

Relationship of Achievement Goals, Engagement, and Self-Handicapping: Test The Mediating Model

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ABSTRACT: *This study examined the model of the relationship between achievement goals, engagement, and Self-handicapping (SH). The study was conducted with 850 students who filled out a self-report questionnaire as respondents. After the measuring instrument was declared valid and reliable, the two relationship models were tested using a structural equation modeling (SEM) with a two-step approach. The test results suggested that the objectives of mastery of the material and improvement of skills must be achieved for increasing student engagement and preventing SH in learning activities. Students who are afraid of appearing incapable did behavioral SH and reduced their attachment to learning activities. The goal of showing off achievements and excelling from their peers did not make students use SH strategies but only emotionally engaged. Claimed Self-handicapping (CSH) increased engagement and vice versa, while behavioral Self-handicapping (BSH) decreased engagement and vice versa.*

KEYWORDS: achievement goals, engagement, self-handicapping

INTRODUCTION

In the academic field, expecting high grades is an important component of learning, but there is no guarantee of achievement (Ohrstedt & Lindfors, 2019). This is what causes students to develop SH strategies. SH is a phenomenon experienced by many individuals who want to achieve success, but there is a feeling of fear of failure. SH is a strategy and behavior by externalizing failure and internalizing success (Yavuzer, 2015). This strategy was created especially when success is difficult to achieve, there is uncertainty, and feelings of fear of failure (Lee et al., 2021).

The COVID-19 pandemic, which has been going on for more than two years, has had an impact on the psychological condition of the students. Uncertainty about when the pandemic will end has caused students to experience academic anxiety (Wang, 2020; Rodriguez et al., 2020). In addition, isolation and online learning that continues in the long term can also increase anxiety, stress, and depression (Knopf, 2020). Uncertainty conditions can encourage students to carry out various strategies to overcome them, including SH (Barutcu & Demir, 2020). In addition, academic anxiety can affect students' engagement (Martin, 2008).

According to Zhou and Wang (2019), students already have goals to be achieved in learning, such as understanding the learning material (mastery-approach goals or MApG), achieving

higher grades than others (performance-approach goals or PApG), not wanting to appear worse than their peers (performance-avoidance goals or PAVG), or avoid losing the material they master (mastery-avoidance goals or MAVG). Students can pursue different goals during their learning process because these goals are not mutually exclusive (Clarence, 2018; Wormington & Linnenbrink-Garcia, 2017). There is no approach or theory that states that the dimensions of achievement goals must be used together or separately (Winberg et al., 2019).

The goals position can be an antecedent (Pulka & Niemivirta, 2013; Skaalvik & Skaalvi, 2013), as consequences (Dinger et al., 2013; Johnson & Kestler, 2013), or as a mediator (Paulick et al., 2013). The finding that mastery goals are related to adaptive patterns and performance goals to maladaptive patterns is still inconsistent. Many studies connected goals and academic outcomes (Niemivirta et al., 2019; Tuominen et al., 2020; Wormington & Linnenbrink-Garcia, 2017). MApG and PApG are positively related to school grades (van Yperen et al., 2014; Hoffman et al., 2019). Both goals are indeed the pursuit of achievement. Meanwhile, PAVG is related to academic SH and low achievement (Lee et al., 2016). There are similarities between PAVG and SH, both of which are fear of failure.

Furthermore, achievement goals are related to academic engagement (Bahar et al., 2018). Academic engagement refers to the involvement and engagement of students in schools or campuses and is multidimensional (Collie et al., 2017). In this study, two dimensions were used, namely emotional engagement and behavioral engagement. Negative engagement or disengagement is said to be related to SH (Collie et al., 2017). Achievement goal theory (AGT) is often associated with SH which is self-regulation oriented to avoidance of performance (Schwinger et al., 2021).

The influence of achievement goals on engagement has been widely studied (Yu & McLellan, 2019). AGT is related to the quality of engagement and its consequences (Pantziara & Philippou, 2014). Pursuing MApG is associated with positive outcomes and increased engagement (Wormington & Linnenbrink-Garcia, 2017; Turner et al., 2021), while PAVG is associated with maladaptive outcomes, disengagement, and SH (Yu & McLellan, 2019). Meanwhile, pursuing PApG has an adaptive and maladaptive impact, so its relationship with engagement is also less consistent (Senko & Dawson, 2017).

