

How Do Social Goals Affect Performance: The Role Of Achievement Goals And Learning Strategies As Mediators

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ABSTRACT

This study investigated how social goals (SGs), achievement goals (AGs), and metacognitive strategies affected the perceived academic performance of students with a collectivistic culture. This study examined mastery goals (MGs), performance goals (PGs), and metacognitive strategies (MCS) as mediating variables for the influence of families, teachers, and peers oriented SGs on perceived academic performance (PAP). The study used a survey method with 516 private university students in Yogyakarta who embraced collectivistic culture as a research sample. Validity testing used confirmatory factor analysis (CFA) with loading factor more than 0.5 and reliability with internal consistency using Cronbach's Alpha more than 0.7. Structural equation modeling (SEM) with two-step approach was used to examine the relationship model between variables used in this study. This study concluded that peers oriented SGs were significantly negatively associated with the two dimensions of the AGs, MCS, and PAP and were not related to family and teachers oriented SGs. The effect of SGs on academic performance was mediated serially by the two dimensions of AGs and MCS. Family and teachers oriented SGs supported students to develop their knowledge and showed their achievements compared to their peers. Active involvement of parents and teachers is needed in improving the students' academic achievement. In-depth discussion was explained in the discussion section of the research results.

Keywords: social goals, achievement goals, metacognitive strategies, academic performance

I. INTRODUCTION

Students study hard in school for a variety of reasons, from academic reasons to social reasons, such as improving competence, showing off competence or outperforming competence of others, being together with peers, getting praise from parents, improving social status, or helping his friends with schoolwork. SGs are an enrichment of achievement goal theory (AGT) (Estrada et al., 2011). They define SGs as perceived SGs to achieve academic performance. Students achieve high academic performance for the sake of family, teachers, or peers. On the other hand, a relationship was found between students' perceptions of social support (from parents or

family, teachers, and peers) and academic performance (Ahmed et al., 2010).

Students not only have goals in achieving academic performance, but also need interpersonal relationships with parents or family, teachers, and peers or what is often called SGs (King et al., 2010; Ryan & Shim, 2006). This is because students' academic and social life cannot be separated between at school and at home (Liem, 2016; Shim & Finch, 2014). In other words, the compatibility between the two is a powerful influence on students' behavior (Yu & McLellan, 2019). Achieving SGs is just as important as achieving AGs for students (King & McInerney, 2012). SGs relate in different ways that students do with regard to peers, families,

and teachers (Poortvliet & Darnon, 2010) and have an effect on academic success (Makara & Madjar, 2015). AGs and SGs have an independent and collective effect on academic performance (see Berger & Archer, 2016; Giota & Bergh, 2021; Poortvliet & Darnon, 2010 for review).

Various literatures have explained that early adolescents' SGs are related to their academic achievement, however, how the SGs mechanism influences academic achievement is rarely tested (e.g., Berger & Archer, 2016; Giota & Bergh, 2021; Lee et al., 2018; Makara & Madjar, 2015). This is due to Western individualist motivational psychology research implicitly assumed to ignore aspects of social motivation or SGs (e.g., Martin & Dowson, 2009; King et al., 2010). Although research on SGs is still developing today, MGs and PGs have been shown to be important in various Western results (King et al., 2010). Students actually can have a variety of goals including SGs because schools have a variety of social or interpersonal domains (Martin & Dowson, 2009). According to King et al. (2014), students in collectivistic culture identify themselves with their families and social networks. SGs are defined as social goals that are perceived to be tried to be achieved academically (King & Ganotice, 2013).

According to Martin and Dowson (2009), the social relations that underlie SGs are assumed to have an important influence on student motivation and achievement in school. Although it is recognized that SGs is important, according to King and Ganotice (2013), educational psychology researchers are still not clear about the paths taken by SGs that affect motivation, learning, and achievement. The reason for the lack of understanding of the relationship is due to SGs in learning motivation inherent in individuals as personality characteristics. Rashid and Rana (2019) noted that learning strategies play an important role in increasing or decreasing student achievement. Learning strategies are even

key factors that influence learning achievements besides motivation (Rodriguez, 2009).

Some literature reveals that SGs affect academic achievements indirectly through motivational mechanisms (e.g., Ahmed et al., 2010; King & Ganotice, 2013; Minnaert, 2013). In other words, motivation mediates the relationship between SGs and academic performance. Relationships with parents or family, teachers, and peers can predict higher performance (King et al., 2014). Empirical research on results related to SGs is still rarely done, even though SGs among adolescents are needed. In adolescence, social care becomes very important (King et al., 2014). SGs are perceived psychological well-being (Horst et al., 2007). Therefore, this study investigated the relationship between students' SGs, academic motivation, learning strategies, and educational outcomes. This study also investigated achievement motivation and MCS as mediating variables for the influence of the three dimensions of SGs on PAP. The SGs tested in this study were parents or family, teachers, and peers oriented SGs. Meanwhile MGs and PGs used in this study were achievement motivation possessed by students.

MGs and PGs have been interpreted as goals related to competence because they focus on achieving competence, while SGs can be said to be socially controlled (King & McInerney, 2012). SGs are defined differently by researchers depending on their focus or emphasis, such as the social outcomes achieved by students (Wentzel, 2000), orientation towards social competence (Ryan & Shim, 2008; Mouratidis & Michou, 2011), or social relations and social responsibility goals (Guan et al., 2006; Estrada et al., 2011). In this study, SGs is defined as the reasons for student learning related to peers, parents or family, and teachers.

2. LITERATURE REVIEW

Many researchers have combined two things in achieving academic performance (Giota &

Bergh, 2021; Yu & McLellan, 2019). First, the AGs perspective is to understand the quality of student achievement. Second, the focus on the relationships between family, teachers, and peers is to understand why students want to do well. In other words, the two school psychological environments that influence student achievement are the goal dimension and the relationship dimension. However, AGs reflect a cultural aspect that focuses on individual goals, whereas SGs are more appropriate for collectivist cultures but are relatively neglected (King & Watkins, 2012).

Learning is a social process and requires social relationships with various parties such as parents or family, teachers and peers. Learning in school also cannot be separated from family, especially parents. Personal Investment Theory recognizes that there are a variety of different reasons that underlie individuals engage in learning activities and produce high learning performance, namely MGs, PGs, and SGs (Martinez-Monteaquedo et al., 2018). These learning goals do not mutually exclusive one another (Clarence, 2018; Navas et al., 2016; Ning, 2018; Rameli et al., 2018). The researchers found that SGs were positively correlated with AGs (Guan et al., 2020; Noordzij et al., 2021).

