Trait Relations: Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism with Teacher Emotion Regulation

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Abstract

Emotion regulation is one form of the personality competence consisting of intrinsic and extrinsic processes that are responsible for recognizing, monitoring, evaluating and limiting emotional responses. Especially, the intensity and shape/form of the reaction to achieve a goal. Therefore, it is not exaggeration to say that one of the competencies is needed to become a professional teacher is to have the ability to regulate his/her emotions. Because, the teacher's emotions can actually influence the effectiveness of the teaching and learning process with the students in the class. The previous research states that the individual emotion regulation is closely related to the personality traits. This study aims to explore which personality factors of The Big Five Personality that is most influenced to emotional regulation. This is very important to understand the mechanism of the emotion regulation in teachers especially. This survey study involved 267 teachers in the city of Padang and the data analysis method used were Partial Least Squares Path Modeling (PLS-PM) to test any personality trait that affected the emotional regulation. The results showed that the value coefficient of determination of the emotion regulation variable was 0.2993. This means that the five traits in The Big Five Personality jointly influence the regulation of emotions or are able to explain the variation of the emotion regulation variables by 29.93%.

Keywords: Emotion Regulation, Trait, Personality

1. Introduction

The learning process or teaching and learning activities cannot be separated from the existence of the teacher. Without the teacher's presence, then, the activity of learning will be difficult to do, especially in the context of implementing the formal education, the teacher becomes a very vital part. The teachers have an important role in the implementation of education in order to achieve the educational goals. Hamre and Pianta (2005) reveal that students in the early grades need strong emotional support in terms of achievement and the relationship between the teacher and the student. Therefore, the emotions of teachers play a role in realizing the effective teaching and the learning process in the classroom (Sutton, 2004; Yin, 2016).

The teacher's emotions in learning activities have increasingly attracted the attention of the researchers in the recent years (Frenzel, Linnenbrink, Garcia, & Pekrun, 2014; Frenzel, Pekrun, Goetz, Daniels, Durksen, Becker, Kurz, & Klassen, 2016; Schutz, & Zembylas, 2009) One of the concerns of education researchers is the teacher's ability to regulate his/her emotions. The emotional regulation is the capacity to control and adjust the emotions that arise at the right level of intensity to achieve a goal. The appropriate emotional regulation includes the ability to regulate the feelings, physiological reactions, cognitions related to emotions, and the reactions related to the emotions (Shaffer, 2005). Someone who has an emotional regulation can maintain, increase or decrease the emotions he/she feels both the positive and negative.

According to Gottman and Katz (Wilson, 1999) the emotion regulation refers to the ability to block inappropriate behavior due to the strong intensity of positive or negative emotions that are felt. He/she can calm down from the psychological influences that arise due to strong intensity of the emotions. He/she also can focus the attention again and organize him/her self to set the right behavior to achieve a goal. Walden and Smith (in Eisenberg, Fabes, Reiser & Guthrie 2000) explain that the emotional regulation is the process of receiving, maintaining and controlling an event, the intensity and the duration of emotions felt, physiological processes related to the emotions, facial expressions and the observable behavior. It can be concluded that the emotional regulation is an intrinsic and extrinsic process that is responsible for monitoring, evaluating and modifying the teacher's emotional reactions that occur intensively and temporarily in achieving the goals. Thompson (2006) divides the emotional regulation in the three dimensions, namely monitoring, evaluation and change.
Monitoring is the ability of individuals to deal with all forms of the emotions and thoughts (Garber & Dodge, 1991) so that they can more clearly monitor the emotions that they are facing (Thompson, 1994; Kostiuk & Foust, 2002). The assessment involves evaluating both the positive and negative for all events faced in accordance with the knowledge they have and how to use that knowledge to produce what is expected (Thompson, 1994; Kostiuk & Foust, 2002). The positive assessment can manage the emotions well, so that they can avoid the effects of negative emotions that make individuals act beyond their expectations (Garber & Dodge, 1991). While change is the ability to change/convert the emotions in a better direction by changing the negative influences that come into an encouragement in order to become the individuals with the motivation for changing towards a positive direction (Thompson, 1994; Kostiuk & Foust, 2002), and then applied in the behavioral responses chosen (Garber & Dodge, 1991). Due to the enormous benefits of the emotional regulation, it is not excessive if the emotion regulation abilities are vital for improving the teacher professionalism.

Sutton, Camino, and Knight (2009) have examined how the teachers attempt to modify the intensity and the duration of their emotions, and also how their emotions are expressed in the classroom. One of his findings revealed that the teachers train their emotional regulation because they believe that it makes them more effective in management, discipline, and their relationship with the students (Sutton & Knight, 2006).