There is uniformity in the literature that SH has a negative influence on educational processes and outcomes such as motivation and achievement (Schwinger et al., 2014). However, the relationship still varies, from insignificant, moderately negative, to strong negative (Schwinger & Stiensmeier-Pelster, 2011). The diversity of research results is due to the diversity in measuring SH (natural observation, experimentation, and self-report) and the existence of two dimensions of SH (behavioral and claimed SH) whose effects can be different (Clarke & McCann, 2016). This study examined the relationship model of three dimensions of achievement goals, two dimensions of SH, and two dimensions of engagement. In this study, SH and engagement were tested alternately as mediating variables. The contribution of this study was to strengthen the results of previous studies regarding multiple goal orientations that have different effects on behavior. Students should have learning goals that must be achieved in learning so as not to use the SH strategy.

LITERATURE REVIEW

Researchers have widely defined SH which generally indicates the development of performance barriers on important tasks (Adil et al., 2019). SH is a self-protection strategy that is used when individuals care about performance but doubt their success (Brown &

Kimble, 2009). The relationship between SH and performance is still mixed. The results of preliminary studies found a positive impact of SH, some studies showed an insignificant relationship (Rhodewalt & Hill, 1995), while others found a fairly strong negative relationship (Soltani et al., 2016; Yavuzer, 2015). Early research also found a reciprocal effect between SH and performance (Zuckerman et al., 1998).

SH is done when individuals feel uncertainty and are afraid to fail (Adil et al., 2019). There are two forms of SH, namely BSH and CSH. BSH is carried out when individuals actively create obstacles (such as reducing exercise or delaying tasks), while CSH is carried out when individuals claim there are obstacles (such as saying illness, bad mood, anxiety, or stress) (Brown et al., 2012). BSH is riskier than CSH (Clarke & McCann, 2016; Ferradas et al., 2016). However, BSH is more influential in decreasing performance (Schwinger et al., 2014). Individuals who are self-handicap will create real and imaginary barriers, and both barriers can lead to failure or poor performance (Ntoumanis et al., 2009). SH can strengthen self-esteem but can reduce individual performance (Yavuzer, 2015). Therefore, SH is always associated with maladaptive consequences.

SH can be viewed from social cognitive learning theories (Torok & Szabo, 2018). The theory states that maladaptive behavior occurs because of uncertainty. SH is done before the performance appraisal (Lee et al., 2021). SH can be measured by an experimental approach and by self-report questionnaires (Clarke & McCann, 2016). Many SH researchers prefer to use an experimental approach carried out in the laboratory, making generalization difficult (Schwinger et al., 2014). The need for SH is a way to maintain the appearance of students who have a fear of failure (De Castella et al., 2013).

Furthermore, self-worth theory is also often used to explain why individuals are success-oriented and others are afraid of failure (De Castella et al., 2013). This fear of failure causes individuals to externalize the causes of failure to protect their self-esteem. The research results of Martin et al. (2021) found that the factors that predict SH are affective and motivational. SH can weaken academic engagement, decrease accuracy, and lower achievement (Ommundsen, 2004). Achievement goals have been considered to play an important role in SH with different roles for each goal (Akin, 2014). AGT provides a framework for understanding goal-oriented behavior with two focuses, namely a focus on mastery of the material and capacity building and a focus on performance or achievement (Lee et al., 2021).

Studies on SH in academic activities have been widely explained by AGT (Akin, 2014). The achievement goals model has indeed been widely applied in research, including research in the field of education (Korn & Elliot, 2016). The achievement goal orientations model has also been adopted to explain the motivational process for SH (Ferradas et al., 2018). Students who focus on developing and mastering knowledge have MAPG, while achievement-oriented students have performance goals (Ingles et al., 2015). Performance goals orientation includes PApG which tries to show its ability and PAvG which tries to show its desire to avoid showing its incompetence (Senko et al., 2013).

