teachers' motivation in choosing the level of difficulty that they would pursue, with the effort that those teachers would exert in teaching and lastly, their perseverance in the face of hardships and challenges (Bandura in Simbula et al., 2010). Teachers who are more efficacious are likely to show that they are greatly motivated in work by setting ambitious goals and in turn, likely to be more engaged. Teachers greatly feel satisfaction with themselves with their jobs whenever they feel competent to perform and carry-out their work tasks vitally or attain their work goals (Erdil & Yakin, 2012). Therefore, their ability to connect to their job satisfaction with their job performance level is found to be greatly associated with self-efficacy (Cherian & Jacob, 2013).

Schaufeli and Bakker (2004) stated that engagement is a positive, affective, motivational state of an employee in their work. They also identified three dimensions of engagement: physical dimension/vigor, emotional dimension/dedication, and cognitive dimension/absorption. *Vigor/Physical Dimension* is characterized by high levels of energy and mental strength. The individual has a desire to exert great effort into work and possesses the ability to persist in the face of difficulties to successfully achieve the given task (Bakker et al., 2008; Schaufeli & Bakker, 2010; Schaufeli et al. in Federici & Skaalvik, 2011; Schaufeli & Bakker in Hotz & Hoole, 2016). With this, engaged teachers are still driven and interested on things which they really like to do even if they are exhausted from work (Bakker & Schaufeli, 2003). *Dedication/Emotional Dimension* is characterized by being involved in work and experiences significance, enthusiasm, inspiration, pride, and challenge in the workplace (Bakker et al., 2008; Bakker & Schaufeli, 2010; Schaufeli et al., in Federici & Skaalvik, 2011; Bakker & Schaufeli in Hotz & Hoole, 2016). Dedicated teachers

are more engaged in teaching as they feel enthusiastic and proud about their job (Bakker & Schaufeli, 2003). Lastly, *Absorption/Cognitive Dimension* is characterized by being concentrated and involved in one's own work (Bakker et al., 2008; Bakker & Schaufeli, 2010; Schaufeli et al., in Federici & Skaalvik, 2011; Schaufeli & Bakker in Hotz & Hoole, 2016). Teachers who have this dimension are usually engaged in their job and have difficulties detaching from as it carries them away. It seems that everything else around is forgotten and that time flies so fast when they are still working (Bakker & Schaufeli, 2003).

Due to the high levels of energy and identification with one's work, work allows engaged individuals to extend their self and provide opportunity to express their preferred self in task behaviours that promote essential connections to work and to others (Mengue et al. in Yakin & Erdil, 2012; Park & Gursoy, 2012; Schaufeli & Bakker in Federici & Skaalvik, 2011; Schaufeli & Van Rhenen in Hotz & Hoole, 2016). Van den Broeck et al. (2013) pointed out that employees who are engaged are resourceful in their job, more motivated, more engaged with their work, able to deal effectively with job demands, have more concentration, and produce excellent and superior job performance.

Self-efficacy, acting as a self-motivating mechanism, increases teachers' engagement with the outcome of their work (Federici & Skaalvik, 2011; Davids, 2011; Mehta et al., 2016; Simbula et al., 2010; Tim et al., in Yakin & Erdil, 2012). Work engagement is also positively linked with work support from colleagues, and work performance (Bakker, 2009; Xanthoupoulou et al., 2007). Hence, highly self-efficacious employees are more engaged and said to be able to meet job demands and know how to solve work-related problems in a variety of ways (Bakker et al., 2006; Han et al., 2015; Xanthoupoulou et al., 2007).

