Achievement goals, PERMA and life satisfaction: A mediational analysis

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Abstract. This study explores the correlation between achievement goals and positive emotion, engagement, relationship, meaning and accomplishment (PERMA) which might affect life satisfaction for Indonesian students in English education programs. The present study employed 260 of Indonesian students in English education programs, selected by using cluster random sampling. The students were enrolled in undergraduate 223 (85.8%) and postgraduate 37 (14.2%). The study follows a correlational research design to measure the degree of relationship between achievement goals, PERMA and life satisfaction. We employed confirmatory factor analysis (CFA) with AMOS 18 to analyze the data. Results indicate that achievement goals and PERMA influence positively life satisfaction. Moreover, PERMA is positive full mediators meaning that students who adopt achievement goals with high PERMA would probably have good life satisfaction. In conclusion, PERMA and achievement goals have a positive effect on students’ life satisfaction.

Keywords: Achievement goals; confirmatory factor analysis, life satisfaction, PERMA, structural equation modelling

INTRODUCTION

The researchers emphasized that the importance of psychological wellbeing (e.g., happiness) as crucial consequences for health, longevity, and success in life (Diener & Chan, 2011) has obtained few scholarly attention (Lewis, Huebner, Malone, & Valois, 2011). The results of the empirical study generally endorses that individuals who satisfy with their life will support career adaptability (Ginevra, Magnano, Lodi, Annozavi, Camussi, Patrizi, & Nota, 2018), enhance positive development and reduce degree of problem behavior (Sun & Shek, 2012), promote social connectedness (Abubakar & Dimitrova, 2016), improve peers’ perceived support, increase engagement (Abubakar & Dimitrova, 2016; Lewis, Huebner, Malone, & Valois, 2011; Li & Loo, 2017) and upgrade academic achievement (Lewis et al., 2011). In contrast, low life satisfaction are associated with depression (Gahzwin, Kavian, Ahmadloow, Jarchi, Javadi, Latifi, Ghajarzadeh, & Srivastava, 2016), anxiety (Bulut, Serin, & Özbas, 2010; Gahzwin et al., 2016) and psychological stress (Kumar, 2016). Surprisingly, researcher reported that university students dissatisfied with their life (Gahzwin et al., 2016), sfor example, engineering student’s depression was about 25%, anxiety 32% and stress 20%, in social science students, 21% depression, 30% anxiety and 17% stress, and medical students have 25% depression, 34% anxiety and 23% stress (Kumar, 2016).

There are also many potential factors which might influence life satisfaction of students. In the framework constructed by Seligman (2011), multidimensional PERMA (positive emotion, engagement, relationship, meaning and accomplishment) model of flourishing is identified as one of the indicators that influence life satisfaction. Empirically, Kern, Waters, Adler, and White
(2014) evidenced that someone who tend to have higher wellbeing factors (PERMA) are likely to hold greater physical health, life satisfaction, and professional thriving (job satisfaction and organizational commitment) in school staff. At the same time, college's students wellbeing is widely explored by scholars (Ghazwin et al., 2016; Kumar, 2016). However, research of factor which might influence life satisfaction including their goals and level of PERMA among university students is still questionable. The purpose of this paper is to examine relationship between achievement goals and PERMA which might influence life satisfaction for undergraduate and postgraduate students in the English education programmes.

LITERATURE REVIEW

Life Satisfaction

Diener (2009) classifies one's longer-term levels of pleasant affect, lack of unpleasant affect, and life satisfaction as part of subjective well-being (SWB). Researcher has pointed out that the construct of life satisfaction is also frequently utilized as the operationalization of well-being (Cooke, Melchert & Connor, 2016). It is also regarded as the cognitive dimension of subjective well-being (Schalock & Felce, 2004). Life satisfaction, known as part of hedonic model (Diener, Emmons, Larsen, & Griffin, 1985), is an overall judgment that someone create as they judge their life as a whole (Diener, 2009). Likewise, Warr et al., (1979) define life satisfaction as the level to which people report their satisfaction with prominent characteristics of life and life space.