Previous studies state that SH is carried out on students who pursue performance (Ferradas et al., 2018). However, it is still unclear whether SH exists in individuals with high PAvG (Akin, 2014) or high PApG (Valle et al., 2007), or a combination of both (Ferradas et al., 2017). Furthermore, related to the two dimensions of SH, there are differences in the relationship between the two dimensions of SH and achievement goals. PApG is positively related to BSH (Lovejoy & Durik, 2010), but Ferradas et al. (2016) found that PApG was positively related to

CSH. Meanwhile, MApG is consistently negatively related to both dimensions of SH (Akin, 2014; Schwinger et al., 2014).

MApG and PApG are associated with positive outcomes, while PAvG with negative outcomes. MApG and PApG focus on pursuing knowledge and achievement so as not to engage in SH which hinders performance (Akin, 2014; Leondari & Gonida, 2007). Meanwhile, PAvG and MAvG are avoidance of performance and ability achievement, so they are considered to have a positive effect on SH (Ommundsen, 2004; Scwinger et al., 2014). MApG consistently strengthens adaptive outcomes (Lee et al., 2021). Students with high MApG or low PApG were less engaged in SH strategies than students with low MApG or high PApG and low MApG or low PApG. Students with high PAvG used more SH than students with low PAvG.

However, the results of the study by Schwinger et al. (2014) stated that if students pursue MApG it can inhibit the effect of maladaptive SH and performance. This is because students who pursue mastery of the material will see failure from a different perspective and attribute it to controlled factors to reduce SH (Schwinger & Stiensmeier-Pelster, 2011). Fear of failure causes individuals to adopt negative goals such as PAvG and MAvG, while MApG and PApG are not related to these fears but are related to the hope of success (Dickhauser et al., 2016).

To date, how MAvG is interpreted by students is still difficult to understand (Linnenbrink-Garcia & Barger, 2014). MAvG is widely associated with maladaptive outcomes (Bjornebekk et al., 2013), although according to Senko and Freund (2015), MAvG is mostly chosen by students who have difficulty in learning. However, this study did not use MAvG, because it does not fit the context of students who generally focus on the goal of mastering the material, getting a higher grade, or avoiding appearing incompetent (Mason et al., 2013). Students generally do not think that they will lose their knowledge by following the learning process.

Furthermore, a good and supportive environment for student involvement and engagement in academic activities will encourage them not to do SH (Mendez-Gimenez et al., 2018). This is because the involvement and engagement of students can reduce anxiety and low self-perception that causes students to do SH (Cano et al., 2017). Engagement is a level where students are actively involved in school, both cognitively, behaviorally, and emotionally in the school environment (Skinner et al., 2009). Behavioral engagement refers to the active actions of students to plan, manage, and evaluate their assignments at school (Johnson et al., 2015). Meanwhile, emotional engagement is a positive or negative reaction to teachers, friends, and activities at school or in class (Fredricks et al., 2004). Furthermore, behavioral engagement is the real willingness of students to try their best to master and understand their abilities (Bempechat & Shernoff, 2012). In general, engagement is referred to as positive or engagement and negative or disengagement (Collie et al., 2017).

Achievement goals are a significant predictor of behavioral and emotional engagement (Goagoses et al., 2021; Ramshe et al., 2019). High motivation and engagement or engagement have been associated with positive outcomes (Martin et al., 2019; Shernoff et al., 2017) and can fluctuate over time as they relate to workload and stress (De Castella et al., 2013; Martin et al., 2015). Academic emotions such as goal setting in learning are also educational phenomena that have been widely studied (Geitz et al., 2016). Engagement is a behavior that reflects the energy, drive, inclination, and emotion (Liem & Martin, 2012).