However, in Indonesia, Widiyanto (2001) found a phenomenon regarding a teacher behavior that actually impressed emotionally, especially when dealing with the students who had problems. Instead of calming, the teacher snapped loudly, banging the blackboard eraser to the table and threatening the students when making noise in the class or not paying attention to the lesson. Ramdhani (2012) and Brackett, et al. (2010) state that the teachers who are easily angry also yelling out with the loud voices to make the students quiet and listen to them, or shouting, beating, angry and labelling the students, are the indicators of the teachers who are unable to regulate their emotions. Even, not infrequently the teacher's inability to regulate their emotions manifests itself by giving the physical punishment. In fact, the punishment should be aimed at changing the students' behavior to be better attitude, not vent the teachers' emotions. The impact of the teacher's emotional behavior is the breakdown of the teacher-student relations that should be built to support learning (Brackett et al., 2010). Besides, by destroying relationships with the students, the teachers who are easily angry will also make students afraid, and these fears have an impact on the students' decreased interest and the concentration in the learning process. Kostiuk and Fouts (2002) state that the teachers who are unable to regulate their emotions, they cannot make reasonable evaluations, also are not creative in managing the emotions and are unable to make the good decisions. Of course, these things lead to the low achievement of learning for the students.

Robbins & Judge (2008) state that the people who understand the emotions of themselves and can read the emotions of others that may be more effective in doing their jobs. Therefore, the teachers need to be helped to train their abilities by regulating their emotions in order to be able to play a professional role and increase their effectiveness in learning.

An important aspect of emotional regulation is the capacity to restore the emotional balance even though at first someone loses control of the emotions that they feel. In addition, a person can only experience excessive emotions in a short time and quickly be able to neutralize the mind, behavior, physiological response and can avoid the negative effects of excessive emotions itself (Sukhodolsky, Golub & Cromwell in Gratz & Roemer, 2004).

Thompson (1994) says that the emotional regulation consists of intrinsic and extrinsic processes that are responsible for recognizing, monitoring, evaluating and limiting emotional responses. Especially, the intensity and the shape of the reaction to achieve a goal. The effective emotional regulation includes the ability to flexibly manage the emotions in accordance with the demands of the environment.

From the previous studies, it was mentioned that there is a specific relationship between the personality traits and the emotions (Sadr, 2016; Sandhu & Kapoor, 2013). Means, a person's personality is related to a person's ability to regulate his/her emotions. Feist and Feist (2009) state that the traits of personality of an individual can predict and explain the emotions and behaviors that are displayed. Trait in referred is a dimension that is relatively settled on the individual characteristics that can be used to distinguish one individual from the other individual.

The researchers now approve the trait theory which groups trait into the top five, with the bipolar dimensions (Costa & McCrae, 1997), which are called as the Big Five or FFM (Five Factor Models). Piedmont & Chae (1997) also assumed that various cross-cultural studies of the big five personality were conducted, one of them in Korea. The Big Five or trait is based on the category of individual traits, which can be used to evaluate yourself and the others (Moberg, 1999). McCrae & Costa (1997) explained that big five personalities are described in five basic dimensions, including the Neuroticism, Extraversion, Openness to Experience, Agreeableness, and the Conscientiousness.
The individuals with high conscientiousness trait will tend to be more aware of the situations that can cause negative emotions (Cate in Gross & John, 2007). This trait helps individuals to master the emotional regulation competencies, by the carefully and consistently way. They also can choose and modify the situations that can support their goals and plans.

The regulatory strategies, also conducted by the individuals with the conscientiousness trait are the attention deployment (spreading the attention). Besides that, trying to focus on the task and spread the attention that is relevant to the objectives of the environment is often done by the individuals with a conscientiousness trait.

The individuals with the extroversion type achieve goals including the expectations toward the students, reaching influential positions, and feeling free to express the negative and positive emotions (Anderson, Keltner, & Kring, Gross, John, Pervin in Gross & John, 2007). The extraversion individuals can potentially take the advantage of the situations in order to reduce the negative emotions. Individuals with this type tend not to choose the situations as an effort to regulate their emotions.

The neuroticism trait is the core of the negative emotions or the emotional experience itself that causes individuals to act in accordance with these traits (Costa & McCrae in Feist & Feist, 2009). According to Gross and John (2007) the individuals with the neuroticism trait are negatively related to the emotion regulation strategies. They tend to be less effective in trying to regulate their emotions. Besides that, they don't believe that the other people can help to change their negative emotions, and they believe that the negative emotions they have are very strong and difficult to be controlled by them selves. While the individuals with the trait agreeableness have the motivation to help the others and be directed towards the prosocial behavior. The people with the lower levels of agreeableness tend to be more aggressive and less cooperative. According to Costa and Widiger (in Moberg, 1999).