Employees who have higher self-efficacy are more capable of finding an effective way and deal more successfully with demands, which results to the prevention undesired outcomes (Stajkovic & Luthans, 1998; Yperen & Snijders,2000). Speier and Frese (1997) showed that employees are more able to do difficult tasks when they have high levels of self-efficacy. In contrast, employees with low levels of self-efficacy are more likely to avoid a challenging environment. Thus, self-efficacious employees are more able to exert more effort to reach their work goals and to overcome difficulties in their job, which could lead to higher levels of work engagement (Chen et al., 2001). High demands and high levels of self-efficacy result in higher levels of work engagement (Xanthopoulou et al., 2013). However, there are few studies which have focused on the relation between self-efficacy and work engagement in the education context (Federici & Skaalvik, 2011; Schaufeli & Taris, 2013 in Dekker, 2015; Simbula et al., 2011).

Mediating Role of Teaching Emotions

Emotions serve as a powerful tool in enhancing learning that build understanding due to the positive relationships between emotion and cognition (Fried et al., 2015; Neville, 2013). Emotions at work place, generally, fall into the category of positive (good) and negative (bad) emotions. Positive emotions are those pleasant feelings of an individual that are favorable to the attainment of organizational goals while negative emotions are those that are unpleasant feelings perceived to be destructive for the organization (Desiviya & Yagil, 2004 Owoseni, 2015; Brigido, 2012). Positive emotions include enjoyment, interest, pride, satisfaction, love and respect (Emmer 1994; Hargreaves 1998; Trigwell, 2012; Garcia et al., 2006). Negative emotions include anger and frustration, anxiety, sadness, shame and guilt, boredom, and pity (Beilock et al., 2010; Brigido et

al., 2012; Chang, 2009; Frenzel, 2014; Hargreaves & Tucker, 1991; Keller et al., 2014; Owoseni, 2015; Sutton, 2007; Sutton & Wheatley, 2003).

Work engaged people are cognitively alert and emotionally committed to others at the time of engagement (Kahn, 1990). They become more emotionally committed toward their work, colleagues, and organization. Engaged employees also feel a strong emotional bond to the organization that employs them, results in higher level of work performance and lowers negligence toward work responsibilities (Agu, 2015).

Self-efficacy has also been known to affect emotions and work performance. People who experience positive emotions tend to be more engaged and endure longer in both satisfying and tiresome tasks (Isen & Reeve, 2005). Highly self-efficacious people are more capable to comprehend and to adapt their emotions and better understand the causes of the formulation of their negative emotions (Bandura 1994; Bong & Skaalvik in Stephanou et al., 2013; Brigido et al., 2012; Fiori et al., 2006; Muris et al., 2001). Conversely, when people believe that they are less efficacious are less contented and less satisfied that allows them to experience negative emotions (Bandura 1997; 2001) which relates to the failure to achieve positive expectations (Garcia et al., 2006).

## METHODS

### Participants

The respondents of the study consisted of 406 in-service teachers from government and private owned schools. There are 66 males (16.3%), 328 females (83%) while 6 respondents did not indicate their gender. The mean age is 37.93 (SD=9.443) ranging from 22-65. The sample was taken from a sample of teachers currently employed on a contractual or permanent status and who have passed the licensure examination for teachers through purposive sampling.

### Procedure

A letter of permission was sent to the superintendent of the Division of Iligan City. Once approved, a letter of permission was sent to various public and private elementary school principals. The researchers then sought for the informed consent of the respondents. The respondents were explained of the purpose of the study, the nature of confidentiality and anonymity, and were informed that the study does not involve risk or harm. Prior to the conduct of the study, proper ethical procedure was ensured through examination of the faculty members of the college.

### Instruments

Teacher Self-Efficacy Scale (TSES) was developed by Tschannen- Moran (2011) measured teacher's sense of self-efficacy in instructional strategies (ɑ .934), classroom management (ɑ .949), student engagement (ɑ .933). The questionnaire is a 9-point Likert scale with responses ranging from 1 (nothing) to 9 (a great deal).