According to Schimmack, Diener and Oishi (2002), these judgments are somewhat constant over extended periods of time and forecasted by personality characteristics. However, people’s life satisfaction could become different as their life situations change totally (Diener, 2009). For Diener, Inglehart and Tay (2012), attention and availability, values and the relevance of the information, judgment standards, and top down biases are factors to understand life satisfaction judgments. Interestingly, researchers and theorists agree that life satisfaction has strong correlation with numerous desirable outcomes (Au, Ng, Lai, Tsien, Busch, Hofer & Wu, 2015; Ginevra et al., 2018; Kern, Waters, Adler, & White, 2014; Li & Loo, 2017; Stack-cutler, Parrila, & Torppa, 2015; Steca, Monzani, Greco, D’Addario, Cappelletti, & Pancani, 2016; Sun & Shek, 2012). These findings might suggest that scholars which concentrate on the new movement of positive psychology has the potential in the English education programmes especially students’ general life satisfactions, which migh influence their achievement.

Achievement Goal

The achievement goal include the purposes (Ames, 1992), or cognitive-dynamic manifestations (Elliot & Church, 1997) of achieving, developing or demonstrating high rather than low ability (Nicholls, 1984). Purposes used in the conceptualization of achievement goal are that the reason to engage in achievement behavior (to develop or demonstrate competence), and occasionally the objective pursued while engaging in achievement behavior (objective/intrapersonal or normative competence) is also involved (Elliot, Murayama & Pekrun, 2011). There are different kinds of framework of achievement goal theory (Ames, 1992), but the six-component model of goal orientations, which involves task approach, task-avoidance, self-approach, self-avoidance, other-approach, and other-avoidance (Elliot et al., 2011), is the latest framework used in current study. Elliot et al., (2011) state that task-and self-based goals have been seen together under a single concept in which both have an evaluative standard such as mastery goal. On the other hand, other-based goals are a direct analog of performance goal. Competence in mastery and performance is conceptualized as approach or avoidance. Mastery-oriented goals (i.e., mastery goals and performance goals) are related to positive educational results, meanwhile avoidance goals (i.e, mastery-avoidance goals and performance-avoidance goals) often influence negative outcomes (Liu, Xiang, & Lee, 2017).

Positive Emotion, Engagement, Relationship, Meaning and Accomplishment (PERMA)

The pathway of positive emotion is, also used in authentic happiness theory and well-being theory (Seligman 2011), a component of the PERMA model which help an individual in
broadening available options to maximize resources and invite novel thoughts, activities and relationships (Seligman, 2011). It assists to envision goals and challenges, open the mind to thoughts and problem-solving, protect health by fostering resiliency, generate attachments to significant others, lay the groundwork for individual self-regulation, and guide the behavior of groups, social systems, and nations (Pekrun, Goetz, Titz & Perry, 2002). Positive emotion encompasses all the usual subjective well-being variables: pleasure, ecstasy, comfort, warmth, and the like (Seligman, 2011). Although the pathway of engagement is rarely clearly defined with other variables (Brodie, Hollebeek, Juric, & Ilic, 2011), it refers to absorption and interest within the PERMA model (Kern, Waters, Adler & White, 2015). In addition, Csikszentmihalyi (2013) define pathway of engagement as the level of immersion and focus an individual experiences or dedicates to a daily life.

The pathway of relationship is a feeling socially integrated, cared about and supported by others, and satisfied with one's social connections (Seligman, 2011), feeling loved and valued (Forgeard et al., 2011) and feel a sense of belonging (Doyle, Filo, Lock & Funk, 2016). Positive relationships in university environment with peers and lectures, for example, usually assist students to experience support and acceptance, and feel integrated to community. Doyle et al., (2016) state that the activation of new relationships was particularly important, which allow students to develop interpersonal relationships and assist them to assimilate into the community.

The pathway of meaning has been defined in terms of believing that one's life is worthwhile and feeling connected to something greater than oneself (Seligman, 2011) or one's purposeful existence in the world (Damon, Menon, & Bronk, 2003); Lee, Krause & Davidson, (2017), which come from strengths and engagement (Steger 2012). To Steger, Kashdan, Sullivan and Lorentz (2008), when someone understand and accept themselves, understand the world around them, and understand where they fit within the world and with others, they experience meaning in life. Family, friends, relationships, spirituality/religion, and educational/vocational pursuits is vital sources of meaning to boost one's meaning in daily activities (Lambert, Stillman, Baumeister, Fincham, Hicks & Graham, 2010).

Accomplishment has been defined in terms of objective achievement in the academic environment (Kern et al., 2015). Seligman (2011) defines the pathway of accomplishment as making progress toward aims, feeling capable to perform daily life, and having a sense of attainment, which finally maintain wellbeing and encourage mental health. Accomplishment is also about a sense of working toward and attaining goals, mastery, and efficacy to complete tasks (Butler & Kern, 2016), acquire knowledge, and experience self-efficacy (D’raven & Pasha-Zaidi, 2016). Accomplishment is highly associated with meaning. Doyle et al., (2016) state that someone who experiences accomplishments is likely to derive an increased sense of meaning.

