Reliability and Correlation Item on Achievement Goal Orientation Scale of the Students College in Indonesia

Herdian[1], Fatin Rohmah Nur Wahidah[2] Totok haryanto[3]

[1,2]Psychology Faculty, Universitas Muhammadiyah Purwokerto, Indonesia

[3] Economic and Business Faculty, Universitas Muhammadiyah Purwokerto, Indonesia

ABSTRACT: Achievement goal orientation is one of the important psychological variables in the realm of education, knowing the orientation of students in learning will provide information on the form of behaviour they do in academic activities at school. We tested the psychometric properties of the achievement goal orientation tool from Elliot & McGregor, (2001). Participants in this study were 431 students in Indonesia. The results of the study stated that the achievement goal orientation measuring instrument had good reliability and all items met the validity coefficient value of the item correlation test. The research implications are discussed in the discussion.

KEYWORDS- Academic Dishonesty; Students; Primary School; Islamic school; Cheating

I. INTRODUCTION

In the student learning process, the important thing in the success of his study is the orientation of his goals in academics. So that students will be easy to determine their learning strategies. This of course makes students will be directed depending on how students make a goal orientation. Goal orientation is part of forming motivation, which means it is related to the goals or objectives to be achieved by individuals in a task (Purwanto, 2014)

Achievement goal orientation is a behavioural goal that is perceived or pursued in an environment that is relevant to competence. In the achievement goal orientation, there are two orientations, namely mastery goal orientation or known by students who are interested in learning science, skills, and improving their understanding, and performance goal orientation or known as students who show their abilities exceed others (Dweck & Leggett, 1988). Elliot & Church, (1997) deepened the two forms with avoidance theory and approach to each goal orientation. So that into four forms, namely performance-approach and performance avoidance, and mastery-avoidance and mastery-approach. This expansion was studied by Pintrich, (2000) known as the 2 x 2 framework.

The results of previous studies say that goal orientation has an impact on learning, including goal orientation which has an influence on learning achievement (Setiyaningsih, 2021). In the study of Miller et al., (2021) mastery-approach orientation were more likely to take part in various indicators of engagement, such as reflective and integrative learning, higher order learning, quantitative reasoning, and student-lecturer interactions. Recent research with the theme of Achievement goal orientation in online learning shows that students with average or high achievement goals (success-oriented) may want more digitally mediated schoolwork. Mastery-oriented students tend to have significantly lower schoolwork and sleep disturbances associated with Internet use than other students (Mädamürk et al., 2021).

The use of achievement goal orientation measuring instruments in Indonesia has been used in many subjects such as elementary school (Setiyaningsih, 2021), junior high school (Nuraeni & Yanuvianti, 2018), high school (Widyaningsih & Budiningsih, 2016) and universities. However, there are not many studies that examine the reliability and correlation of test items on the achievement goal orientation scale. Therefore, the purpose of our research is to examine the reliability and item correlation test on the achievement goal orientation measuring instrument that has been adapted for the student population in Indonesia.

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II. METHOD

Participants in this study amounted to 431 students from universities in Indonesia. Participant profile is shown in table 1. Which explains the demographics by faculty, gender, age, religion and semester. Based on table 1, information about faculties, obtained the most participants from the economics and business faculties with a percentage of 57.3%, then from the psychology faculty with a total percentage of 23.2% and the least participants from the faculties of Islamic religion, animal husbandry, pharmacy, sports science. And social and political science with 1% each. Based on gender, this study was dominated by female sex with a percentage of 68% while men were 32%. Based on age, this study was dominated by ages 19 (36%) and 20 (26.9). based on religion, participants who are Muslim are 99.5% while Catholics and Protestants are only 1 respondent each. last semester based on information obtained that the second semester participants as much as 47.8% and the fourth semester as much as 42.5% dominate this study.

Table 1. Demography Data

Demography		Frequency	Percent
Faculty	Agama Islam	1	0.2
	Agriculture	5	1.2
	Animal Husbandry	1	0.2
	Computer Science and Technology	17	3.9
	Economic and Business	247	57.3
	Letter	50	11.6
	Nursing	2	0.5
	Pharmacy	1	0.2
	Psychology	100	23.2
	Sports science	1	0.2
	social and political science	1	0.2
	teacher training and education science	5	1.2
Sex	pria	138	32.0
	wanita	293	68.0
Age	17	8	1.9
	18	86	20.0
	19	155	36.0
	20	116	26.9
	21	43	10.0
	22	10	2.3
	23	3	0.7
	24>	10	2.3
Religion	Islamic	429	99.5
	catholic	1	0.2
	protestant	1	0.2
semesters	2	206	47.8
	4	183	42.5
	6	27	6.3
	>8	15	3.5

The sampling technique used incidental sampling with the help of google forms to fill in the scale. Filling the scale with google forms is because at the time of data collection in Indonesia, psychological distancing is still applied so that daily activities are carried out with a work from home system. Prior to data collection, participants filled out a statement of willingness to become respondents, so that this study obtained voluntary permission from the participants. The data collection tool uses a scale from Elliot & McGregor, (2001) which was adapted and translated into Indonesian. The achievement goal scale consists of 2 orientations based on competence, namely performance-approach, performance avoidance, mastery-avoidance and mastery-approach. Examples of items on performance-approach are "It is important for me to do better than other students", on performance avoidance items "I just want to avoid doing poorly in this class", on mastery-avoidance items "I worry that I may not learn all that I possibly could in this class "and on item mastery-approach "I want to learn as much as possible from this class". Scoring data using a scale ranging from 1 (not at all true of me) to 7 (very true of me). Data analysis used item correlation test and Cronbach's alpha. Tool for analyzing data using JASP program 0.13.1.0

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III. RESULT AND DISCUSSION

Based on the results of the analysis using the JASP statistical program analysis program, information about reliability is obtained which is presented in table 2.