The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli, Bakker, Salanova (2003) measures the experience of aspects of the construct by means of three item scales: vigor (ɑ .82), dedication (ɑ .89), and absorption (ɑ .83). It consists of 17 statements with responses rated on a 7-point scale, ranging from 0 (Never) to 6 (Always/Every day). Several studies have

demonstrated the validity and reliability of the scale (e.g., Schaufeli & Bakker, 2004; Schaufeli, Martinez, Marques-Pinto, Salanova, & Bakker, 2002; Schaufeli, Salanova, et al., 2002; Storm & Rothman, 2003 in Bakker et al., 2007; Høigaard et al., 2011).

Teacher Emotion Scale (TES) was developed by Frenzel (2014) which measures experienced emotions: enjoyment ($\alpha$ .92), anger ($\alpha$ .89), and anxiety ($\alpha$ .89) (Frenzel, 2016). The scale was expanded to a sixty-item questionnaire. The construction of the scale was based on previous similar research (Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011; Schutz & DeCuir, 2002; Sutton & Wheatley, 2003; Weiner, 2001, 2005). The revised scale is a 4-point Likert scale which constitutes 1 as the lowest rate (strongly disagree) and 4 as the highest rate (strongly agree).

**Data Analysis**

The data was analyzed by means of mediation analysis by Preacher and Hayes (2004, 2008) and Hayes (2009, 2012) which included a bootstrapping procedure for testing the indirect effects. A mediation model is one that seeks to identify and explicate the mechanism or process that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third explanatory variable, known as a mediator variable. Bootstrapping involves repeated random sampling observations with replacement from the data set to compute the desired statistic in each resample. After the questionnaires will be collected, the data gathered will be read and listed regardless of the results.

## RESULTS AND DISCUSSION

Findings of the study presented in table 1, 2, and 3 showed that the teaching emotions mediated the relationship between the Teacher's Sense of Self-efficacy and the Teaching Engagement. Further scrutinizing the results, strong or high self-efficacy on Student Engagement (SE, table 1), Instructional Strategies (IS, table 2) and Classroom Management (CM, table 3) increase Vigor (VIG), Dedication (DED) and Absorption (ABS), which is brought about by the strong or high experience of Enjoyment (ENJ).

The findings suggest that teachers who are highly self-efficacious will exert more effort to make a difference in their students' learning that leads to student engagement and achievement, contentment and satisfaction which enables them to experience positive emotions such as enjoyment (Bandura, 1997; 2001). Teachers with high self-efficacy on instructional strategies usually intensify their efforts to change the environment, innovate new teaching strategies and techniques to become more confident (Tschannen- Moran, Hoy & Woolfolk Hoy, 1998; Friedman & Kass, 2002; Betonio, 2015). Teachers who are self-efficacious tend to endure longer even if they are facing difficulties in their classroom (Bandura, 1997; Speier & Frese, 1997; Bakker & Schaufeli, 2003) enabling them to experience positive emotion (enjoyment) and in turn leads to higher levels of energy and mental resilience while working (Vigor), higher sense of significance, enthusiasm, and pride (Dedication), and higher state of concentration and happiness in whereby time passes quickly (Absorption) (Basikin, 2007).

The influences of teacher's sense of self-efficacy have been extensively studied. For instance,

teachers who are highly self-efficacious are likely to feel positive emotions such as enjoyment and become more engaged to work. Results are consistent with several studies (e.g. Bakker, 2011; Upadyaya et al., 2016; Yakin & Erdil, 2012; Frederici & Skaalvik, 2011). Self-efficacious teachers would perceive the objective and needs of daily teaching as being less threatening (Schwarzer & Hallum, 2008). Simbula and colleagues (2010) also found that when teachers perceive the possibility of developing new skills to assist students in their learning, feel supported by their colleagues and school principal, and are self-efficacious, they are likely to be more engaged.

Student Engagement (SE) is positively predicts Enjoyment (ENJ).These findings advocate that those teachers who have better perception on affecting student engagement will probably experience effective feelings including enjoyment. Teachers who are highly self-efficacious will exert extra effort to make a difference in their students' performance that leads to engagement and fulfillment so one can end result so one can end to contentment and satisfaction, a good way to permit them to experience effective emotions consisting of enjoyment (Bandura, 1997; 2001). Ssun & Rueda (2012) stated that self-efficacy involves influencing students' engagement and learning through teacher's performance. Teachers with high experience of self-efficacy are confident that they can connect with the most difficult students, generate new various strategies and techniques providing teachers a sense of satisfaction and enjoyment (Eslami & Fatahi, 2008; Bandura 1997; 2001).