The relationship between the openness trait and the emotional regulatory ability was expressed by Costa and Mc. Craze (in Gross & John, 2007) that the individuals with the openness trait have greater awareness of the emotional clarity, and the intensity of emotions felt at a time. Gross and John (2007) state that the individuals with the trait openness accept their emotions as something real, important, need an attention and regulation, and feel optimistic about their ability to regulate their emotions.

The description above reveals that the individual regulatory abilities are influenced by the traits that have consequences on one's actions when facing certain emotional situations. An explanation of the relationship supports this research in discussing how trait influences the teacher's ability to regulate emotions. Based on the description above, it needs to be investigated whether there is an influence of personality trait on the regulation of teacher emotions. The research hypothesis is described as follows: (1) There is an Openness trait relationship, with the regulation of teacher emotions. (2) There is a Conscientiousness trait relationship, with the regulation of teacher emotions. (3) There is an Extraversion trait relationship, with the regulation of teacher emotions. (4) There is an Agreeableness trait relationship, with the regulation of teacher emotions. (5) There is a Neuroticism trait relationship, with the regulation of teacher emotions. (6) There are trait variables: Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism jointly influence with the regulation of teacher emotions.

2. Method

2.1. Participants

The participants involved in this study were 267 elementary school teachers in Padang City who were selected using a random sampling technique from 4913 state elementary school teachers.

2.1. Measurement

The measurement of the emotion regulation uses the 3 dimensions of emotion regulation that is expressed by Thompson (1994), namely: Monitoring (monitoring), Assessment (evaluating), and Changing (Modifying). The choice of the emotional regulation scale consists of 5 answer choices, namely Strongly Agree (SA), Agree (A), Doubtful (D), Disagree (DS) and Strongly Disagree (SD). For the favorable items, Strongly Agree (SA) answer choices have a score of 5, Agree (A) answer choices have a score of 4, Doubtful (D) answer choices have a score of 3, Disagree (DS) answer choices have a score of 2 and answer choices for Strongly Disagree (SD) has a score of 1. For the unfavorable items, Strongly Agree (SA) the answer choices have a score of 1, for the answer of choices Agree (A) has a score of 2, for the answer of choices Doubtful (D) has a score of 3, the answer disagree choice (DS) has a score of 4, and the answer choices for Strongly Disagree (SD) has a score of 5.

Trait measurement is arranged based on the concept which are proposed by Robert R. MC. Crae & Paul T. Costa (2000) regarding the five types of trait. Each type has six facets which are described into a number of indicators that represent each statement. The questionnaire captured the full and total comprehension of the subject about the personality (trait) he/she had.
Each respondent gets a score based on the choice of answer in each item that he/she chooses. The assessment of the five types of personality (trait) will be conducted by summing the scores that have obtained by the subject for each type of the personality. The higher of score that has obtained by the subject in a particular trait, then, the stronger the trait in the respondent. Conversely, the lower of score that has obtained by the subject in a particular trait, then, the weaker the trait in the respondent.

2.2. Data analysis

In this study, the data analysis method used is the Partial Least Squares Path Modeling (PLS-PM) by using the software STATCAL-PLSPM. Gaston Sanchez (2013) PLS-PM is simplified can be interpreted as a statistical data analysis methodology which is a combination of the regression models, structural equation models, and multiple table analysis methods. Mahfud and Ratmono (2013) state that if the data fulfils CB-SEM assumptions appropriately such as the minimum sample size and normal distribution, then select CB-SEM. If it doesn't fulfil, select SEM-PLS. SEM-PLS is a nonparametric approach; can work well even for an extreme abnormal data.

3. Results

3.1. The Evaluation of Outer Model (Measurement Model)

The convergent validity is the part of the measurement model in SEM-PLS usually referred to as the outer model. While in covariance-based SEM it is called the Confirmatory Factor Analysis (CFA) (Mahfud and Ratmono, 2013). There are two criteria to assess whether the outer model fulfils the convergent validity requirements for the reflective constructs, they are: (1) loading must be above 0.7 and (2) p value is significant (<0.05). But in some cases, often loading requirements above 0.7 are often not fulfilled especially for newly developed questionnaires. Therefore, loading between 0.40-0.70 must be considered to be maintained (Mahfud and Ratmono, 2013).