Many factors are identified as antecedents of SH, such as self (e.g., self-esteem; Schwinger & Stiensmeier-Pelster, 2012), emotional motivation (e.g., achievement goals; Ferradas et al.,

2018), and personality (Bobo et al., 2013; Martin et al., 2013). A large number of studies have referred to the relationship between trichotomous student achievement goals and SH using MApG, PApG, and PAvG (Schwinger et al., 2021). In general, SH is referred to as an individual's strategy of performance-oriented avoidance to avoid incompetence (Schwinger & Stiensmeier-Pelster, 2012). Meanwhile, some researchers found a positive relationship between PApG and SH (Cheng & Lam, 2013), other researchers found a negative relationship (Ommundsen, 2004), and some others did not find a significant relationship (Shih, 2012). Meanwhile, because the material mastery approach (MApG) implies that mistakes are opportunities to learn and improve skills, MApG is negatively associated with SH consistently (Schwinger & Stiensmeier-Pelster, 2011). Based on the theory and the results of previous studies, several hypotheses are proposed. First, engagement mediates the relationship between MApG, PApG, and PAvG with BSH and CSH. Second, SH mediates the relationship between MApG, PApG, and PAvG with emotional and behavioral engagement.

RESEARCH METHODS

Participants

The population of this research is students who are still actively studying at private universities in Yogyakarta. The study was conducted using a survey using a questionnaire given to students by filling out a google form. Respondents who were asked to fill out the questionnaire were students who had attended college for at least four semesters. This is following the regulations of the Indonesian Ministry of Education and Culture regarding the evaluation of the first stage of study continuity in higher education, namely the first four semesters. This research data was collected from September to December 2021. The google form link was distributed to 1500 students, but only 850 students filled out the questionnaire completely (response rate of 56.67%). In general, respondents are aged 20 – 22 years and consist of 342 males and 508 females.

Measurements

This study uses self-report questionnaires which were adopted from several previous researchers. This research questionnaire uses a Likert scale with a score from 1 (strongly disagree) to 5 (strongly agree). The SH questionnaire was adopted from Clarke and McCann (2016), the academic engagement questionnaire was adopted from van Ryzin et al. (2009), and the achievement goals questionnaire was adopted from Elliot and McGregor (2001). The results of validity testing using confirmatory factor analysis and reliability with internal consistency (Cronbach's alpha) resulted in valid and reliable question items (Hair et al., 2014). The BSH questionnaire has a loading factor of 0.421 to 0.665 and $\alpha = 0.658$, while the CSH has a loading factor of 0.617 to 0.751 and $\alpha = 0.724$. The loading factor of the emotional engagement questionnaire was 0.694 to 0.780 and $\alpha = 0.903$, while the loading factor of the behavioral engagement questionnaire was 0.483 to 0.772 and $\alpha = 0.866$. Meanwhile, the MAVG questionnaire has a loading factor of 0.638 to 0.791 and $\alpha = 0.812$, PApG has a loading factor of 0.658 to 0.792 and $\alpha = 0.830$, while PAvG has a loading factor of 0.785 to 0.849 and $\alpha = 0.812$.

Procedures

After the respondents had filled out the questionnaire completely, the validity was tested using confirmatory factor analysis and reliability with internal consistency (Cronbach's alpha). The valid and reliable question items were used in subsequent tests (Sekaran & Bougie, 2016). Meanwhile, the question items that did not pass the validity and reliability test were discarded. A correlation test was conducted to analyze the relationship between the

variables used in this study. SEM with a two-stage approach was carried out to test the mediation model (Byrne et al., 2010).

RESULTS

Descriptive Analysis

Table 1 presents the results of the correlation test between the research variables, the mean, standard deviation, and reliability. This analysis is needed as an initial test to test whether further testing can be carried out. This test is also needed to test the relationship between research variables before testing the mediation model.