Early studies in AGT distinguish between two types of AGs, namely MGs whose purpose is to develop competencies and PGs whose purpose is to demonstrate competence (Mega et al., 2014). Students who pursue MGs are motivated because they want to increase their competence or emphasize mastery and intellectual development, while students who pursue PGs are motivated because they want to show their superiority compared to other students or their relative abilities and competition among students (Lee et al., 2018). MGs and PGs are interpreted as goals related to competence (interpersonal or intrapersonal). MGs and PGs are then divided into dimensions of approach and avoidance, so that they become four types of

goals, mastery approach, performance approach, mastery avoidance, and performance avoidance (Mega et al., 2014). In his meta-analysis, Huang (2012) found that MGs are positively correlated while PGs are negatively correlated with academic performance. However, Chen and Wang (2015) found that MGs and PGs are both positively related to students' academic performance. Goal theory states that AGs such as MGs and PGs both affect educational outcomes (Hulleman et al., 2010).

AGT is a contemporary perspective on motivation that dominates many studies of motivation and achievement related behavior (Pulkka & Niemivirta, 2013; Minnaert, 2013). The theory has become a motivational framework that has been extensively studied in educational psychology (Huang, 2012). The multidimensional structure of AGs has been used as an independent variable, as a dependent variable (Johnson & Kostler, 2013; Paulick et al., 2013), as well as mediating variables (Paulick et al., 2013; King & Ganotice, 2013). The AGs framework that dominates research appears to be built on Western assumptions, where the individuals are unique identities separate from their social group (King & McInerney, 2012). Western motivational psychology research is implicitly assumed to ignore aspects of social motivation. This condition is different from Eastern societies with a collectivist culture and has high social motivation.

In this study, SGs are defined as social reasons for studying. SGs research varies depending on culture, although these differences still need to be investigated (King & Watkins, 2012). SGs appear specifically and are powerful in the context of collectivist cultures (Chang & Wong, 2008; King & Watkins, 2012). SGs refer to reasons for learning that are socially related. Several studies found an association between parental support and success in school (Gordon & Cui, 2012). Parenting style influences students so that they are more mastery oriented (Boon, 2007;

Gonzalez & Wolters, 2006). Parental support also influences learning achievement (Giota & Bergh, 2021; Yang Hansen & Gustafsson, 2019). From the students' side, they might try and study hard for academic reasons and social reasons (King et al., 2014). According to Martin and Dowson (2009), based on previous studies, there is a consensus that social support contributes to motivation and learning in schools. SGs have an important effect on motivation, learning, and student performance in schools. However, some issues regarding social support have not been clearly understood (Wentzel et al., 2010). Therefore, research is still needed on the potential of mediation by motivational beliefs of adolescents in the relationship between SGs and learning performance. In addition, interpersonal aspects that are shown by positive relationships with family or parents, teachers, and peers are also related to motivation and learning performance.

Motivation to achieve SGs comes from a variety of social forces (King & McInerney, 2012). SGs are also interpreted as social reasons for learning. Dowson and McInerney (2001) claimed that SGs can motivate students more than MGs and PGs. For example, students want to learn because they want to show their ability to the teacher or be the pride of their parents, or be diligent to go to school because they are together with friends or help friends do assignments, and so on. However, according to Nelson & De Backer (2008) having many friends is negatively related to self-efficacy and mastery orientation. MGs and PGs have reasons why students excel at school (Shim & Finch, 2014). The proposed reason is related to competence (demonstrating normative abilities beyond other students for PGs and developing self-referenced competencies for MGs). SGs are also related to why students want to excel at school (e.g., study with friends, help friends, meet the expectations of teachers, be the pride of parents). Although not widely studied, SGs are claimed by researchers as a construct of

motivation that is powerful and influences academic achievement (Giota et al., 2019; Yang Hansen & Gustafsson, 2019). Some studies discovered positive effect of SGs on educational outcomes while others showed negative influences (Chang & Wong, 2008; Leondari & Gonida, 2007).

In the AGs structures, students perceive class and school widely using strategies, effort, and perseverance to learn effectively. According to Mega et al. (2014), cognitive and metacognitive strategies are used to regulate and control independent learning. In this study, the learning strategy used is MCS. Metacognition includes monitoring thoughts, evaluating compliance with the procedures used, and identifying potential deviations (Dinsmore et al., 2008; Mega et al., 2014). MCS are used to plan, manage, and monitor the learning process for achieving goals such as self-evaluation, self-control, strategic planning, and goal setting. MCS help learners focus their attention on understanding content, connecting current and previous knowledge with expertise and doing their encoding and processing well (Lavasani et al., 2011). Motivation factors are considered as a requirement for self-regulated learning that motivates learners to use strategies to more proactively adjust their studies. Learning strategies play the role of mediating the relationship between motivation and performance (Logan et al., 2011). Lin et al. (2017) discovered that goal orientation influences learning performance through learning strategies.

According to Covington (2000), motivational goals differently affect learning achievement through various degrees of cognitive self-regulation. Motivation and learning strategies moderate relationships with students' learning achievement. Furthermore, teacher support is also associated with greater PGs, higher interest and perceived academic self-efficacy (Ibanez et al., 2004). Perceived academic self-efficacy refers to students' beliefs that they

have succeeded in carrying out academic assignments at a specified level (Bandura, 1997). Self-efficacy is deeply rooted in the achievement of success and personal history in the past (Lackaye & Margaliz, 2006). Ferla et al. (2008) stated that many studies have clearly established that perceived academic self-efficacy has a profound impact on academic performance. In addition, the self-efficacy of students is a strong predictor of performance and has a much better performance (Mega et al., 2014).

There are several studies that analysing motivation and learning strategies. Effective learning strategies are important for achieving high performance in learning (Mascarell & Cabedo, 2014). Learning strategies include emotional, motivational, cognitive, behavioral, and metacognitive activities and processes. The strategy facilitates understanding, learning and processing as the integration of new knowledge in one's mind (Weinstein et al., 2010). Metacognition refers to thinking about her own learning progress. Metacognition is defined as thinking about thinking (Kahraman & Sungur, 2013). Metacognition is also understood as the ability to control and monitor an individual's cognitive processes (Schraw, 1998).

Learning strategies and motivation can influence learning achievement (Loyens et al., 2008). The purpose of this study is to investigate how motivation relates to students' learning achievement. The relationship between motivation and learning achievement is mediated by cognitive factors (Rotgans & Schmidt, 2012). Motivations used are MGs, PGs, and SGs. MGs always influence positive results while PGs produce diverse findings (Senko et al., 2011). In line with above theoretical consideration, this study tested the relationship models, that is MGs and PGs as achievement motivations and MCS mediated the effect of family or parents, teachers, and peers oriented SGs on perceived academic performance. Therefore, the hypothesis of this study is that AGs (MGs and PGs) and MCS

mediate the relationship between families, teachers, and peers oriented SGs in student's academic performance.

3. MATERIALS AND METHODS

3.1. Participants

This research was conducted in Indonesia with a collectivistic culture, and students who were still actively studying at private universities were respondents. The study was conducted by survey method using a questionnaire that must be filled out by respondents. There were 1000 students involved as respondents with a purposive sampling method. Students who were asked to fill out questionnaires were students who have taken college for 4 semesters. Data collection was carried out for one semester (6 months). The questionnaire filled out by students in full was 516 copies, in other words the response rate was 51.6%. Therefore, this study used 516 respondents.