Based on testing the validity of loading in Table 5.1, all loading values are> 0.4, which means that it fullfils the validity requirements based on the loading value. At STATCAL-PLSPM a graph is also displayed which displays the loading values (note Figure 3.1).

![Loading Graph](image)

Based on the loading graph in Figure 3.1, it is known that all loading values are above 0.4. Furthermore, testing the validity based on the values of Average Variance Extracted (AVE) and the testing reliability based on cronbach’s alpha (CA), dillon goldstein’s rho (DG).

<table>
<thead>
<tr>
<th>Names</th>
<th>Type</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP</td>
<td>Exogenous</td>
<td>0.6437</td>
</tr>
<tr>
<td>CO</td>
<td>Exogenous</td>
<td>0.5616</td>
</tr>
<tr>
<td>EX</td>
<td>Exogenous</td>
<td>0.5273</td>
</tr>
<tr>
<td>AG</td>
<td>Exogenous</td>
<td>0.589</td>
</tr>
<tr>
<td>NE</td>
<td>Exogenous</td>
<td>0.7963</td>
</tr>
<tr>
<td>RE</td>
<td>Endogenous</td>
<td>0.5271</td>
</tr>
</tbody>
</table>
Based on the results of the testing validity based on AVE value, it is known that AVE from OP are 0.6437, CO 0.5616, EX 0.5273, AG 0.589, NE 0.7963 dan RE 0.5271. The recommended AVE value is above 0.5 (Mahfud dan Ratmono, 2013). It is known that all AVE values > 0.5, which means that it fulfils the validity requirements based on the AVE. Next is conducted the reliability testing based on Cronbach’s Alpha (CA), Dillon goldstein’s rho (DG).

### Table 3.2 The Reliability Testing based on the Cronbach’s Alpha & Dillon Goldstein’s rho

<table>
<thead>
<tr>
<th>Names</th>
<th>MVs</th>
<th>Cronbach’s alpha</th>
<th>Dillon-Goldstein’s Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP</td>
<td>8</td>
<td>0.9193</td>
<td>0.935</td>
</tr>
<tr>
<td>CO</td>
<td>10</td>
<td>0.9048</td>
<td>0.9245</td>
</tr>
<tr>
<td>EX</td>
<td>10</td>
<td>0.8987</td>
<td>0.9172</td>
</tr>
<tr>
<td>AG</td>
<td>8</td>
<td>0.898</td>
<td>0.9192</td>
</tr>
<tr>
<td>NE</td>
<td>7</td>
<td>0.9581</td>
<td>0.9657</td>
</tr>
<tr>
<td>RE</td>
<td>9</td>
<td>0.8873</td>
<td>0.9091</td>
</tr>
</tbody>
</table>

The value of Cronbach’s Alpha is the value to evaluate how well the indicators that are used (block of indicators) in terms to measure latent variables. The value of Cronbach’s Alpha that can be accepted is above 0.7, which means that the indicators used are good in terms of measuring the latent variables. It is known based on the results on Table 5.3, all values are known Cronbach’s Alpha > 0.7.

Besides the Cronbach’s Alpha, there are other sizes that can be used to test unidimensional (dimension unity), namely, Dillon-Goldstein’s rho. Dillon-Goldstein’s rho it is seen better than the Cronbach’s Alpha because the Dillon-Goldstein’s size takes measuring the extent to the latent variables can explain the indicator block. As a practical benchmark, the value of Dillon-Goldstein’s rho > 0.7 seen as an indicator block as unidimensional (Gaston Sanchez, 2013:57-58). It is known based on the results on the Table 3.2, all values of Dillon Goldstein’s rho are known > 0.7.

### 3.1 Structural Model Testing (Structural Model / Inner Model)

Figure 3.2 presents the path coefficient values, while Table 3.4 also shows the path coefficient values along with the test results of the significance of the effect.

![Figure 3.2 The Path Coefficient Value](image)

### Table 3.4 The Test of Effect Significance

<table>
<thead>
<tr>
<th>Names</th>
<th>paths.Original</th>
<th>paths.perc.025</th>
<th>paths.perc.975</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP -&gt; RE</td>
<td>0.1184</td>
<td>0.0274</td>
<td>0.2516</td>
</tr>
<tr>
<td>CO -&gt; RE</td>
<td>0.185</td>
<td>0.0687</td>
<td>0.3161</td>
</tr>
<tr>
<td>EX -&gt; RE</td>
<td>0.2659</td>
<td>0.0908</td>
<td>0.4133</td>
</tr>
<tr>
<td>AG -&gt; RE</td>
<td>0.1526</td>
<td>0.0379</td>
<td>0.3112</td>
</tr>
<tr>
<td>NE -&gt; RE</td>
<td>-0.1303</td>
<td>-0.241</td>
<td>0.0343</td>
</tr>
</tbody>
</table>
For knowing whether the effect is significance or not, then, pay attention to the value in the column paths.perc.025 and paths.perc.975. Sanchez (2013) states as follows:

- An effect is said to be significant if in the interval range paths.perc.025 and paths.perc.975 does not contain a zero value (zero).
- An effect is said to be insignificance if in the interval range paths.perc.025 and paths.perc.975 does contain a zero value (zero).