Instructional Strategies (IS) is positively predicts Enjoyment (ENJ). These results advocate that those teachers with high self-efficacy on instructional strategies will experience high quality emotions (enjoyment). This suggest that teachers with high self-efficacy on developing academic techniques usually intensify their efforts in innovation of new teaching strategies. This is consistent with the study of Betonio (2015) where teachers can control to look or generate for new teaching strategies and techniques. High efficacy on instructional techniques lead teachers to attempt or create various new teaching strategies and techniques so as to meet or fulfill the academic desires of their students which gives them a sense of satisfaction and contentment (Bandura 1997; 2001; Federici & Skaalvik, 2011; Betonio, 2015).

Classroom Management (CM) is positively predicts Enjoyment (ENJ). This indicates that once teachers feel that they are efficacious on classroom management they are in all likelihood to experience enjoyment in teaching. Bandura, (1997) stated that self-efficacy is possible in a responsive environment and in  unresponsive surroundings efforts are intensifiedextra. Speier and Frese (1997) confirmed that employees are able to do extra hard obligations when they have excessive degrees of self-efficacy. Bakker and Schaufeli, (2003) stated that self-efficacious people are persistent in the face of difficulties, persist longer in tasks that makes them successful.  Teachers who are self-efficacious have a tendency to endure longer even if they may be going through problems in their classroom that makes them successful in their tasks and make them more involved in teaching. Self-efficacious teachers emerge as more mindful and motivated in terms of managing unique situations (Johnson & Tschannen-Moran, 2011; Stephanou et al., 2013). Furthermore, Isen & Reeve, (2005) said that those who endure longer of their fulfilling and tiresome assignment experience high-quality emotions.

Enjoyment (ENJ) is positively predicts Vigor. This shows that once teachers feel satisfied, entertained and enthusiastic, they emerge as lively and mentally resilient or absolutely vigorous (energy). A study by Bakker and Bal, (2010) stated that the ones who are engaged frequently enjoy

positive emotions. Positive emotions enables teachers to have higher teaching engagement through being open to new coping techniques, goal-setting, becoming more engaged in accomplishing the work-related goals which generate extra teaching ideas and dedication to work (Fredrickson, 2004; Bakker & Demerouti, 2008; Trigwell, 2011; fee & Collett, 2012; Ouweneel et al., 2013).

Enjoyment (ENJ) is positively predicts Dedication. This suggests that when teachers feel joy at their work they become more dedicated. As teacher experience positive emotions, they end up engaged, tend to look their activity as meaningful, self-fullfilling and inspirational and in turn, grow to be more committed and focused in their work that results to high-quality work overall performance (Macey, 2008 in Agu 2015; Yakin & Erdil, 2012). Accordingly, teachers who experience positive emotions together with enjoyment tend to become inspired, fulfilled and grow to be greatly devoted to their work.

Enjoyment (ENJ) is positively predicts Absorption. This implies that when teachers experience enjoyment at work they become more involved and concentrated with their work (Absorption). Teachers who are absorbed in their jobs are being over excited at the same time being carried away (Bakker & Schaufeli, 2003). As they teach they grow to be focused, involved and experienced enjoyment. Teachers experience greater positive emotions when they come to be more engaged in accomplishing their work-related goals (Fredrickson, 2004; Bakker & Demerouti, 2008; Trigwell, 2011; Price & Collett, 2012; Ouweneel et al., 2013). Bakker and Bal (2010) cited that those teachers who are engaged are experiencing more positive emotions consisting of enjoyment, satisfaction, interest.

