

# **Passion Trend Based Learning Scale Validation**

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**Abstract.** This study aims to test the validity and reliability of the passion trend-based student learning measurement scale. In order to accomplish the research aims, two analytical procedures were employed, specifically the Pearson product moment to assess the validity of the instrument items, and Cronbach's alpha to evaluate reliability. The results of the instrument validity test carried out support the structure of two indicators, namely harmonious passion and obsessive passion which have been translated into 12 statement items. In addition, the reliability test results are also quite high, indicating that the scale used is reliable. This research contributes theoretically and practically.

**Keywords:** passion trend based learning, measurement scale, validity, reliability.

## 1 Introduction

Passion-based learning, a pedagogical approach characterized by students independently engaging in projects aligned with their personal interests, is gaining traction within educational institutions due to its numerous benefits and merits [1], [2]. Educators who have allocated dedicated time for passion-based learning have seen that students exhibit heightened levels of engagement and motivation while studying subjects that captivate their interest, hence facilitating a more profound level of comprehension compared to conventional instructional methods [3], [4]. When passion-based learning is effectively implemented, it has the potential to unlock students' creativity and facilitate the acquisition of crucial 21st century skills, while simultaneously empowering them to take ownership of their own learning [5], [6]. Nevertheless, the implementation of passion-based learning can present certain challenges. In order to achieve success, educators necessitate the backing of administrative personnel, alongside a willingness to undertake ventures that include uncertainty.

Even so, many students have not found their passion when they are in school. One of them has an impact on students when they have entered college. The results of a survey in 2017 showed that 87.0% of students in Indonesia admitted to taking the wrong major during college [7]. This is of course caused by several reasons, for example parental encouragement, the choice of majors was rushed and seemed without deep consideration, and of course when they were at the senior high school level, they did not study according to their passion [8]. Upon matriculation into college, a considerable number of students come to the realization that the subjects they are being exposed to do not align with their own interests, aptitudes, and capabilities. However, there are still schools in Indonesia that have implemented a passion-based curriculum and learning [9], [10], this shows that there is still hope that passion-based learning can also be implemented in other educational institutions.

Passion-based learning is very important. Passion is the passion, encouragement, and energy that arises in a person to do activities he likes in a disciplined manner [6], [11]. With the application of passion-based learning, they will be able to live it with love and enthusiasm. On the contrary, various studies state that learning that is not in accordance with their passion can be an academic pressure for students [12], [13]. The presence of academic stressors has the potential to elicit many responses in students, affecting their cognitive processes, activities, and emotional states [14], [15]. Commonly experienced emotional reactions among students include anxiety, despair, and thoughts of hopelessness. Commonly experienced emotional reactions among students include anxiety, despair, and thoughts of hopelessness.

The implementation of the independent learning policy in schools is a challenge for teachers to be more creative and innovative. One form of translation of the independent learning policy into learning activities in schools is passion trend learning which is in accordance with the important points of the independent learning policy objectives, namely the development of improving the quality of students based on the freedom of learning based on the interests of students [16]–[19]. Passion trend-based learning is expected to be an alternative strategy to improve the competence of students [2], [20], [21]. Where the learning strategy is expected to make students enjoy participating in learning activities at school. Based on these interests, it is felt necessary to develop instruments to measure student learning based on passion trends in schools that have been tested for validity and reliability.

## 2 Method

This study aims to test the validity and reliability of the passion trend-based student learning measurement scale. The instrument used is an adaptation of the instrument developed by Vallerand [22], [23], which was also adapted by Zhao et al. [24] which consists of 2 indicators namely harmonious passion (six items) and obsessive passion (six items). The research instrument employed a closed-ended questionnaire comprising four response options, which were rated on a scale ranging from 1 (not good) to 4 (very good). participants in this research were 30 teachers from high schools in Si-

doarjo, East Java, Indonesia. In order to accomplish the research objectives, two analytical procedures were employed: the Pearson product moment was utilized to assess the validity of the instrument items, while Cronbach's alpha was employed to evaluate the reliability of the instrument. These analyses were conducted using the SPSS 24.0 software program [25], [26].

Table 1. Passion Trend Based Learning

Variable	Indicator	Item Code
Passion Trend Based	1. harmonious passion	X1, X2, X3, X4, X5, and X6
Learning	2. Obsessive passion	X7, X8, X9, X10, X11, and X12

# 3 Results

The results of the validity and reliability tests of the passion trend-based student learning measurement scale were analyzed based on instruments distributed via Google form to 30 teachers in high school environments in Sidoarjo Regency, East Java. Table 2 shows the demographics of the respondents in detail. Respondents demographically described as follows, (1) Age, 26.67% aged less than 25 years, 36.67% aged 26-35 years, 23.33% aged 36-45 years, and 13.33% aged over 45 years; (2) Gender, 40.00% male and 60.00% female; and (3) Educational qualifications, 0.00% high school graduate, 10.00% diploma, 70.00% bachelor, 16.67% master's degree, and 3.33% postgraduate (PhD). Based on this description, it can be understood that the majority of respondents in this study were female with undergraduate backgrounds, with varying ages.