Table 2. Reliabilities Test Achievement Goal Orientation

No	aspect		Cronbach's
1	performance	approach	0.909
2		avoidance	0.753
3	Mastery	approach	0.891
4		avoidance	0.896

Based on table 2. Information is obtained that the reliability of each aspect is reliable in measuring achievement goal orientation because it is above 0.7. As (Kaplan & Saccuzzo, 2017) says that reliability is adequate if the reliability coefficient value is at least 0.7. The performance approach aspect has a reliability coefficient of 0.909. The aspect of performance avoidance has a coefficient of 0.753. The mastery approach reliability coefficient is 0.891 and mastery avoidance is 0.896.

Furthermore, the calculation of correlation analysis on each item, the results are shown in table 3. Item Test Correlation achievement goal orientation. Based on table 3, information is obtained that all items have good Item Test Correlation scores. The minimum limit of the correlation coefficient suggested by Kaplan and Sacuzzo (2005) is 0.2, meaning that all items meet the item correlation test item validity coefficient.

Table 3. Item Test Correlation Achievement Goal Orientation

Orientations		Number of items	Item-rest correlation
Performance	Approach	Item 1	0.855
		Item 2	0.857
		Item 3	0.749
	Avoidance	Item 1	0.607
		Item 2	0.625
		Item 3	0.519
Mastery	Approach	Item 1	0.75
		Item 2	0.816
		Item 3	0.795
	Avoidance	Item 1	0.762
		Item 2	0.834
		Item 3	0.793

In addition to statistical reliability tests and Item Test Correlation, we conducted Pearson's Correlations test to determine the relationship between each variable. Data analysis results are shown in table 4. Pearson's Correlations. Based on table 4, information is obtained that, there is a significant positive relationship between Mastery Avoidance and performance approach (r=0.347, p<.001); Mastery Approach and performance approach (r=0.548, p< .001); Avoidance performance and performance approach (r= 0.566; p< .001). There was also a significant positive relationship between Mastery Approach and Mastery Avoidance (r= 0.562; p < 0.01); Performance Avoidance and Mastery Avoidance (r= 0.461; p < 0.01); and Performance Avoidance and mastery approach (r= 0.558; p < 0.01).

Table 4. Pearson's Correlations

Variable		Performance Approach	Mastery Avoidance	Mastery Approach	Performance Avoidance
Performance Approach	Pearson's r	—			
	p-value	—			
Mastery Avoidance	Pearson's r	0.347	—		
	p-value	< .001	—		
Mastery	Pearson's r	0.548	0.562	—	

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Approach	p-value	< .001	< .001	—	
Performance	Pearson's r	0.566	0.461	0.558	—
Avoidance	p-value	< .001	< .001	< .001	—

* p < .05, ** p < .01, *** p < .001

This study obtained information about the properties of psychological measuring instruments for achievement goal orientation using Cronbach's alpha analysis and item correlation test. In the JASP statistics program, the data is obtained directly by using the function menu of reliability. The use of JASP is easier and in accordance with the needs compared to other statistical programs. Based on the results of this analysis, we obtained a high Cronbach's alpha value in the performance approach, which is 0.909 and the smallest on performance avoidance, which is 0.753. So it can be concluded that the achievement goal orientation measuring instrument has a good value for consistency. While based on the item correlation test, the correlation value moves from 0.519 to 0.857. So it can be concluded that achievement goal orientation has a good correlation value as well. Based on Cronbach's alpha value and good item correlation test, this measuring instrument can be used in research with the same theme in the student population. However, it is possible that different populations can describe the properties of different psychological measuring tools. So that researchers can recalculate the two values before further analysis is carried out.

Further research can use different analyses, such as explanatory factory analysis to see the relationship between manifest variables or indicator variables in building a construct. In addition, Confirmatory Factor analysis is also important to do to obtain results whether the indicators grouped based on the late variable are appropriate or consistent in a construct or not. So that the development of measurement tools for achievement goal orientation in the student population in Indonesia can be used on the basis of strong and good psychological properties

IV. CONCLUSIONS

Analysis of psychometric properties in measuring instruments is an important thing to be done by every researcher. It includes the reliability and validity coefficient of the correlation test item. We carried out this analysis on the achievement goal orientation measuring instrument for each form of competence from the orientation. The reliability of the performance approach aspect has a reliability coefficient of 0.909. The aspect of performance avoidance has a coefficient of 0.753. The mastery approach reliability coefficient is 0.891 and the mastery avoidance coefficient is 0.896. While all items meet the value of the coefficient of validity of the item correlation test because it exceeds 0.2. So the conclusion is that the achievement goal orientation measuring instrument has good psychometric properties and can be used in the same population.

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