Student Engagement (SE) is positively predicts Vigor. This suggests that when teachers believe that they are efficacious in engaging the students they also feel energetic and mentally resilient at work. This is consistent several studies (Bakker & Demerouti, 2008; Xanthopoulou et al., 2007). Teachers who are self-efficacious are notably energetic, enthusiastic and concentrated and believes they are able to meet the demands in their work. Self-efficacy results to trying of diverse new coaching techniques and strategies with the intention to meet the student desires (Allinder, 1994; Barbaranelli et al., 2006; Cothran & Kulinna, 2003; Grey & Ross, 2006; Stephanou & Tsapakidou, 2007b; Tschannen- Moran, Hoy & Woolfolk Hoy, 1998). When teachers feel energetic and full of life at work, they turn out to be active and resilient, extra resourceful, progressive in coming up with new teaching strategies and techniques to satisfy the work-related goals and solve problems (Bakker et al., 2006; Han et al., 2015; Xanthoupoulou et al., 2007).

Student Engagement (SE) is positively predicts Dedication. The findings suggest that when teachers are efficacious on student engagement they are also dedicated. Engaged employees have been found to be enthusiastic and believe that they are capable of meeting the demand of their job. Employees who have better self-efficacy are more able to finding an effective way and deal successfully with the needs, which ends up to the prevention of undesired consequences (Stajkovic & Luthans, 1998). Teachers are more enthusiastic at work and are more capable of finding effective methods in dealing with the job-demands and academic needs of their students (Speier and Frese, 1997).

Student Engagement (SE) is positively predicts Absorption. The results suggest that when teachers have high self-efficacy on student engagement they are also concentrated at work. Teachers who have high efficacy show that they are greatly motivated in work by setting goals and in turn are likely to be engaged (Lent et al., in Erdil & Yakin, 2012). Van den Broeck et al.

(2013) said that those employees who are engaged are resourceful, more motivated, more engaged, able to deal effectively with job demands, have more concentration, and produce excellent and superior job performance. Teachers who are engaged have more concentration, imaginative, inspired and effectively offers with the work-associated needs and have precise activity overall performance.

Instructional Strategies (IS) is positively predicts Vigor. This implies that when teachers feel efficacious on instructional strategies (IS) they also feel vigorous. Their level of strength and

intellectual resilience at work are also excessive. Teachers are more open to attempt new coaching strategies and techniques. They experience pride with themselves, with their jobs whenever they sense competence (Erdil & Yakin, 2012).

Instructional Strategies (IS) is positively predicts Dedication. This suggests that when teachers feel efficacious on instructional strategies, they are more dedicated with their job. Engaged employees are enthusiastic and believes that they may be able to meet the demands they face in any circumstances (Xanthopoulou et al., 2007) through new strategies and techniques in teaching to meet the academic needs of their students (Allinder, 1994; Barbaranelli et al., 2006; Cothran & Kulinna, 2003; Gray & Ross, 2006; Stephanou & Tsapakidou, 2007b; Tschannen- Moran, Hoy & Woolfolk Hoy, 1998;).

Instructional Strategies (IS) is positively predicts Absorption. These findings suggest that when teachers feel efficacious on instructional strategies (IS) they are more absorbed with their work. Cherian & Jacob, (2013) stated that once teachers are self-efficacious they experience a conncetion to their job satisfaction and job overall performance. Van den Broeck et al. (2013) additionally mentioned that those employees who are engaged are imaginitive of their job, greatly motivated, greatly engaged with their work, able to deal efficiently with activity needs, have more focus, and bring extremely good and superior job performance. Teachers are capable of innovating new strategies and they may try to observe the techniques and look at improvement they emerge as greatly concentrated with their work and experience that time flies when they are teaching.

Classroom Management is positively predicts Vigor. This suggests that when teachers feel efficacious on classroom management, they tend to become more energetic and mentally resilient at work. Xanthopoulou et al., (2007) stated that personal sources (e.g. Self-efficacy) are parts of one's self, which might be related to resiliency and the capability to govern the surroundings efficaciously. Self-efficacy stimulated teachers' motivation in selecting the level of problem that they might pursue, with the attempt that those teachers might exert greater effort in teaching and finally, their perseverance inside the face of hardships and challenges (Simbula et al., 2010).