Table 2. Respondents Description

Criteria	Freq	%
Age		
< 25 years	8	26.67%
26 - 35 years	11	36.67%
36 - 45 years	7	23.33%
> 45 years	4	13.33%
Gender		
Male	12	40.00%
Female	18	60.00%
<b>Educational qualifications</b>		
High school	0	0.00%
Diploma	3	10.00%
Bachelor	21	70.00%
Magister	5	16.67%
Postgraduate (PhD)	1	3.33%

The validity of the passion trend-based student learning measurement scale was evaluated using the Pearson product moment formula with the help of the SPSS program. The trend-based student learning measurement scale has 12 statement items developed based on two indicators, namely harmonious passion and obsessive passion. Based on the validity analysis summarized in Table 3, it is known that the sign value is in the range of 0.000 - 0.038, meaning that the value is <0.05. Based on the recommendation from Sultoni et al. [26] all statement items declared valid.

The subsequent step involves assessing the dependability by the utilization of Cronbach's alpha, facilitated by the software SPSS 24.0. According to the findings presented in Table 3, it is evident that the acquired value of  $\alpha = 0.866$  indicates a high level of reliability for the research instrument [27], [28]. Based on the findings of this investigation, the instrument designed to assess student learning in relation to passion patterns holds potential for utilization by academics and other scholars in the field.

**Table 3.** Test Results for the Validity and Reliability of the Measurement Scale

Item Code	Statement	Sig.	Pearson Correla- tion	Interpreta- tion	α	Interpreta- tion
Passion	trend-based student learning				0.862	Reliable
X1	The studies conducted by students are aligned with activities in their lives	0.000	0.552	Valid		
X2	New things that students discover with their studies allow them to appreciate it more	0.000	0.634	Valid		
X3	The study conducted by the students reflects the qualities he likes about himself	0.000	0.659	Valid		
X4	Studies conducted by stu- dents make it possible to undergo various experi- ences	0.003	0.504	Valid		
X5	Studies conducted by stu- dents are well integrated in their lives	0.000	0.588	Valid		
X6	The studies carried out by students are in harmony with other things that are part of the students them- selves	0.001	0.531	Valid		
X7	Students have difficulty controlling themselves while studying	0.009	0.484	Valid		
X8	Students almost have ob- sessive feelings for their studies	0.000	0.613	Valid		
X9	The study that students do is one of the things that really gets him excited	0.000	0.720	Valid		
X10	If the students can, he will just do his studies	0.000	0.535	Valid		

Item Code	Statement	Sig.	Pearson Correla- tion	Interpreta- tion	α	Interpreta- tion
X11	The studies that students do are so exciting that they sometimes lose control over them	0.038	0.403	Valid		
X12	Students get the impression that the studies they are doing control them	0.000	0.704	Valid		

## 4 Discussion

One important determinant in the successful implementation of the independent learning policy in schools is the implementation of passion trend-based learning. This phenomenon depends on many circumstances, including the extent to which information is obtained by students during school, including how teachers teach [22], [29]. Many people find their passion after they are in college [1]. Usually, students will take the initiative to find their passion through non-formal education outside the campus. For example, by participating in an organization to develop yourself. Students should be able to find their passion from school, but many students are late because education in Indonesia tends to emphasize material so that during the learning process there are no opportunities for students to imagine, think, and express themselves [30], [31].

In addition, the lack of direction from the school environment, the surrounding environment, and the lack of motivation from within students also has an impact on students being late to immediately find the passion that is within them [9], [32]. In fact, if students have found their passion while in school, of course students have more opportunities to develop the skills they have [2], [33]. This method can also minimize the problem of students taking the wrong major during college. When students from an early age have been directed to find their passion, of course students will be more enthusiastic about learning and there is no pressure for students to follow the learning process [3], [34], [35]. As an educator, the teacher also cannot force students to understand all types of lessons, because each student has a different passion [36], [37]. There are students whose passion is in the field of art, there are students whose passion is in the field of religion, there are also students whose passion is in the field of languages. Teachers are also expected to be able to help students find their passion and so students can more quickly develop their passion.

Pierce [38] summarizes four tips from teachers who have seen great success with the passion-based learning approach. First, Provide structure. Even though interest-based learning allows students to follow their interests, this cannot be done freely for all students, teachers still need to provide boundaries as study guides. Second, Learn along-side your students, the main advice that can be given is that teachers must complete projects they like with their students. Exemplary is important to students and important to teachers as lifelong learners with them. Third, Scale it school-wide, giving all students options to explore their interests can be challenging at scale. To overcome this obstacle and make the process easier for teachers, a learning platform such as a learning

management system is needed [39], [40], which is a collection of learning content in the form of videos, infographics, and so on which are arranged into independent learning paths.

If done well, interest-based learning can spark a love of learning that extends to core subjects [38], [41]. In all subjects, students want to be challenged and find relevance between the material being taught and their own lives [42], [43]. Every student at school hopes to get inspired, learn, and have fun while at school, which can be facilitated through passion trend-based learning.

The aim of this study is to validate the passion trend-based student learning measurement scale. In line with previous research [23], [24], the results of the instrument validity test carried out support the structure of two indicators, namely harmonious passion and obsessive passion which have been translated into 12 statement items. In addition, the reliability test results are also quite high, indicating that the scale used is reliable. The reliability results obtained in this research are also consistent with the findings of previous studies by Marsh et al. [44].

## 5 Conclusion

The application of passion-based learning in schools is important because if passion-based learning goes well, students will be able to live it with love and enthusiasm. On the contrary, various studies state that learning that is not in accordance with their passion can be an academic stressor for students. The results of the instrument validity test carried out support the structure of two indicators, namely harmonious passion and obsessive passion which have been translated into 12 statement items. In addition, the reliability test results are also quite high, indicating that the scale used is reliable. This research contributes theoretically and practically, by adding references related to passion-based learning, and practically the instruments whose validity and reliability are measured in this study can be used by future researchers.

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