3.2. Measurements

This study used a questionnaire that included MGs, PGs, family, teachers, and peers oriented SGs, metacognitive strategies, and perceived academic self-efficacy as students' academic performance. All questionnaires used a Likert Scale with a value of 1 as strongly disagree to a value of 5 as strongly agree. The question items used in this study were reliable, which were assessed by internal consistency (Cronbach's Alpha). The achievement goal orientation scale questionnaire was adapted from the Elliot and McGregor (2001) questionnaire (for example, MGs: I want to fully master the material presented in this class, $\alpha = 0.869$; PGs: I want to do the assignments better than other students, $\alpha = 0.844$). The family, peer, and teacher oriented SGs questionnaire was adapted from the Salili et al. (2001) questionnaire (for example, FSGs: I want parents to be proud of my learning achievements, $\alpha = 0.826$; TSGs: I don't want to

disappoint my lecturers with my achievements, $\alpha = 0.872$; PSGs: I don't want to excel at achievements for fear of losing friends, $\alpha = 0.774$). The metacognitive strategies questionnaire was adapted from the Yong (2005) questionnaire (for example, I skim the material being studied to see how I understand it before I study it carefully, $\alpha = 0.772$). Meanwhile, the perceived academic performance questionnaire was adapted from the Kaplan and Maehr (1999) questionnaire (for example, I believe I can take on the most difficult of tasks if I try, $\alpha = 0.843$).

Furthermore, the question items used in this study were also valid based on the results of testing using CFA. Family oriented SGs with five questions had a loading factor of 0.732 to 0.809, Teachers oriented SGs with five questions had a loading factor of 0.757 to 0.881, and Peers oriented SGs with five questions had a loading factor of 0.619 to 0.794. MGs with five questions had a loading factor of 0.715 to 0.876 and PGs with five questions had a loading factor of 0.588 to 0.898. Metacognitive strategies with five questions had a loading factor of 0.633 to 0.814 and students' learning achievement had a loading factor of 0.595 to 0.834.

3.3. Procedures

This study used students who meet the requirements in accordance with the research

objectives because this study used a purposive sampling method as a sampling method (Sekaran & Bougie, 2016). After all the questionnaires were collected, the validity and reliability of the measuring instrument were tested. Testing the validity of the questionnaire using CFA with a loading factor of at least 0.50 and reliability with internal consistency with a Cronbach's Alpha at least 0.70 (Sekaran & Bougie, 2016). The relationship between research variables was tested using correlation analysis. This analysis is also used to ensure that there is no multicollinearity between independent variables. Furthermore, the effect of the independent variable on the dependent variable was tested using multiple linear analysis. Model mediation testing was carried out using SEM with a two-step approach (Byrne, 2010).

4. RESULTS AND DISCUSSION

4.1. Preliminary Studies

Testing the relationship between variables used in this study was carried out after the measuring instruments used had been declared valid and reliable. Table 1 shows descriptive statistics and relationships between research variables. The internal consistency of the measurement scale was fulfilled ($r > 0.70$).

Table 1: Descriptive Statistics and Bivariate Correlations

Variables	(FSGs)	TSGs)	PSGs	MGs	PGs	MCS	PAP
1. Family Oriented Social Goals (FSGs)	-	0.396**	-0.037	0.327**	0.420**	0.269**	0.137**
2. Teachers Oriented Social Goals (TSGs)		-	0.020	0.317**	0.104*	0.269**	0.233**
3. Peers Oriented Social Goals (PSGs)			-	0.252**	0.147**	0.295**	0.286**
4. Mastery Goals (MGs)				-	0.497**	0.510**	0.431**
5. Performance Goals (PGs)					-	0.312**	0.353**

6. Metacognitive Strategies (MCS)						-	0.631**
7. Perceived Academic Performance (PAP)							-
Mean	4.337	4.235	2.757	4.006	3.634	3.962	3.739
Standard Deviation	0.581	0.545	0.695	0.602	0.659	0.496	0.608
Cronbach's α	0.826	0.872	0.774	0.869	0.844	0.772	0.843

** $p \leq 0.01$ (2-tailed)

* $p \leq 0.05$ (2-tailed)

Table 1 presents that the relationship between research variables was significant, except the relationship between peers and teachers oriented SGs and the relationship between peers and family oriented SGs. There was no relationship between peer and teachers oriented SGs and between peers and family oriented SGs. AGs, both MGs and PGs, were both related to MCS and perceived academic self-efficacy as constructs for students' academic achievement. The relationship between the two AGs and MCS and PAP were significantly positive. Family and teachers oriented SGs were also significantly positively related to MGs, PGs, MCS, and PAP. However, peers oriented SGs was significantly negatively related to MGs, PGs, MCS and PAP. The results of the correlation test showed that

there was no multicollinearity among the independent variables because there was no correlation greater than 0.8 (Gujarati & Porter, 2009).

4.2. The Direct Effect of Independent Variables on Dependent Variables

Before testing the model mediation, testing the direct effect of all independent variables on the dependent variable was carried out using multiple linear regression analysis. In this study, motivation and learning strategy variables were independent variables that affected academic achievement as the dependent variable. The results of this direct relationship test are presented in Table 2.

Table 2: Direct Effect of All the Independent Variables on the Dependent Variable

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.601 ^a	.361	.353	.48874	.361	47.906	6	509	.000
a. Predictors: (Constant), MCS, FSGs, PSGs, TSGs, PGs, MGs									

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.659	6	11.443	47.906	.000 ^a
	Residual	121.584	509	.239		
	Total	190.243	515			
a. Predictors: (Constant), MCS, FSGs, PSGs, TSGs, PGs, MGs						
b. Dependent Variable: PAP						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Err.	Beta		
1	(Const.)	1.175	.267		4.401	.000
	TSGs	.107	.045	.096	2.405	.017
	PSGs	-.106	.033	-.121	-3.203	.001
	FSGs	-.132	.044	-.126	-3.024	.003
	PGs	.167	.040	.181	4.210	.000
	MGs	.127	.047	.126	2.727	.007
	MCS	.468	.052	.382	8.931	.000
a. Dependent Variable: PAP						

The results of multiple linear regression testing indicated that MGs and PGs, MCS, and teachers oriented SGs were positive predictors of learning achievement using the construct of PAP. Meanwhile, family and peers oriented SGs had a significant negative effect on the students' academic achievement.

4.3. Model Testing

This study also used the independent variable, mediating, and the dependent variable. The two-step approach in SEM was followed in testing the relationship model (Byrne, 2010). The relationship model proposed in this study was MGs and PGs and meta-cognitive strategies as mediating variables in the influence of families,

teachers, and peers oriented SGs on PASE. After modifying the model based on the theory and results of previous research, the results of model

testing using SEM with a two-stage approach are presented in Table 3.