Classroom Management is positively predicts Dedication. The findings suggest that when teachers believe that they are efficacious on classroom management they become more dedicated with their job. Speier and Frese (1997) showed that employees are more able to do difficult task if they have high levels of self-efficacy. In contrast, employees who have low ranges of self-efficacy are much more likely to keep away from a challenging surroundings. Self-efficacious employees exert extra effort to reach their work goals, overcome problems of their job (Chen et al., 2001), feel enthusiastic and proud with their job (Bakker & Schaufeli, 2003). People who are engaged have a

sense of passion, relevance, and significant reference to work that they will have (Yakin & Erdil, 2012; Park & Gursoy, 2012; Schaufeli & Bakker in Federici & Skaalvik, 2011; Hotz & Hoole, 2016). For the reason that, as employees turn out to be more engaged, they have a tendency to perceive their job as significant, self-fullfilling and inspirational and in turn, they turn out to be extra dedicated and focused in their work (Agu 2015; Yakin & Erdil, 2012).

Classroom Management positively predicts Absorption. When teachers feel efficacious on classroom management, they become more concentrated with their work. Teachers who are capable of innovating new strategies may try to observe the techniques and look at improvement become greatly concentrated with their work (Bakker & Schaufeli, 2003).

The results support the proposed hypotheses. This research outlined a strong relationship between teachers' sense of self-efficacy and teaching engagement through teaching emotions. It has been proven that teachers' sense of self-efficacy predict teaching emotions and subsequently teaching emotions predict teaching engagement (Upadyaya et al., 2016 ; Yakin & Erdil, 2012; Frederici & Skaalvik, 2011; Rahimi & Brigdeli, 2014). Beyond providing additional support for earlier findings, the major finding and contribution of this study is on teaching emotions as an important mediating link between teachers' sense of self-efficacy and teaching engagement. Teachers with higher sense of self-efficacy will have more positive emotions that result to higher teaching engagement.

Recommendations

This research focused only on primary level. Further researchers may also investigate at the secondary and tertiary levels using the same aspects that this present study used. The researchers would like to present few recommendations to ensure that results and concerns regarding this study will be addressed.
1. To enhance work engagement, focus on job design that will address the individual needs of the teachers
2. More opportunities for professional development and performance feedback
3. Focus on developing interventions that will develop within the teachers the belief to do work, since such enables them to experience positive emotions which would sustain high priority work engagement.
4. More consultative meetings and conferences with teachers where teachers have a say in the discussion.

Limitations

The study is cross-sectional where data is gathered at a particular point in time. The questionnaires are self-report which may be subject to social desirability. The study is limited in the use of variables, other variables may be examined. Other samples may be used which could expand the generalisability of the findings.

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**APPENDIX**

Table 1. Mediation Analyses of Teacher's Sense of Self Efficacy (Student Engagement) on Work Engagement