Table 1: Descriptive statistics and correlations between variables

	BSH	CSH	EE	BE	MApG	PAPG	PAvG
Behavioral self-handicapping (BSH)	1.000						
Claimed handicapping (CSH)	0.177**	1.000					
Emotional Engagement (EE)	- 0.124**	0.430**	1.000				
Behavioral Engagement (BE)	- 0.462**	-0.031	0.264**	1.000			
Mastery-Approach Goals (MApG)	- 0.172**	- 0.370**	0.761**	0.259**	1.000		
Performance-Approach Goals (PAPG)	0.036	0.249**	0.456**	0.005	0.433**	1.000	
Performance-Avoidance Goals (PAvG)	0.267**	0.191**	0.171**	- 0.255**	0.174**	0.395**	1.000
Mean	2.867	4.184	4.038	3.423	4.078	3.549	3.036
Standard Deviation	0.618	0.644	0.673	0.714	0.310	0.402	0.297
Composite Reliability	0.775	0.852	0.950	0.931	0.902	0.913	0.904

**p < 0.01

Table 1 shows the relationship between the variables used in this study, except for the relationship between PAPG and BSH, between PAPG and behavioral engagement, and between behavioral engagement and CSH. The three correlations are not significant. The reliability of the measuring instrument is quite reliable (0.60-0.70), reliable (0.70-0.80), and very reliable (0.80 -0.95) according to the criteria of Zikmund et al., (2010). Furthermore, the average CSH, emotional engagement, and MApG were in the high category (mean > 3.66). Meanwhile, the mean of other variables is moderate (more than 2,330 – 3,660). This shows that students tend to be only emotionally attached and involved in learning. Their active involvement is still lacking. However, the desire to master the material given in lectures is still higher than the desire to show achievements beyond their friends and the tendency to cover up their inability compared to their friends. Their SH tendency is not too worrying, because the average CSH is higher than the average BSH.

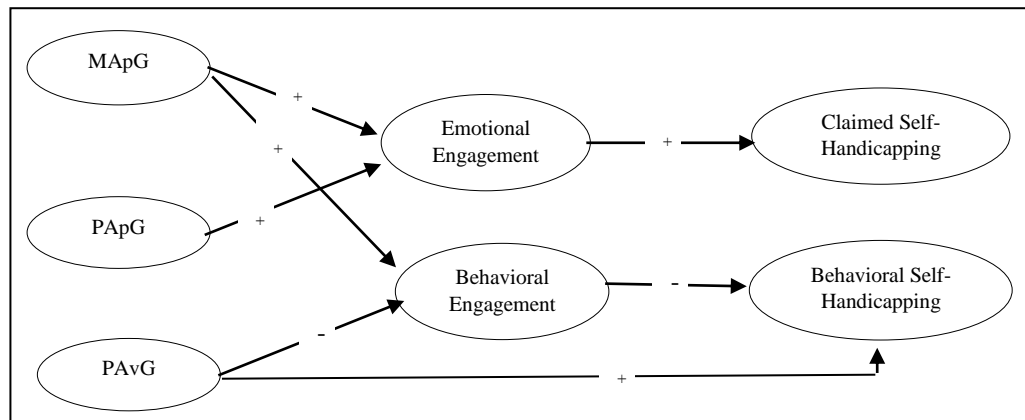
Relationship Model Test Results

Table 2 describes the results of testing the relationship model, where the two dimensions of engagement are mediators of the relationship between the three dimensions of achievement goals and the two dimensions of SH using structural SEM with a two-step approach.

Table 2: Test results of relationship model, engagement as a mediator

	β	Critical Ratio
Mastery-Approach Goals → Emotional Engagement	0.863**	25.904
Mastery-Approach Goals → Behavioral Engagement	0.463**	10.335
Performance-Approach Goals → Emotional Engagement	0.080**	2.258
Performance-Approach Goals → Behavioral Engagement	-0.027	-0.522
Performance-Avoidance Goals → Emotional Engagement	-0.011	-0.522
Performance-Avoidance Goals → Behavioral Engagement	-0.372**	-9.015
Emotional Engagement → Behavioral Self-handicapping	-0.085	-1.863
Emotional Engagement → Claimed Self-Handicapping	0.731**	20.469
Behavioral Engagement → Behavioral Self-handicapping	-0.493**	-10.061
Behavioral Engagement → Claimed self-Handicapping	-0.030	-0.811
Performance-Avoidance Goals → Behavioral Self-Handicapping	0.240**	5.027
Chi-Square = 18.879 Df = 7 P = 0.009 GFI = 0.994 AGFI = 0.977 CFI = 0.994		
NFI = 0.991 IFI = 0.994 TLI = 0.982		

Table 2 demonstrates that both emotional engagement and behavioral engagement only mediate the effect of the three achievement goals on behavioral and CSH. The relationship model shows that MApG has a significant positive effect on emotional and behavioral engagement, PApG only has a significant positive effect on emotional engagement, while PAvG only has a significant negative effect on behavioral engagement. The model also shows that PAvG can significantly increase BSH. Furthermore, emotional engagement can increase CSH. BSH will increase when behavioral engagement decreases. This first relationship model can be described in Figure 1 below.