Table 3: The Relationship between Social Goals and Perceived Academic Performance is Mediated Serially by Achievement Goals and Metacognitive Strategies

	Standardized Regression Weights	Critical Ratio		
Family Oriented Social Goals → Mastery Goals	0.140**	2.475		
Family Oriented Social Goals → Performance Goals	0.334**	5.568		
Teachers Oriented Social Goals → Mastery Goals	0.152**	3.015		
Teachers Oriented Social Goals → Performance Goals	0.144**	2.559		
Peers Oriented Social Goals → Mastery Goals	- 0.205**	- 4.415		
Peers Oriented Social Goals → Performance Goals	- 0.162**	- 3.175		
Performance Goals → Metacognitive Strategies	0.127**	2.188		
Mastery Goals → Metacognitive Strategies	0.570**	9.783		
Performance Goals → Mastery Goals	0.422**	8.518		
Metacognitive Strategies → Perceived Academic Performance	0.653**	13.976		
Teachers Oriented Social Goals ↔ Family Oriented Social Goals	0.482**	8.532		
Family Oriented Social Goals ↔ Peers Oriented Social Goals	- 0.199**	- 3.542		
Chi-square = 47.380 0.940	GFI = 0.975 IFI = 0.950	AGFI = 0.913	CFI = 0.949	NFI =

GFI: Goodness-of Fit Index

AGFI: Adjusted Goodness-of Fit Index

CFI: comparative fit index,

NFI: Normed-Fit Index,

IFI: Incremental Fit Index

The results of testing the mediating model showed that family oriented SGs and teachers oriented SGs had a positive effect on MGs and PGs. While peers oriented SGs had a negative effect on MGs and PGs. The results of this study indicated that PGs affected MGs. Both MGs and PGs influenced MCS positively. PAP was also positively influenced by MCS. Teachers and family oriented SGs had a positive effect on each other, while peers and family oriented social goals had

a negative effect on each other. Based on the results of the mediating model test, two dimensions of AGs and MCS mediated serially the effect of SGs on PAP. Table 3 also shows that the model was fit with the data and the underlying theory. This can be seen from the GFI, AGFI, CFI, TLI, and IFI values that were more than 0.9. The model that fits the data is presented in Figure 1.

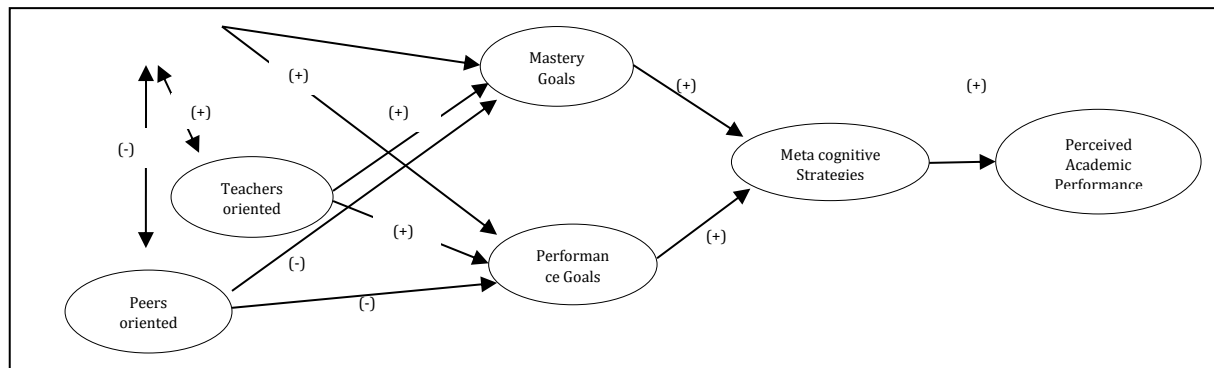


Figure 1: Relationship Model among Research Variables

The overall purpose of this study was to explore how SGs and AGs as motivational variables were considered to influence learning strategies (in this study were metacognitive strategies) which then affected perceived academic performance. Research on the relationship between several AGs and SGs is still very rare because it is rarely carried out in Western countries that adhere to individualistic values (Levy-Tossman et al., 2007). This study was conducted on students with a collectivistic culture like Indonesia who use social goals for motivation. The results of this study discovered that AGs and MCS serially mediated the influence of SGs on PAP. However, peers oriented SGs actually weakened achievement motivation, both motivation to increase knowledge and understanding of the material as well as motivation to be superior to their peers.

This study discovered that PAP and MCS were significantly positively associated with MGs, PGs, family and teachers oriented SGs. Meanwhile, the relationship between peers oriented SGs with two dimensions of motivation, MCS and perceived learning performance was negative. Family and teachers oriented SGs can increase motivation, both MGs and PGs. Meanwhile, peers oriented SGs lowered the two dimensions of motivation, MCS and PAP. This showed that closeness with peers is not necessarily able to encourage learning strategies

and can't improve perceived learning performance.

This study is in line with previous research, AGs have often explained about individual variability in performance (Bahar et al., 2018; Shim & Finch, 2014). In addition, although they have different influences, SGs can also motivate what is called socially-driven (King & McInerney, 2012). In adolescence or early maturity, social support from family, teachers, and peers influences various aspects of the school (Demary et al., 2005). In a collectivistic culture, students have social reasons to excel academically (Cheng & Lam, 2013). This study shows that peers oriented SGs decrease MCS. This is because social recognition is very relevant in adolescence, so students want to get appreciation from others and encourage student solidarity with their friends.

This study supports the study by Kahraman and Sungur (2013) and Vrugt and Oort (2008) which stated a positive relationship between PGs and MCS. According to Urdan (1997), MGs relate to friends who have a positive orientation towards school. On the other hand, students who are oriented toward PGs are characterized by low closeness (Levy-Tossman et al., 2007). However, the findings of Anderman and Anderman (1999) stated that AGs were related to the desire to have friends. For many students who are oriented towards PGs, an

important aspect of friendship is their contribution to social status and social visibility (Levy et al., 2004).

The results of testing the effect of using regression, all independent variables significantly influence the dependent variable. However, this study discovered that peers and family oriented SGs reduce perceived learning performance. Encouraging a sense of belonging with peers will actually weaken students' perceived learning performance. The findings of this study support some of the results of previous studies. Family oriented SGs can not necessarily affect student achievement (Song et al., 2015). Both MGs and PGs can improve performance (Hulleman et al., 2010). This indicates that students' academic performance is not influenced by their relationship with peers and their families or parents. Although not in all dimensions, social goals have been shown to be powerful in collectivist culture and have an effect on learning performance (King & Ganotice, 2013).