Based on the results in the Table 3.4, the following results are obtained:

- The OP path coefficient value against the RE is 0.1184 (column paths.Original). Known in the interval paths.perc.025=0.0274 and paths.perc.975=0.2516 does not contain the number 0, so that the OP has a significant effect on the RE.
- The CO path coefficient value against the RE is 0.1850 (column paths.Original). Known in the interval paths.perc.025=0.0687 and paths.perc.975=0.3161 does not contain the number 0, so that the CO has a significant effect on the RE.
- The EX path coefficient value against the RE is 0.2659 (column paths.Original). Known in the interval paths.perc.025=0.0908 and paths.perc.975=0.4133 does not contain the number 0, so that the EX has a significant effect on the RE.
- The AG path coefficient value against the RE is 0.1526 (column paths.Original). Known in the interval paths.perc.025=0.0379 and paths.perc.975=0.0343 does not contain the number 0, so that the AG has a significant effect on the RE.
- The NE path coefficient value against the RE is -0.1303 (column paths.Original). Known in the interval paths.perc.025= -0.2410 and paths.perc.975=0.0343 does not contain the number 0, so that the NE has no insignificant effect on the RE.

The coefficient of the value determination is used to measure how much the independent variables or the exogenous are in explaining the variation of the dependent variables or the endogenous.

| Table 3.5   The Coefficient of Determination |
|-----------------------------|-----------------------------|
| row.names | Type | R2     |
| RE         | Endogenous | 0.2993 |

The coefficient value of determination from the RE variable is 0.2993. This value can be interpreted as variables OP, CO, EX, AG and NE able to explain the variation of the RE variable by 29.93%.

4. Discussion

The results of this study indicate that the variable trait: Openness, Councientiousness, Extraversion, Agreeableness is significantly associated with the Teacher Emotional Regulation. It can be concluded that the variables Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism has the same effect on the Teacher Emotion Regulation on 29.93%. This is in line with the previous studies (Sadr, 2016; Sandhu & Kapoor, 2013). In the research mentions that affectively, personality traits closely related to the emotion regulation in the big five personality are conscientiousness and agreeableness. In this study, it was also found that both conscientiousness and agreeableness were significantly associated with the emotional regulation. The trait agreeableness is a person who has an orientation for straightforward, humble, patient and helpful. While, conscientiousness identifies the extent to which individuals have a careful attitude in achieving a certain goal that is manifested in their attitudes and behavior (Schultz & Schultz, 2005).

Referring to these conditions in the context of the school, teachers who have low conscientiousness tend to have an impulsive attitude when faced with the stressors or heavy workloads. This impulsivity sometimes arises unconsciously so it is expressed in an action such as shouting at the students or hitting them and so on. Such behaviors, according to Koole (2009) are referred to as a set of processes that is automatically occurring when faced with an emotional situation. Under these conditions, the emotion regulation appears to play a role to eliminate it.

On the other hand, the extraversion trait is also significantly related to the emotional regulation. The individuals or teachers with an extraversion type can achieve a goal that includes the expectations of the students, reaching an influential position, and feeling free to express the negative and positive emotions (Anderson, et al. In Gross & John, 2007). The extraversion teachers are potentially can take the advantage of the situation in order to reduce the negative emotions. The teachers with this type tend not to choose the situations as an effort to regulate their emotions. The openness also has a significant relationship to the emotional regulation. The individuals with the openness trait have a greater awareness of the emotional clarity and the emotional intensity that is felt at a time (Costa & Mc. Crae, 2000; Gross & John, 2007).
Furthermore, Gross & John (2007) state that the individuals with the openness trait accept their emotions as something real, important, requires attention and regulation, and also feel optimistic about their ability to regulate emotions. As predicted earlier, neurotic trait is the only trait that is negatively related to the emotional regulation. It can be concluded that the variables Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism has the same effect on the Teacher Emotion Regulation on 29.93% and the remaining 70.07% is influenced by other variables outside the model that is included in this study. Means, the trait is one of the important factors in influencing the ability of someone to regulate his/her emotions.

References