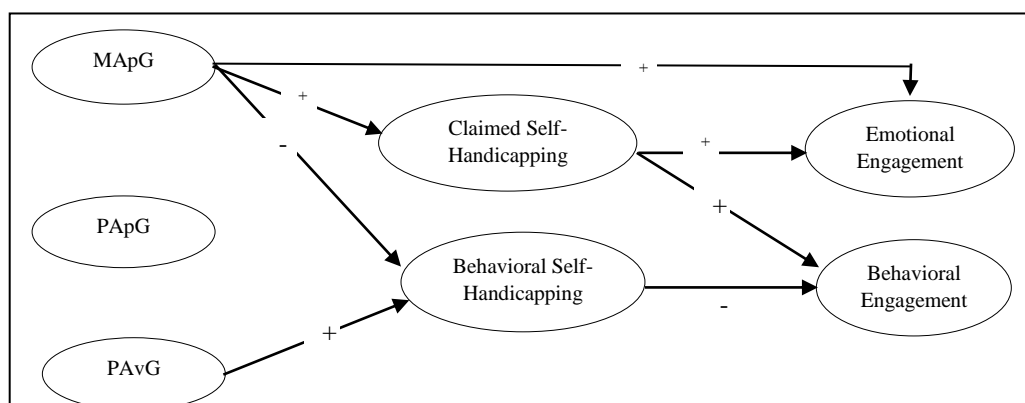
**Figure 1: Engagement mediates partially achievement of goals and SH Relationships**

Furthermore, Table 3 is the result of testing the relationship model in which two dimensions of SH mediate the relationship between three dimensions of achievement goals and two dimensions of engagement.

Table 3: Test results of relationship model, SH as a mediator

	β	Critical Ratio
Mastery-Approach Goals \rightarrow Claimed Self-Handicapping	0.616**	12.501
Mastery-Approach Goals \rightarrow Behavioral Self-handicapping	-0.387**	-7.008
Performance-Approach Goals \rightarrow Claimed Self-Handicapping	0.101	1.875
Performance-Approach Goals \rightarrow Behavioral Self-handicapping	0.030	0.502
Performance-Avoidance Goals \rightarrow Claimed Self-Handicapping	0.016	0.384
Performance-Avoidance Goals \rightarrow Behavioral Self-handicapping	0.482**	9.978
Claimed Self-Handicapping \rightarrow Emotional Engagement	0.204**	5.099
Claimed Self-Handicapping \rightarrow Behavioral Engagement	0.193**	5.235
Behavioral Self-handicapping \rightarrow Emotional Engagement	-0.016	-0.590
Behavioral Self-Handicapping \rightarrow Behavioral Engagement	-0.624**	-14.482
Mastery-Approach Goals \rightarrow Emotional Engagement	0.760**	18.932
Chi-Square = 40.595 Df = 7 P = 0.000 GFI = 0.988 AGFI = 0.950 CFI = 0.983		
NFI = 0.980 IFI = 0.983 TLI = 0.950		

Table 3 demonstrates that both BSH and CSH partially mediate the relationship between the three achievement goals dimensions and the two engagement dimensions. The relationship model shows that PApG does not affect both CSH and BSH, but PAVG can significantly increase BSH. Meanwhile, this second model shows that students who pursue material mastery and increase skills and knowledge can increase their emotional attachment to learning and increase CSH. However, students pursuing this MApG may reduce the BSH strategy. This second model is depicted in Figure 2 below.