| Independent Variable (IV) | Mediating Variable (M) | Dependent Variable (DV) | Direct Effect (c') | Total Indirect Effect | Total Effect (c) | Indirect Effects | SE | BC 95% CI | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | LL | UL |
| SE | Enjoyment | Vigor | 0.0787** | 0.0291 | 0.1078 | **0.0249** | 0.01 | 0.0094 | 0.0501 |
| | Pride | | | | | 0.0046 | 0.0045 | -0.0006 | 0.0185 |
| | Anger | | | | | 0.0044 | 0.006 | -0.0045 | 0.0203 |
| | Anxiety | | | | | -0.0018 | 0.0093 | -0.0212 | 0.0162 |
| | Shame & Guilt | | | | | -0.0005 | 0.0021 | -0.0075 | 0.0022 |
| | Boredom | | | | | -0.0019 | 0.0032 | -0.0132 | 0.0014 |
| | Pity | | | | | -0.0006 | 0.0029 | -0.0083 | 0.004 |
| SE | Enjoyment | Dedication | 0.1006** | **0.0301** | 0.1307 | **0.0233** | 0.0095 | 0.0087 | 0.0468 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Pride | | | | | 0.0001 | 0.0031 | -0.0052 | 0.0078 |
| | Anger | | | | | 0.0053 | 0.0067 | -0.0061 | 0.0208 |
| | Anxiety | | | | | 0.002 | 0.0064 | -0.0102 | 0.016 |
| | Shame & Guilt | | | | | 0.0015 | 0.0023 | -0.0013 | 0.0091 |
| | Boredom | | | | | -0.0003 | 0.0023 | -0.0067 | 0.0033 |
| | Pity | | | | | -0.0019 | 0.0026 | -0.0107 | 0.0011 |
| SE | Enjoyment | Absorption | 0.0629** | 0.0289 | 0.0918 | **0.0234** | 0.0096 | 0.0085 | 0.0482 |
| | Pride | | | | | 0.0038 | 0.0045 | -0.0009 | 0.0184 |
| | Anger | | | | | 0.0077 | 0.0096 | -0.0088 | 0.0293 |
| | Anxiety | | | | | -0.003 | 0.0083 | -0.0205 | 0.0129 |
| | Shame & Guilt | | | | | 0.0011 | 0.0024 | -0.001 | 0.0093 |

| | | | 6 | |
|---|---|---|---|---|
| Boredom | 0.0005 | 0.0024 | -0.0033 | 0.007 |
| Pity | -0.0046 | 0.0038 | -0.016 | 0.0003 |

*Note: SE, Student Engagement; IS, Instructional Strategies; CM, Classroom Management; Data was bootstrapped to 10,000 resamples; All coefficients are unstandardized; \*p< .05, \*\*p< .01; LL=lower limit; UL=upper limit; Significant indirect effects are indicated in boldface. N= 406.*

Table 2. Mediation Analyses of Teacher's Sense of Self Efficacy (Instructional Itrategies) on Work Engagement

| Independent Variable (IV) | Mediating Variable (M) | Dependent Variable (DV) | Direct Effect (c') | Total Indirect Effect | Total Effect (c) | Indirect Effects | SE | BC 95% CI | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | LL | UL |
| IS | Enjoyment | Vigor | 0.0657** | 0.0285 | 0.0942 | **0.0237** | 0.0097 | 0.0088 | 0.0481 |
| | Pride | | | | | 0.0047 | 0.0047 | -0.0007 | 0.0194 |
| | Anger | | | | | 0.0033 | 0.0062 | -0.0061 | 0.0194 |
| | Anxiety | | | | | 0 | 0.009 | -0.0181 | 0.0181 |
| | Shame & Guilt | | | | | -0.0002 | 0.0019 | -0.0057 | 0.0029 |
| | Boredom | | | | | -0.0024 | 0.0035 | -0.0142 | 0.0015 |
| | Pity | | | | | -0.0007 | 0.0031 | -0.0085 | 0.0043 |
| IS | Enjoyment | Dedication | 0.1125** | **0.0259** | 0.1384 | **0.0218** | 0.0089 | 0.0082 | 0.0448 |
| | Pride | | | | | -0.0005 | 0.0032 | -0.0076 | 0.0059 |
| | Anger | | | | | 0.0042 | 0.0072 | -0.0084 | 0.0206 |
| | Anxiety | | | | | 0.0018 | 0.0061 | -0.0095 | 0.0152 |