**Relationship between Achievement Goal, PERMA and Life Satisfaction**

Emotions have been influenced by achievement goals (Huang, 2011) but different types of achievement goals generate different effect. For instance, mastery goals have been consistently found to associate positive emotions such as happiness (Goetz et al., 2016; Huang, 2011; Putwain, Larkin & Sander, 2013; Ranellucci, Hall & Goetz, 2015) and performance-avoidance goals are thought to facilitate negative emotions such as anxiety (Goetz et al., 2016; Putwain et al., 2013; Ranellucci, Hall & Goetz, 2015). Similar findings have been reported in recent study with male golfers participating in team sports (Dewar & Kavussanu, 2011). Findings reveal that task involvement (mastery goals) positively predicted happiness and excitement on the other hand ego involvement (performance goals) predicted happiness negatively and anxiety positively. However, result for performance-approach goals have been less consistent, with several research reporting performance-approach goals predict negative emotions such as sadness (Pekrun & Stephens, 2009) and lower levels of enjoyment (Pahljina-Reinić & Kolić-Vehovec, 2017) other studies reporting that performance-approach goals are positive predictors for positive emotions such as pride (Goetz et al., 2016).

Some research have investigated the effects of achievement goals on engagement. According to research on the pathway of engagement, individuals who adopt high level of
engagement will enhance academic commitment and achievement (Carli, Delle Fave & Massimini, 1988) and motivation (Chan 2009; Ruch, Harzer, Proyer, Park, & Peterson, 2010; Vella-Brodrick, Park & Peterson, 2009). Regarding achievement goals, mastery-approach goals have been found to predict lower task disengagement and performance-avoidance goals predict higher levels of task disengagement (Liem, Lau & Nie, 2008). Interestingly, Tuominen-Soini, Salmela-Aro and Niemivirta (2012) found that students who adopt avoidance approach are more likely to have less adaptive patterns of motivation and academic well-being than did mastery- and success-oriented students. In other words, mastery- and success oriented students are more get engaged in study.

Relationships characterized by a high level of closeness can be assumed as secure, and the combination of conflict (Pianta, Hamre & Stuhlman, 2003). Perceived closeness related positively mastery goals and had no relationship with performance-approach (Thijs & Fleischmann, 2015). Mercier (2017) also found that achievement goals affect interaction behaviors as an individual is engaged in collaborative activities. Elliot and Reis (2003) stated that relationships in performance-approach classroom suit the exploration that is specific for secure attachment. However, relationships also can be seen to be critical, abusive, or ostracizing (Hawker & Boulton, 2000) because of peer emphasis or risk taking behaviors (Maxwell, 2002).

Since meaning actualize the goals (Ju, Shin, Kim, Hyun & Park, 2013), a high degree of meaning has been found to be positively related to goals. Yeager and Bundick (2009) reported that someone who hold purposeful work goals are found to be more meaning in life and in schoolwork. It is expected that correlation between meaning in life and achievement goals would be positive. In addition, accomplishment entangles setting and obtaining forthcoming goals (D’raven & Pasha-Zaidi, 2016). Seligman (2011) states accomplishment as a persevering drive to master or finish something for one’s own sake. Since accomplishment can contribute to psychological well-being (Seligman, 2011), there are good grounds for preserving that achievement goals can positively relate to accomplishment.

Multidimensional dimensions of well-being are associated with life satisfaction (Huppert & So, 2013; Işık, Ulubey & Kozan, 2018; Kern et al., 2015; Verme 2009). Similarly, positive emotion, relationships, and accomplishment (Kern et al., 2015) and meaning and engagement have been found to be the most effective domain in improving life satisfaction (Chan 2009; Ruch et al., 2010). Researchers also evidenced that positive emotion is most richly associated with life satisfaction (Fernández-Ozcorta, Almagro & Sáenz-López, 2014) although it revealed the weak relationship with life satisfaction (Park, Peterson & Ruch, 2009; Ruch et al., 2010). In addition, King et al., 2006 also state that students who hold high degree of meaning in daily life have been found to be positively linked with life satisfaction. At the same time, quality of life also can be increased by improving level of a sense of accomplishment (Levasseur, Desrosiers & Whiteneck, 2010). Interestingly, PERMA also is discovered to mediate relationship between functional disability and life satisfaction (Tansey, Smedema, Umucu, Iwanaga, Wu, Cardoso & Strauser, 2018). Therefore, only mastery goals and life satisfaction have been consistently found to associate PERMA, it is expected that sub-construct of achievement goals including mastery goals (task-approach, task-avoidance, self-approach and self-avoidance goals) and performance goals (other-approach and other-avoidance goals) and PERMA would be positive predictor toward life satisfaction.