**Figure 2: SH partially mediates achievement goals and engagement**

DISCUSSION

The current study strengthens previous studies that PAVG was positively related to BSH and CSH significantly. Students who fear or avoid appearing incompetent engage in an SH strategy. This study supports the findings of previous researchers who stated that SH is a strategy to manage self-image associated with feelings of fear of failure (e.g., De Castella et al., 2013; Lee et al., 2021; Merolla & Jackson, 2019; Molenaar et al., 2021). Both BSH and CSH are ways to avoid failure or feelings of fear of failure. It is the fear of failure that deflects the attribution of others from the cause of poor ability or performance (Sameer Babu & Selvamari, 2018).

The results of testing the two relationship models also found that PAVG had a significant negative effect on behavioral engagement and a direct and significant positive effect on BSH.

This is consistent with the results of previous studies which found that PAVG was chosen by students who avoided appearing to fail or feeling anxious if the failure did occur (e.g., Janke et al., 2016; Lee et al., 2021; Schwinger et al., 2014). Therefore, they do not want to be actively involved or engaged in learning and take actions that make their performance worse. Avoidance-oriented students take maladaptive actions such as SH and do not want to be engaged in learning activities.

The relationship between PApG and SH was diverse. This study is consistent with the results of research by Ferradas et al. (2018), Lee et al. (2016), and Yu and McLellan (2019). This study found that PApG was positively related to CSH significantly but did not significantly associate with BSH. This study is in line with the results of research by Ferradas et al. (2016) which yielded the same findings. This study also supports Janke et al. (2016) who found that PApG is associated with adaptive and less adaptive outcomes. However, this study found that PApG is associated with persistence and perseverance in learning, and the desire to master the learning material, so that it can slightly overcome the fear of failure but is also associated with anxiety.

Regarding academic engagement, this study found that only emotional engagement was positively related to PApG significantly, but PApG was not related to behavioral engagement. The results of testing the relationship model also found the effect of PApG only on emotional engagement and did not affect behavioral engagement. Students who are oriented to the pursuit of high achievement and outperform their peers have a positive and enthusiastic response to the learning process. However, being actively involved and engaged in these learning activities is still influenced by various factors (Clarence, 2018). The results of testing the relationship model found that PApG did not affect BSH and CSH. This study supports the previous studies which found that SH was not affected by PApG because PApG was associated with persistence (e.g., Akin, 2014; Janke et al., 2016; Ommundsen, 2004). However, this study does not support several previous studies (e.g., Molenaar et al., 2021; Sameer Babu & Selvamari, 2018; Schwinger et al., 2014) which found that PApG can increase SH.

PApG can be both adaptive and maladaptive. PApG becomes maladaptive if they want to show off their abilities but can lead to positive outcomes if they focus on outperforming their peers (Senko & Dowson, 2017; Yu & McLellan, 2019). Therefore, to be actively involved and engaged in learning, students who pursue PApG are still limited to a positive response but have not been actively involved. This study reinforces the results of previous research that the role of PApG in learning activities is less clear (e.g., Hoffman et al., 2019; Lee et al., 2016). Several previous studies found a negative relationship between PApG and SH (e.g., Akin, 2014; Lee et al., 2021; Schwinger et al., 2014), and some other studies the two were positively related (e.g., Molenaar et al., 2021; Sameer Babu & Selvamari, 2018)

The results of this study also strengthen the results of previous studies that MApG has a significant negative relationship both with BSH and CSH (e.g., Akin, 2014; Martin et al., 2015; Schwinger et al., 2014). Individuals who pursue mastery of learning materials view failure as part of the learning process, so failure is not something to be afraid of. In other words, MApG inhibits students from doing SH (Schwinger & Steinsmeier-Pelster, 2011). Meanwhile, both emotional and behavioral engagements have a significant positive relationship with MApG. This relationship is consistent with the results of previous studies (Wormington & Linnenbrink-Garcia, 2017). Active engagement and participation in learning activities will encourage students to behave positively and not do things that decrease their achievement. However, passive engagement or positive response to learning is positively

related to CSH. This positive response can affect the tendency of students to become restless, in a bad mood, feel sick, or stressed, but does not trigger negative actions such as laziness, procrastination, or drunkenness.