This study found that academic performance was not only influenced by AGs, but also by SGs (e.g., Bahar et al., 2018; Makar & Madjar, 2015; Poortvliet & Darnon, 2010). The interaction of AGs and SGs also influences students learning (Goncalves et al., 2017; Lee, 2018; Shim & Finch, 2014). Students may pursue different goals during the learning process and in the courses they take. Students' goals are not mutually exclusive (Wormington & Linnenbrink-Garcia, 2017). MGs and PGs have an effect on learning strategies (Martinez-Monteagudo et al., 2018).

The results of testing the hypothesis models in this study that fit the data discovered that MGs and PGs affect metacognitive strategies, then effect on learning performance. This is consistent with the results of research by Vrugt and Oort (2008), Hulleman et al. (2010) and Zhou and Wang (2019). Social support from family, teachers, and peers is a predictor of achievement goals (King & Ganotice, 2013).

Family and teachers oriented SGs were discovered to improve both dimensions of motivation, MGs and PGs. Meanwhile, peers oriented SGs had a negative effect on MGs and PGs. This supports Nelson and De Backer (2008) which stated that having many friends actually reduces self-efficacy and mastery orientation. However, this study also discovered that not only MGs related to learning strategies, PGs also correlated with MCS used to achieve learning performance. Both MGs and PGs were related to learning strategies and academic performance. This is also consistent with the previous studies which found that MGs, PGs, and SGs were related to learning strategies and higher academic performance (e.g., De la Fuente et al., 2017; Harackiewicz et al., 2008; Luftenegger et al., 2016).

In Indonesia, parents or family are the main social agents at home that has an influence on adolescent development, including in learning. Therefore, Indonesian students are still not fully independent. Various considerations from parents or family are still very much needed, often even dominating student decision making. The results of the study are consistent with the results of Song et al. (2015) research which stated that family and teachers oriented SGs have a positive impact on MGs and PGs (e.g., Cheng & Lam, 2013). The results of this study found that peers oriented SGs had a negative effect on both MGs and PGs. These results do not support Brendt's (1992) study which states that peers oriented SGs cannot predict motivation. This study also supports the research of Sutantoputri and Evanytha (2016) which stated that in collectivistic cultures such as Indonesia, AGs can be influenced by SGs.

Overall, the research results confirm that AGs and SGs are outcome predictors (Makara & Madjar, 2015), when examining student learning (Bahar et al., 2018). Community culture, both individualistic and collectivistic is an important factor because achievement has different

meanings in different societies (Bahar et al., 2018; King & Watkins, 2012). Social aspects of learning motivation are ignored by Western students who focus on personal and individualistic aspects of achievement motivation. The collectivist has important implications for achievement. In collectivistic culture, family and group goals are given higher priority and are more important than individual goals (King & McInerney, 2012). In a collectivistic culture, the whole family feels proud and happy when their children achieve academic success (Giota et al., 2019). Instead, academic failure will disappoint their families. In collectivistic families, children's academic success is very important, even they are willing to dedicate themselves to their children's schoolwork.

5. CONCLUSION

This study strengthens and expands the results of previous studies that found that SGs are related to educational outcomes such as motivation, learning strategies, and performance. Zero-order correlations revealed that social approval and concerns goals related to parents or family and teachers were positively associated with MCS, MGs, PGs, and PAP, whereas social approval and concerns goals and concerns related to peers were negatively related to MGs, PGs, MCS, and PAP. Overall, the results of the study indicate that several types of SGs are led to adaptive outcomes, while other types of SGs cannot predict learning outcomes. The influence of SGs on PAP is mediated serially by AGs and MCS.

The results of this study contribute to the importance of MGs and PGs in determining learning strategies and academic performance that are perceived by students. Therefore, educational institutions need to fulfill the desires of students to increase their knowledge, not just get recognition for their abilities compared to their peers. A comprehensive understanding of goal orientation provides evidence that behavior

is governed by multiple goals. This learning strategy is needed by students to improve their abilities so that their learning objectives are achieved. This is contrary to peers oriented SGs which can actually reduce students' awareness of how to learn to improve their abilities. Peers oriented SGs will instead reduce MCS. Therefore, giving assignments in teamwork needs to be balanced with individual tasks. There is a relationship between families and teachers oriented SGs and MCS and PAP encourages educational institutions in Indonesia to continue to involve families, especially parents in learning activities for students as well as teachers.

However, the interpretation of current findings has several limitations. First, the cross sectional design of the dependent and independent variables studied makes it difficult to describe definitive causal conclusions. Future research needs to use longitudinal design to create the same skills. Second, the measurement of SGs in this study does not cover all existing SGs, but only those related to social concern goals. Future research needs to use all dimensions of existing SGs. Third, the independent, mediating, and dependent variables are all assessed using self-assessment, so a common method variance occurs that results in a closer relationship.

Furthermore, although there are some limitations, the findings of this study have important implications. The key implication of the current study is the introduction that students have various reasons for trying to achieve learning performance, one of which is SGs. This analysis suggests that early adolescents who parents, teachers, and peers oriented SGs are related to motivation, learning strategies, and PASE. Students in Asia especially Indonesia have multiple reactions for learning strategies and perceived learning achievement.

REFERENCES

1. Ahmed, W., Minnaert, A., van der Werf, G., & Kuyper, H. (2010). Perceived social support and early adolescents' achievements: The meditational roles of motivational beliefs and emotions. *Journal of Youth and Adolescence*, 39(1), 36-46. <http://doi.org/10.1007/s10964-008-9367-7>.
2. Anderman, L.H. & Anderman, E.M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology*, 25(1), 21-37. <http://doi.org/10.1006/ceps.1998.0978>.
3. Bahar, M, Ugur, H., & Asil, M. (2018). Social achievement goals and students' socio-economic status: Cross-cultural validation and gender invariance, *Issues in Educational Research*, 28(3), 511-529. <http://www.iier.org.au/iier28/bahar.pdf>.
4. Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: Freeman.
5. Berger, N. & Archer, J. (2016). School socio-economic status and student socio-academic achievement goals in upper secondary contexts. *Social Psychology of Education*, 19(1), 175–194. <http://doi.org/10.1007/s11218-015-9324-8>.
6. Berndt, T.J. (1992). Friendship and friends' influence in adolescence. *Current Directions in Psychological Science*, 1, 156-159. <http://doi.org/10.1111/1467-8721.ep11510326>.
7. Boon, H. J. (2007). Low- and high-achieving Australian secondary school students: Their parenting, motivations and academic achievement. *Australian Psychologist*, 42(3), 212–225. <http://doi.org/10.1080/00050060701405584>.
8. Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd edition. New York: Routledge, Francis & Taylor Group.
9. Chang, W.C. & Wong, K. (2008). Socially-oriented achievement goals of Chinese University students in motives, goals, and affective outcomes. *International Journal of Psychology*, 43(5), 880-885. <http://doi.org/10.1080/00207590701836398>.
10. Chen, W.W. & Wang, Y.L. (2015). The relationship between goal orientation and academic achievement in Hong Kong: The role of context. *The Asia Pacific Education Researcher*, 24(1), 169-176. <http://doi.org/10.1007/S40299-013-0169-7>.
11. Cheng, R.W.Y. & Lam, S.F. (2013). Interaction between social goals and self-construal on achievement motivation. *Contemporary Educational Psychology*, 38(2), 136-148. <http://doi.org/10.1016/j.cedpsych.2013.01.001>.
12. Clarence, S.H. (2018). High school students' motivation to learn mathematics: The role of multiple goals. *International Journal of Science and Mathematics Education*, 16, 357-373. <http://doi.org/10.1007/s10763-016-9780-4>.
13. Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrative review. *Annual Reviews in Psychology*, 51(1), 171-200. <http://doi.org/10.1146/annurev.psych.51.1.171>.
14. De la Fuente, J., Fernandez-Cabezas, M., Cambil, M., Vera, M.M., Gonzalez-Torres, M.C., & Artuch-Grade, R. (2017). Linear relationship between