**Summary of Hypotheses**

The three main hypotheses of this study are:

H01. There will be no significant causal relationships between achievement goals and life satisfaction

H02. There will be no significant causal relationships between achievement goals and PERMA

H03. The Relationships between achievement goal and life satisfaction will not be mediated by PERMA.
METHODS

Participants and Procedure

The study was approved by Department of Investment and Integrated One Stop Services, Riau Province Government - Indonesia). Then, researcher administered survey to participating university ranging from one to two month timescale. The population of the current research is Indonesian undergraduate and postgraduate students in English education programs. Since the current research select groups rather than individuals, cluster random sampling was suitable (Fraenkel & Wallen, 2009). The current study employed 260 of Indonesian undergraduate and postgraduate students in English education programs. A number of female participants were 179 (68.8%) while male participants were 81 (31.2%) with ages ranging from 18 to 22 years old. All classes of undergraduate and postgraduate students in English education programs took 20 to 30 minutes to answer all questions.

Measures

The three types of questionnaire were the Satisfaction with Life Scale (SWLS) constructed by Diener, Emmons, Larsen and Griffin (1985), the 3 x 2 achievement goal questionnaire adopted from Elliot et al., (2011) and the PERMA-Profiler was adopted from Butler and Kern (2016). A seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used in the Satisfaction with Life Scale (SWLS). Reliability values of some scales exceeded the desirable standard of 0.70 (α = 0.83). Moreover, a ten-point scale ranging from 1 (never) to 10 (completely) was used in The PERMA-Profiler. Reliability values of some scales exceeded the desirable standard of 0.70 (positive emotion, α = 0.82), (engagement, α = 0.70), (relationship, α = 0.76), (meaning, α = 0.87) and (accomplishment, α = 0.80). A seven-point scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”) was used in the 3 x 2 achievement goal questionnaire (Gillet, Lafrenière, Huyghebaert, & Fouquerreau, 2015). Reliability values of some scales exceeded the desirable standard of 0.70 (task-approach goal, α = 0.77), (task-avoidance goal, α = 0.87), (self-approach goal, α = 0.88), (self-avoidance goal, α = 0.92), (other-approach goal, α = 0.89), and (other- avoidance goal, α = 0.93).

Data Analysis

Prior to succeeding further analysis, the current research also considered a large number of issues related to data screening such as handling missing data, multicollinearity, identification of outliers and normality using Statistical Package for the Social Sciences (SPSS) 23.0 program. Outliers are identified by box plot for each sub-construct. The benchmark of the univariate normality of construct in a measurement model for a latent variable is that the skewness and kurtosis values for each item are in the range of - 1.96 to + 1.96 at (0.05 significant level) (Hair, Black, Babin, & Anderson, 2010). Lastly, it is indicated as multicollinearity, if the correlation matrix with correlations is more than 0.90 (Kline, 2005).

To investigate whether the established dimensionality and factor-loading pattern fitted Indonesian context, CFA procedures using AMOS 18.0 were applied. According to Awang (2012), a goodness of fit was evaluated by using chi-square (χ²) (P > 0.05), Comparative Fit Index (CFI > 0.90), Tucker Lewis Index (TLI> 0.90), Root Mean-Square Error of Approximation (RMSEA < 0.08). Moreover, Cronbach’s alpha coefficients were calculated to determine the reliability of the instrument (both total and sub-constructs) as well as split-half correlations. Alpha values in the current research were not expected to be comparatively high.

RESULTS

Preliminary Analysis

The amount of missing data in the current research varied from 0 to 0.5% per item. The missing data are completely at random (MCAR) (Kline, 2005). The means, standard deviations and correlation matrix, skewness and kurtosis for all variables are shown in Table 1.
Table 1 revealed results of preliminary analysis all of the items of the measures of achievement goal, PERMA and life satisfaction reached univariate normality (skewness and kurtosis values are in the range of -0.87 to 1.11). In term of multicollinearity, inter-correlations among achievement goal, PERMA and life satisfaction ranged from 0.24 to 0.73. It indicated that the discriminant validities of the variables are reached since the correlation matrix with correlations is less than 0.90 (Kline, 2005). At the same time, the mean value for achievement goals was (M = 5.21 and SD = 0.90), PERMA was (M = 7.19 and SD = 1.15) and life satisfaction was (M = 4.48 and SD = 1.14).