| | | | | | | Coeff | SE | LL | UL |
|---|---|---|---|---|---|---|---|---|---|
| | Shame & Guilt | | | | | 0.0013 | 0.0023 | -0.0016 | 0.0087 |
| | Boredom | | | | | -0.0006 | 0.0025 | -0.0081 | 0.0031 |
| | Pity | | | | | -0.0022 | 0.0027 | -0.0109 | 0.0011 |
| IS | Enjoyment | Absorption | 0.067** | 0.0251 | 0.0921 | **0.0218** | 0.0091 | 0.008 | 0.0452 |
| | Pride | | | | | 0.0038 | 0.0047 | -0.0011 | 0.019 |
| | Anger | | | | | 0.0059 | 0.0101 | -0.0116 | 0.0284 |
| | Anxiety | | | | | -0.0027 | 0.0079 | -0.0198 | 0.0121 |
| | Shame & Guilt | | | | | 0.0009 | 0.0023 | -0.0017 | 0.0091 |
| | Boredom | | | | | 0.0004 | 0.0027 | -0.0042 | 0.0074 |
| | Pity | | | | | -0.0052 | 0.0038 | -0.0164 | 0.0000 |

*Note: SE, Student Engagement; IS, Instructional Strategies; CM, Classroom Management; Data was bootstrapped to 10,000 resamples; All coefficients are unstandardized; \*p< .05, \*\*p< .01; LL=lower limit; UL=upper limit; Significant indirect effects are indicated in boldface. N= 406.*

Table 3. Mediation Analyses of Teacher's Sense of Self Efficacy Classroom Management) on Work Engagement

| Independent Variable (IV) | Mediating Variable (M) | Dependent Variable (DV) | Direct Effect (c') | Total Indirect Effect | Total Effect (c) | Indirect Effects | SE | BC 95% CI | |
|---|---|---|---|---|---|---|---|---|---|
| CM | Enjoyment | Vigor | 0.0491* | 0.0182 | 0.0673 | **0.0184** | 0.0081 | 0.0061 | 0.0393 |
| | Pride | | | | | 0.0026 | 0.0035 | -0.001 | 0.0142 |
| | Anger | | | | | -0.0001 | 0.0053 | -0.0098 | 0.0118 |
| | Anxiety | | | | | 0.0006 | 0.0085 | -0.0161 | 0.0179 |
| | Shame & Guilt | | | | | -0.0001 | 0.0019 | -0.0046 | 0.0038 |
| | Boredom | | | | | -0.0024 | 0.0034 | -0.0136 | 0.0014 |
| | Pity | | | | | -0.0008 | 0.0032 | -0.0082 | 0.005 |
| CM | Enjoyment | Dedication | 0.0859** | 0.018 | 0.1039 | **0.017** | 0.0077 | 0.0056 | 0.0371 |
| | Pride | | | | | 0.000 | 0.0021 | -0.0039 | 0.0051 |
| | Anger | | | | | -0.0002 | 0.0063 | -0.0122 | 0.0133 |
| | Anxiety | | | | | 0.0026 | 0.0059 | -0.0082 | 0.0155 |
| | Shame & Guilt | | | | | 0.0018 | 0.0024 | -0.001 | 0.0092 |

| | | | | | | Effect | SE | LL | UL |
|---|---|---|---|---|---|---|---|---|---|
| | Boredom | | | | | -0.0007 | 0.0024 | -0.0077 | 0.0029 |
| | Pity | | | | | -0.0025 | 0.0027 | -0.0102 | 0.0013 |
| CM | Enjoyment | Absorption | 0.039* | 0.0144 | 0.0533 | **0.0172** | 0.0079 | 0.0055 | 0.0381 |
| | Pride | | | | | 0.0022 | 0.0034 | -0.0009 | 0.0141 |
| | Anger | | | | | -0.0002 | 0.0087 | -0.0161 | 0.0185 |
| | Anxiety | | | | | -0.0009 | 0.0075 | -0.0166 | 0.0135 |
| | Shame & Guilt | | | | | 0.0015 | 0.0024 | -0.0013 | 0.0094 |
| | Boredom | | | | | 0.0003 | 0.0026 | -0.0043 | 0.0067 |
| | Pity | | | | | -0.0057 | 0.0037 | -0.016 | -0.0006 |