- resilience, learning approaches, and coping strategies to predict achievement in undergraduate students. *Frontiers in Psychology*, 8, 1039. <http://doi.org/10.3389/fpsyg.2017.01039>.
15. Demaray, M.K., Malecki, C.K., Davidson, L.M., Hodgson, K.K., & Rebus, P.J. (2005). Relationship between social support and students adjustment: A longitudinal analysis. *Psychology in the Schools*, 42(7), 691-706. <http://doi.org/10.1002/pits.20120>.
16. Dinsmore, D.L, Alexander, P., & Loughlin, S.M. (2008). Focusing the conceptual lens on metacognition, self-regulation and self-regulated learning. *Educational Psychology Review*, 20(4), 391-409. <http://doi.org/10.1007/s1064-008-9083-6>.
17. Dowson, M. & McInerney, D.M. (2001). Psychological parameters of students' social and work avoidance goals: A qualitative investigation. *Journal of Educational Psychology*, 93(1), 35-42. <http://doi.org/10.1037/0022-0663.93.1.35>.
18. Elliot, A.J. & McGregor, H. (2001). A 2X2 achievement goal framework. *Journal of Personality and Social Psychology*. 80(3), 501-519. <http://doi.org/10.1037/0022-3514.80.3.501>.
19. Estrada, J.A. C., González-Mesa, C.G., Méndez-Giménez, A. & Fernández-Río, J. (2011). Achievement goals, social goals, and motivational regulations in physical education settings. *Psicotherma*, 23(1), 51-57.
20. Ferla, J., Valcke, M., & Schuyten, G. (2008). Relationships between student cognition and their effects on study strategies. *Learning and Individual Differences*, 18(2), 271-278. <http://doi.org/10.1016/j.lindif.2007.11.003>.
21. Giota, J. & Bergh, D. (2021). Adolescent academic, social and future achievement goal orientations: Implications for achievement by gender and parental education. *Scandinavian Journal of Educational Research*, 65(5), 831-850. <http://doi.org/10.1080/00313831.2020.175536>.
22. Giota, J., Bergh, D., & Emanuelsson, I. (2019). Changes in individualized teaching practices in municipal and independent schools 2003, 2008, and 2014 – student achievement, family background and school choice in Sweden. *Nordic Journal of Studies in Educational Policy*, 5(2), 78-91. <http://doi.org/10.1080/20020317.2019.15686513>.
23. Goncalves, T., Niemivirta, M., & Lemos, M.S. (2017). Identification of students' multiple achievement and social goal profiles and analysis of their stability and adaptability. *Learning and Individual Differences*, 54, 144-159. <http://doi.org/10.1016/j.lindif.2017.01.019>.
24. Gonzalez, A.L. & Wolters, C.A. (2006). The relation between perceived parenting practices and achievement motivation in mathematics. *Journal of Research in Childhood Education*, 21(2), 203-217. <http://doi.org/10.1080/02568540609594589>.
25. Gordon, M.S. & Cui, M. (2012). The effect of school-specific parenting processes on academic achievement in adolescence and young adulthood. *Family Relations*, 61(5), 728-741. <http://doi.org/10.1111/j.1741-3729.2012.00733.x>.
26. Guan, J., Xiang, P., Keating, X.D., & Land, W.M. (2020). Junior high school

- students' achievement goals, social goals, and self-reported persistence in physical education settings. *European Physical Education Review*, 26(1), 218-230.
<http://doi.org/10.1177/1356336X19846912>.
27. Guan, J., Xiang, P., McBride, R., & Bruene, A. (2006). Achievement goals, social goals and students' reported persistence and effort in high school PE. *Journal of Teaching in PE*, 25(1), 58-74.
<http://doi.org/0.1123/jtpe.25.1.58>.
28. Gujarati, D.N. and Porter, D.C. (2009). *Basic Econometrics*, 5th edition. Singapore: McGraw-Hill & Irwin.
29. Harackiewicz, J.M., Durik, A.M., Barron, K.E., Linnenbrink-Garcia, L., & Tauer, J.M. (2008). The role of achievement goals in the development of interest: Reciprocal relations between achievement goals, interest, and performance. *Journal of Educational Psychology*, 100(1), 105-122.
<http://doi.org/10.1037/0022.0663.100.1.105>.
30. Horst, S. J., Finney, S. J. & Barron, K. E. (2007). Moving beyond academic achievement goal measures: A study of social achievement goals. *Contemporary Educational Psychology*, 32(4), 667-698.
<http://doi.org/10.1016/j.cedpsych.2006.1.0.011>.
31. Huang, C. (2012). Discriminant and criterion-related validity of achievement goals in predicting academic achievement: A meta-analysis. *Journal of Educational Psychology*, 104(1): 48-77.
<http://doi.org/10.1037/a0026223>.
32. Hulleman, C.S., Schrage, S.M., Bodmann, S.W., & Harackiewicz, J.M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different construct with similar labels? *Psychological Bulletin*, 126, 422-449.
<http://doi.org/10.1037/a0018947>.
33. Ibanez, G.E., Kupermint, G.P., Jurkovic, S., & Perilla, J. (2004). Cultural attributes and adaptations linked to achievement motivation among Latino students. *Journal of Youth and Adolescence*, 33, 559-568.
<http://doi.org/00477-2891/04/1200-0559/0>.
34. Johnson, M. and Kestler, J. (2013). Achievement goals of traditional and nontraditional aged college student: Using the 3x2 achievement goal framework. *International Journal of Educational Research*, 61(1), 48-59.
<http://doi.org/10.1016/j.ijer.2013.03.010>.
35. Kahraman, N. & Sungur, S. (2013). Antecedents and consequences of middle school students' achievement goals in science. *Asia Pacific Education Research*, 22(1), 45-60.
<http://doi.org/10.1007/S40299-012-0024-2>.
36. Kaplan, A. & Maehr, M.L. (1999). Achievement goals and student well-being. *Contemporary Educational Psychology*, 24(4), 330-358.
<http://doi.org/10.1006/ceps.1999.0993>.
37. King, R. B., & McInerney, D. M. (2012). Including social goals in achievement motivation research: Examples from the Philippines. *Online Readings in Psychology and Culture*, 5(3), 1-26.
<http://doi.org/10.9707/2307-0919.1104>.
38. King, R.B. & Ganotice, Jr., F.A. (2013). The social underpinnings of motivation and achievement: Investigating the role of parents, teachers, and peers on academic outcomes. *The Asia-Pacific Educational Researcher*, 23(3), 743-756.