### Table 1. Correlation matrix, means and standard deviations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achievement Goal</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PERMA</td>
<td>0.32</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Life Satisfaction</td>
<td>0.24</td>
<td>0.73</td>
<td>1</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.53</td>
<td>-0.87</td>
<td>-0.42</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.51</td>
<td>1.11</td>
<td>0.44</td>
</tr>
<tr>
<td>Mean</td>
<td>5.21</td>
<td>7.19</td>
<td>4.48</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.90</td>
<td>1.15</td>
<td>1.14</td>
</tr>
</tbody>
</table>

### Measurement Models

In the present study, CFA procedures were conducted to verify the factorial validity of the five PERMA sub-constructs, the six sub-constructs of achievement goals and life satisfaction construct. The measurement model of PERMA resulted in acceptable model fit, $\chi^2 = 138.814$, $\chi^2/df = 1.928$ CFI = 0.967, TLI = 0.958, and RMSEA = 0.060. The measurement model of achievement goals indicated acceptable model fit, $\chi^2 = 304.217$, $\chi^2/df = 2.358$ CFI = 0.950, TLI = 0.941, and RMSEA = 0.072. The measurement model of life satisfaction indicated acceptable model fit, $\chi^2 = 5.614$, $\chi^2/df = 2.807$ CFI = 0.991, TLI = 0.973, and RMSEA = 0.079.

### Structural Model

Results of the SEM analysis in the current research show the measurement of $\chi^2 = 1078.209$, $\chi^2/df = 1.859$, RMSEA = 0.058, TLI = 0.915 and CFI = 0.922. All kinds of evaluations result in acceptable model fit for Indonesian context in the current research. All factor loadings among the five PERMA sub-constructs ranged from 0.59 to 0.89, the six achievement goals sub-constructs ranged from 0.56 to 0.93, and life satisfaction construct ranged from 0.63 to 0.83. Results showed that factor loadings values exceeded the desirable standard of 0.50 (Hair et al., 2010).

In addition, the model of CFA presented in Figure 1 became the finalized model that indicated relationships among achievement goal, PERMA and life satisfaction in the Indonesian context. The final model derived from the current research can be used as an alternative in

### Table 2. Results of the hypothetical structural model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>1078.209</td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>1.859</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.058</td>
</tr>
<tr>
<td>TLI</td>
<td>0.915</td>
</tr>
<tr>
<td>CFI</td>
<td>0.922</td>
</tr>
</tbody>
</table>

NOTE. $\chi^2$: Chi-square goodness of fit; df: Degrees of Freedom; CFI: Comparative Fit Index; TLI: Tucker-Lewis fit index (TLI); RMSEA: Root Mean Square Error.
explaining the prior study on the relationships between achievement goal, PERMA and life satisfaction.

**FIGURE 1. Final model of the study**

**Relationships between Achievement Goal and Life Satisfaction**

We hypothesized that there will be no significant causal relationships between achievement goals and life satisfaction. Hence, hypothesis H0 1 is fully confirmed. There are no significant relationships between achievement goal and life satisfaction (β = 0.009, t = 0.122, p > 0.05). The findings revealed that achievement goal did not affect their life satisfaction. Achievement goal of students are not important in improving their life satisfaction.

**Relationships between Achievement Goals and PERMA**

We hypothesized that there will be no significant causal relationships between achievement goals and PERMA. Hence, hypothesis H0 2 is not fully supported. There are significant relationships between achievement goals and PERMA (β = 0.319, t = 4.276, p < 0.01). It implies reasonably that students’ achievement goals were found to be vital to encourage students’ PERMA.

**Mediating Effects of PERMA on the Relationships between Achievement Goal and Life Satisfaction**

A mediating effect of PERMA was expected to influence relationships between achievement goal and life satisfaction. Table 3 lists the results of mediating effect analysis using AMOS software.