MApG has also been shown to be associated with adaptive activities. This was supported by the results of this study, that MApG is positively related to emotional and behavioral engagement significantly. The results of testing the relationship model also demonstrated the significant positive effect of MApG on emotional and behavioral engagement. This finding supports the results of previous studies (e.g., Bahar et al., 2018; Lee et al., 2021; Martin et al., 2021). In the second relationship model, SH mediated the relationship between MApG and engagement, MApG consistently had a direct effect on CSH but did not on BSH. This proves that CSH is not always maladaptive (e.g., Ferradas et al., 2018; Schwinger et al., 2014).

Furthermore, the results of this study also found that BSH was negatively related to emotional and behavioral engagement. This is consistent with the results of previous studies (e.g., Barutcu & Demir, 2020; Jia et al., 2020; Shih, 2012). However, CSH was significantly positively related to emotional engagement, but not to behavioral engagement. Meanwhile, the results of testing the relationship model show that students who have emotional engagement have a significant positive effect on CSH, while students who have behavioral engagement will not choose and do BSH. If students are involved and engaged in the learning process, this will reduce their desire to do SH.

In the second test result of the relationship model, only CSH can increase emotional and behavioral engagement. Meanwhile, BSH only hurts behavioral engagement but does not affect emotional engagement. This supports Ferradas et al. (2018) that the two dimensions of SH are two different strategies. This further strengthens the evidence that CSH does not always have a negative impact (e.g., Clarke & McCann, 2016; Schwinger et al., 2014). Academic engagement can encourage students to choose a CSH strategy to protect their self-esteem. On the other hand, SH claims can also increase students' engagement in learning activities. These findings support the results of previous studies (e.g., Barutcu & Demir, 2020; Clarke & McCann, 2016; Jia et al., 2020).

The results of this study also found a positive correlation between MApG, PApG, and PAvG. This is consistent with the findings of several previous researchers (e.g., Lee et al., 2021; Ntoumanis et al., 2009). Goal orientations are important because they are significant predictors of the learning strategies used. The combination of these various goals is believed to be more beneficial for achievement outcomes (e.g., Pantziara & Philippou, 2014; Scherrer et al., 2020). Students can have various goals in the learning process. This is consistent with the results of previous studies (e.g., Meissel & Rubie-Davis, 2016; Wormington & Linnenbrink-Garcia, 2017). The choice of goals is influenced by many factors, such as courses, the learning process carried out, and even their learning culture (Clarence, 2018; Martinez-Monteagudo et al., 2018). The results of this study further strengthen the results of contemporary research which has proven that non-cognitive factors such as motivation affect students' learning strategies, attitudes, and behavior. The motivational construct that has a lot of influence on learning activities is achievement goals.

Implication to Research and Practice

The findings of this study are important for academics and practitioners, especially in managing educational organizations to further encourage students to have a desire to master the learning material rather than just pursuing achievements or not seeming to understand what is being learned.

CONCLUSION

MApG is a goal that must be pursued by students because it consistently influences positive outcomes. This goal can strengthen attachment both emotionally and behaviorally. Meanwhile, PAVG weakens behavioral attachment whereas PApG only strengthens emotional attachment. Students will do BSH if their behavioral attachment is weak and will do CSH if their emotional attachment is strong. Therefore, the consequences of being CSH are lighter than BSH and do not reduce the chances of success. This research contributes to a comprehensive understanding of goal orientation and views individual behavior as being influenced by multiple goals. The results of this study also strengthen the findings of previous studies that MApG affects adaptive outcomes such as engagement and weakens maladaptive outcomes such as SH.

Future Research

This study has several weaknesses that need to be understood. First, data collection is done by self-report, so there is a possibility of social desirability bias because SH is a negative construct. Second, self-report can also cause common method variance which can increase the beta value. Future research is expected to use other reports, especially for SH variables. Third, cross-sectional data collection could weaken the mediation test of the model. Future research is expected to be able to use longitudinal data to properly test the mediation relationship model.

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