- <http://doi.org/10.1007/s40299-013-0148-z>.
39. King, R.B. & Watkins, D.A. (2012). Cross-cultural validation of the five factor structural of social goals. *Journal of Psychoeducational Assessment*, 30(1), 181-193.
<http://doi.org/10.1177/0734282911412542>.
40. King, R.B., Ganotice, F.A., Jr., & Watkins, D.A. (2014). A cross-cultural analysis of achievement and social goals among Chinese and Filipino students. *Social Psychology of Education: An International Journal*, 17(3), 439-455.
<http://doi.org/10.1007/s11218-014-9251-0>.
41. King, R.B., McInerney, D.M., & Watkins, D.A. (2010). Can social goals enrich as understanding of students motivational goals? *Journal of Psychology in Chinese Societies*, 10(1), 1-16.
<http://doi.org/10.1016/j.lindif.2012.04.005>.
42. Lackaye, T.D. & Margaliz, M. (2006). Comparisons of achievement, effort, and self-perceptions among students with learning disabilities and their peers from different achievement groups. *Journal of Learning Disabilities*, 39(5), 432-446.
<http://doi.org/10.1177/00222194060390050501>.
43. Lavasani, M.G., Weisani, M., & Ejei, J. (2011). The role of achievement goals, academic motivation and learning strategies in statistic anxiety: testing a causal model. *Procedia Social and Behavioral Science*, 15, 1881-1886.
<http://doi.org/10.1016/j.sbspro.2011.04.020>.
44. Lee, E.J. (2018). Social achievement goals and social adjustment in adolescence: A multiple-goal perspective. *The Japanese Psychological Association*, 69(3), 121-133.
<http://doi.org/10.1111/jpr.12189>.
45. Lee, J.Q., McInerney, D.M., Liem, G.A., & Ortiga, Y.P. (2018). The relationship between future goals and achievement goal orientations: An intrinsic-extrinsic motivation perspective. *Contemporary Educational Psychology*, 35(4), 264-279.
<http://doi.org/10.1111/j.j.1467-9566.2009.01170.x>.
46. Leondari, A., & Gonida, E. (2007). Predicting academic self-handicapping in different age groups: The role of personal achievement goals and social goals. *British Journal of Educational Psychology*, 77(3), 595-611.
<http://doi.org/10.1348/000709906X128396>.
47. Levy, I., Kaplan, A., & Patrick, H. (2004). Early adolescents' achievement goals, social status, and attitudes towards cooperation with peers. *Social Psychology of Education*, 7(2), 127-159.
<http://doi.org/10.1023/B-SPOE.0000018547.0829.b6>.
48. Levy-Tossman, J., Kaplan, A., & Assor, A. (2007). Academic goal orientations, multiple goal profiles, and friendship intimacy among early adolescents. *Contemporary Educational Psychology*, 32, 231-252.
<http://doi.org/10.1016/j.cedpsych.2006.06.001>.
49. Liem, G. A. D. (2016). Academic and social achievement goals: Their additive, interactive, and specialized effects on school functioning. *British Journal of Educational Psychology*, 86(1), 37-56.
<http://doi.org/10.1111/bjep.12085>.
50. Lin, C.H, Zhang, Y., & Zheng, B. (2017). The roles of learning strategies and motivation in online language learning: A structural equation modeling analysis.

- Computers & Education, 113(1), 75-85. <http://doi.org/10.1016/j.compedu.2017.05.015>.
51. Logan, S., Medford, E., & Hughes, N. (2011). The importance of intrinsic motivation for high and low ability readers' reading comprehension performance. *Learning and Individual Differences*, 21(1), 124-128. <http://doi.org/10.1016/j.lindif.2010.09.011>.
52. Loyens, S.M., Magda, J., & Rikers, R.M.P. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychological Review*, 20(4), 411-427. <http://doi.org/10.1007/s10648-0089082-7>.
53. Luftenegger, M., Klug, J., Harrer, K., Langer, M., Spiel, C., & Schober, M. (2016). Students' achievement goals, learning-related emotions, and academic achievement. *Frontiers in Psychology* 7, Article 603. <http://doi.org/10.3389/fpsyg.2016.00603>.
54. Makara, K.A. & Madjar, N. (2015). The role of goal structures and peer climate in trajectories of social achievement goals during high school. *Developmental Psychology*, 51(4), 473-488. <http://doi.org/10.1037/a0038801>.
55. Martin, A.J. & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79, 327-365. <http://doi.org/10.3102/0034654308325583>.
56. Martinez-Monteagudo, M.C., Delgado, B., Sanmartin, R., Ingles, C.I., & Harcia-Fernandez, J.M. (2018). Academic goal profiles and learning strategies in adolescence. *Frontiers in Psychology*, 9, 1892. <http://doi.org/10.3389/fpsyg.2018.01892>.
57. Mascarell, M.D.M. & Cabedo, J.L.G. (2014). Virtual learning environment and academic results: Empirical evidence for the teaching of management accounting. *Revista DeContabilidad*, 17(2), 108-115. <https://doi.org/10.1016/j.rcsar.2013.08.003>.
58. Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, 106(1), 121-131. <http://doi.org/10.1037/a0033546>.
59. Minnaert, A. (2013). Goals are motivational researchers' best friend, but to what extent are achievement goals and achievement goal orientations also the best friend of educational outcomes? *International Journal of Educational Research*, 61(1), 85-89. <http://doi.org/10.1016/j.ijer.2013.08.002>.
60. Mouratidis, A. & Michou, A. (2011). Perfectionism, self-determined motivation, and coping among adolescent athletes. *Psychology of Sport and Exercise*, 12(2011), 355-367. <http://doi.org/10.1016/j.psychsport.2011.03.006>.
61. Navas, L. N., Llorca, J. A. S., Tello, F. P. H., & Mira, I. J. (2016). Multiple goals: predictive analysis of academic achievement in Chilean students. *Education XXI*, 19, 267-286. <http://doi.org/10.5944/educXX1.14225>.
62. Nelson, R.M. & De Backer, T.K. (2008). Achievement motivation in adolescents:

- The role of peer climate and best friends. *Journal of Experimental Education*, 76(1), 170-189. <http://doi.org/10.3200/JEXE.76.2.170-190>.
63. Ning, H.K. (2018). Singapore primary students pursuit of multiple achievement goals: a Latent profile analysis. *Journal of Early Adolescence*, 38, 220-237. <http://doi.org/10.1177/02724316166666521>.
64. Noordzij, G., Giel, L., and van Mierlo, H. (2012). A meta-analysis of induced achievement goals: the moderating effects of goal standard and goal framing. *Social Psychology of Education*, 24, 195-245. <http://doi.org/10.1007/s11218-021-09606-1>.
65. Paulick, T., Retelsdorf, J., & Moller, J. (2013). Motivation for choosing teacher education: Relations with teachers' achievement goals and instructional practices. *International Journal of Educational Research*, 61(1), 60-70. <http://doi.org/10.1016/j.ijer.2013.04.001>.
66. Poortvliet, M., & Darnon, C. (2010). Toward a more social understanding of achievement goals: The interpersonal effects of mastery and performance goals. *Current Directions in Psychological Science*, 19(5), 324-328. <http://doi.org/10.1177/0963721410383246>.
67. Pulkka, A., & Niemivirta, M. (2013). In the eye of the beholder: Do adult students' achievement goal orientation profiles predict their perceptions of instruction and studying? *Studies in Educational Evaluation*, 39(3), 133-143. <http://doi.org/10.1016/j.stueduc.2013.06.002>.
68. Rameli, M. R. M., Kosnin, A. M., Jiar, Y. K., & Ashari, Z. M. (2018). Cluster analysis on Malaysian student's achievement goals orientation in mathematics from multiple goal perspective. *International Journal of Engineering Technology*, 7, 113-116. <http://doi.org/10.14419/ijet.v7i2.10.10967>.
69. Rashid, S. & Rana, R.A. (2019). Relationship between the levels of motivation and learning strategies of prospective teachers at higher education. *Bulletin of Education and Research*, 41(1), 57-66
70. Rodriguez, C.M. (2009). The impact of academic self-concept, expectations and the choice of learning strategy on academic achievement: the case of business students. *Higher Education Research and Development*, 29(5), 523-539. <http://doi.org/10.1080/07294360903146841>.
71. Rotgans, J.I. & Schmidt, H.G. (2012). The intricate relationship between motivation and achievement: Examining the mediating role of self-regulated learning and achievement-related classroom behaviors. *International Journal of Teaching and Learning in Higher Education*, 24(2), 197-208.
72. Ryan, A.M. & Shim, S.S. (2006). Social achievement goals: The nature and consequences of different orientations toward social competence. *Personality and Social Psychology Bulletin*, 32(9), 1246-1263. <http://doi.org/10.1177/0146167206289345>.
73. Ryan, A.M. & Shim, S.S. (2008). An exploration of young adolescents' social achievement goals and social adjustment in middle school. *Journal of Educational Psychology*, 100(3): 672-687.

- <http://doi.org/10.1037/0022-0663.100.3.672>.
74. Salili, F., Chiu, C., & Lai, S. (2001). The influence of culture and context on students' motivational orientation and performance. In F Salili, C.Y. Chiu & Y.Y. Hong (eds.), *Student Motivation: The Culture and Context of Learning* (pp. 221-247). New York: Kluwer Academic/Plenum Publishers. http://doi.org/10.1007/978-1-4615-1273-8_11.
75. Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26(1): 113-125. <http://doi.org/10.1023/A:1003044231033>.
76. Sekaran, U. & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach*, 7th edition. Singapore: A John Wiley & Sons, Ltd.
77. Senko, C., Hulleman, C. S., & Harackiewicz, J. M. (2011). Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist*, 46(1), 26-47. <http://doi.org/10.1080/00461520.2011.538646>.
78. Shim, S.S. & Finch, W.H. (2014). Academic and social achievement goals and early adolescents' adjustment: A latent class approach. *Learning and Individual Differences*, 30(1): 98-105. <http://doi.org/10.1016/j.lindif.2013.10.015>.
79. Song, J., Bong, M., Lee, K., & Kim, S. (2015). Longitudinal investigation into the role of perceived social support in adolescents' academic motivation and achievement. *Journal of Educational Psychology*, 107(3), 821-841. <http://doi.org/10.1037/edu0000016>.
80. Sutantoputri, N.W. & Evanytha. (2016). The role of cultural factors on student's social and achievement goals motivation. *International Journal of Learning, Teaching and Educational Research*, 15(13), 43-51.
81. Urdan, T.C. (1997). Examining the relations among early adolescent students' goals and friends' orientation toward effort and achievement in school. *Contemporary Educational Psychology*, 22(2), 165-191. <http://doi.org/10.1006/ceps.1997.0930>.
82. Vrugt, A. & Oort, F.J. (2008). Metacognition, achievement goals, study strategies and academic achievement: Pathways to achievement. *Metacognition and learning*, 30(1), 123-146. <http://doi.org/10.1007/s11409-008-9022-4>.
83. Weinstein, C.E.; Jong, J. & Acee, T.W. (2010). Learning strategies. *Journal of International Encyclopedia of Education*, 323-329. <http://doi.org/10.1016/Ba78-08-044894-7.00497-8>.
84. Wentzel, K.R. (2000). What is it that I'm trying to achieve? Classroom goals from a content perspective. *Contemporary Educational Psychology*, 25(1), 105-115. <http://doi.org/10.1006/ceps.1999.1021>.
85. Wentzel, K.R., Battle, A., Russell, S.L., & Looney, L.B. (2010). Social support from teachers and peers as predictors of academic and social motivation. *Contemporary Educational Psychology*, 35(3), 193-202. <http://doi.org/10.1016/j.cedpsych.2010.03.002>.
86. Wormington, S. V., & Linnenbrink-Garcia, L. (2017). A new look at multiple goal pursuit: The promise of a person-centered approach. *Educational Psychology Review*, 29, 407-445.

- <http://doi.org/10.1007/s10648-016-9358-2>.
87. Yang Hansen, K. & Gistafsson, J.E. (2019). Identifying the key source of deteriorating educational equity in Sweden between 1988 and 2014. *International Journal of Educational Research*, 93(1), 79-90. <http://doi.org/10.1016/j.ijer.2018.09.012>
88. Yong, M.R. (2005). The motivation effects of the classroom environment in facilitating self-regulated learning. *Journal of Marketing Education*, 27(1), 25-40. <http://doi.org/10.1177/0273475304273346>.
89. Yu, J. & McLellan, R. (2019). Beyond academic achievement goals: The importance of social achievement goals in explaining gender in self-handicapping. *Learning and Individual Differences*, 69(1), 33-44. <http://doi.org/10.1016/j.lindif.2018.11.010>.
90. Zhou, Y. & Wang, J. (2019). Goal orientation, learning strategies, and academic performance in adult distance learning. *Social Behavior and Personality*. 47(7), 1-20. <http://doi.org/10.2224/sbp.8195>.