**Table 3. Result of mediating effect**

<table>
<thead>
<tr>
<th>Path</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG→PERMA→LS</td>
<td>β 0.01</td>
<td>P values 0.90</td>
<td>β 0.73, P values 0.000, Full Mediation</td>
</tr>
</tbody>
</table>

Note. AG: achievement goal; LS: life satisfaction
Table 3 revealed output of mediating effect of PERMA between achievement goal and life satisfaction. Positive full mediating effect of PERMA ($\beta = 0.73, p < 0.05$) for achievement goals on life satisfaction ($\beta = 0.01, p > 0.05$) is found. Hence, there is no a direct significant effect of achievement goals on life satisfaction ($\beta = 0.01, p > 0.05$). Hypothesis H03 is not fully confirmed. The results show that students who hold achievement goals with high PERMA would probably possess good life satisfaction.

**DISCUSSION**

According to the results of SEM, the expected positive effects of achievement goals on students’ life satisfaction corroborate prior research findings (Au et al., 2015; Dewar & Kavussanu, 2011). This can be explained by Michalos (2005) that life satisfaction, a cognitive aspect of subjective wellbeing (Diener 1994), is closely associated with happiness or subjective well-being. Previous research indicated that task involvement (mastery approach goals) positively predicted happiness and excitement on the other hand ego involvement (performance approach goals) predicted happiness negatively and anxiety positively. The reason for the positive relationship is that students who exhibit achievement goals in their daily life usually enjoy undertaking effort in the pursuit of task mastery, reflected through challenge seeking, and high and effective perseverance in the face of barriers. Interestingly, students who hold degrees and increases in goal progress positively affected succeeding degrees of subjective well-being (Steca et al., 2016).

The significant direct relationship between achievement goals and PERMA was confirmed in our study regardless whether due to task-approach goal, task-avoidance goal, self-approach goal, self-avoidance goal, other-approach goal or other-avoidance goal. Our results resonated with previous research findings (Goetz et al., 2016; Huang, 2011). One possible reason for this positive relationship is that students who focus on achievement goals concentrate on purpose as a reason to engage in achievement behavior (to develop or demonstrate competence), and occasionally the objective pursued while engaging in achievement behavior (objective/intrapersonal or normative competence) is also engaged (Elliot et al., 2011). It means that students’ positive emotions such as happiness play vital role in achievement goals (Huang, 2011; Pekrun & Stephens, 2009). At the same time, previous research also found that students who hold avoidance approach are more likely to have less adaptive patterns of academic well-being than did mastery-oriented students (Tuominen-Soini, Salmela-Aro & Niemivirta, 2012). In other word, mastery-oriented students are discovered to predict lower degree of task disengagement and performance-avoidance goals predict higher degree of task disengagement. Thus, the six achievement goal dimensions are vital factors in life satisfaction.

PERMA was found to be a full mediator between achievement goals and life satisfaction. In the presence of mediating effect of five PERMA components, students who adopt achievement goals with high PERMA would probably have good life satisfaction. Our findings endorse prior studies in which PERMA also is found to be a mediator on the relationship between functional disability and life satisfaction (Tansey et al., 2018). The reason for this relationship is that the mediating effects of the five PERMA components effectively control students’ happiness during goal striving although students hold strong achievement goals. At the same time, the prior study also evidenced that multidimensional dimensions of well-being are associated with life satisfaction (Huppert & So, 2013; Işik, Ulubey & Kozan, 2018; Kern et al., 2015; Verme 2009). For instance, students utilizing higher positive emotion (Fernández-Ozcorta, Almagro & Sáenz-López, 2014; Kern et al., 2015), accomplishment (Kern et al., 2015), meaning (King et al., 2006), engagement (Li & Loo, 2017) and positive relationships (Kern et al., 2015) improve their life satisfaction. In addition, this can be explained an internal locus of control. Rotter (1975) argues that to achieve basis of happiness, someone should take responsibility for their preferences and external conditions, which predict life satisfaction. Therefore, the five PERMA components may be meaningful factors distributing achievement goals impacts on life satisfaction.
CONCLUSIONS AND SUGGESTIONS

SEM analysis also found significant and positive influences of achievement goals on the five PERMA components. The five PERMA components is positive full mediator between achievement goals and life satisfaction. By summarizing these outcomes, we argue that the five PERMA components is a powerful factor that can be influenced by achievement goals, and in turn, influence life satisfaction. This study suggests the importance of examining the effects of achievement goals components since there is inconsistent findings of relationship between performance-based goal including other-approach goal, and other-avoidance goal, which might generate different results. Considering that the current research employs correlational design, viewing the effect of these factors towards life satisfaction requires applying an experimental study in future research.

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