

# Analysis of College Students' Satisfaction with the Application of the PAD Class in Teaching

Yueliang Jia<sup>1\*</sup> Yueming Jia<sup>1</sup>

<sup>1</sup> Institute of Nationalities, Hainan Tropical Ocean University, Sanya, Hainan 572022, China

\*Corresponding author. Email: 357070398@qq.com

## ABSTRACT

**Objectives:** The goal of this paper is to explore the satisfaction of college students and the relationship between the satisfaction and grades when the PAD Class is applied to the personality psychology teaching. **Methods:** 62 students majoring in applied psychology were investigated with course satisfaction questionnaire. **Results:** (1) Both students' satisfaction with teachers and students' satisfaction with course design were high; (2) in course design, the students with active learning style were more satisfied than those with thoughtful learning style, and the satisfaction of extroverted students was higher than that of introverted students; (3) students' satisfaction with course design was positively correlated with students' satisfaction with teachers, usual grades, final grades, and usual grades were positively correlated with final grades; (4) the usual grades and the final grades could significantly predict the students' satisfaction with the course design, which together explained the 55% variation rate of students' satisfaction with the course design. **Conclusions:** In the PAD Class, students' satisfaction with the course is affected by their learning style, personality type, usual grades and final grades, which can provide practical basis and reference for the objective evaluation of the effect of the PAD Class.

**Keywords:** PAD Class, Course satisfaction, Learning style, Grades.

## 1. INTRODUCTION

As a compulsory course for the major applied psychology, personality psychology is the only discipline in the discipline system of psychology that examines complex human nature from an overall perspective and explains "the reasons why we are what we are" through various theories and research methods. Students are required to transform theories into practical techniques, so as to guide others and help them to build a healthy personality. At present, the teaching of personality psychology is mainly through lecturing, which is the one-way indoctrination of teachers to students. With little interaction, students can't actively construct knowledge and their exploration spirit and thinking ability can't be effectively cultivated.

Therefore, this study attempts to introduce the "PAD Class" into the personality psychology course to explore its teaching effect. Based on the actual situation of education in China, Professor Zhang Xuexin of Fudan University proposed an original teaching model — "PAD Class" in 2014[1]. In terms of teaching time, it can be divided into three processes, namely Presentation, Assimilation, and Discussion. The core teaching concept is that half of the teaching time is for the teacher's presentation and the other half for students' discussing and studying, with one week for assimilation in between. What's its different from the traditional discussion class, which is also the innovation of the PAD class, that is, the time periods of teaching and discussion are staggered, and it is a kind of "delayed discussion". The literature search on CNKI shows that the teaching reform model of PAD Class has had certain influence and achieved certain results [2], but there is still no research on its application in personality psychology courses.

This study mainly discusses college students' satisfaction with the teaching of personality

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psychology in the PAD Class. Students' satisfaction mainly refers to their evaluation of the degree to which teaching courses meet their needs and expectations, which involves teachers' own situation, course design, assessment methods, selection of teaching materials and practice, etc. [3]. Since the 1990s, the concept of education management has been transformed into the concept of "student orientation" [4]. The satisfaction of students is an important indicator of the quality assessment of higher education, and the empirical research on student satisfaction has also been paid more and more attention to. Previous studies have shown that people with different personality types have different performances in creativity, interpersonal relationship, adaptability, satisfaction and other aspects [3]. This study mainly seeks to analyze which types of students have higher degree of satisfaction with their courses, and further explore the relationship between their satisfaction with their usual performance and their final grades, so as to provide practical basis and reference for the objective evaluation of the effect of the PAD Class teaching mode.

## **2. OBJECTS AND METHODS**

### **2.1 Objects**

In the course of personality psychology of applied psychology major in an undergraduate university, the PAD Class teaching mode was implemented. A total of 62 college students participated in the course, with an average age of 20 years old. All questionnaires from the 62 respondents were collected, including 26 boys and 36 girls, 35 introverts and 27 extroverts; 28 in active style and 34 in contemplative style.

### **2.2 Tools**

#### **2.2.1 Course Satisfaction Questionnaire**

This questionnaire mainly reflects students' satisfaction with this course. It is divided into two parts by referring to previous literature [5] [6]. The first part is the students' satisfaction with the teacher, mainly the evaluation of teachers' teaching methods and teachers' quality. The teaching method mainly refers to the role orientation of teachers in the implementation process of PAD Class, and the quality includes professional knowledge and teaching attitude. There are 12 questions in total, with a 5-level scoring method. The higher is the score, the higher the satisfaction of students to

teachers is. The Cronbach's  $\alpha$  coefficient of this sub-questionnaire in this study is 0.90. The second part is students' satisfaction with course design, mainly referring to the reasonableness of the classroom arrangement and the evaluation of their own performance in the course, including the degree of knowledge mastery, concentration, completion of reading notes, participation in discussion and reporting, etc. There are 28 questions with a 5-point grading system. Except for the reverse questions (5, 6, 7, 13 and 21), the other questions are forward questions. The higher the score is, the higher the students' satisfaction with the course design is. The Cronbach's  $\alpha$  coefficient of this sub-questionnaire in this study is 0.92.

#### **2.2.2 Learning Styles[7]**

Honey & Mumford defined learning style as an individual's preferred attitude and behavior in the learning process and preference determines learning style. Learning styles can be divided into four types: actor, pragmatist, theorist and reflector. Actors tend to take the initiative to practice and act before thinking, while pragmatists tend to turn theories into concrete practical experience. Both of them belong to the active learning style that features a tendency to participate in discussions and group learning, being proactive and good at communication and cooperation. Theorists are good at organizing abstract concepts and have strong thinking ability and inductive ability. Reflectors are good at independent thinking and reflection observation. Both of them belong to the contemplative learning style. Their common characteristics are that they are good at thinking and have little communication with others, and they are used to self-induction and summary in learning.

#### **2.2.3 Introversion and Extroversion Personality Types [8]**

Psychologists Jung and Eysenck both described personality traits as extravert type and introverted type. While extroverts like to socialize and talk to people and don't like to read alone, introverts are quiet and withdrawn, like introspection and reading and don't like to socialize.

### **2.3 Data Processing**

The collected data were input into SPSS25.0 for descriptive analysis, t-test, correlation analysis and regression analysis.

**3. RESULTS**

**3.1 Overall Analysis of Course Satisfaction**

Through descriptive statistics, it was found that the average of students' satisfaction with teachers was 48.32 (S =5.63), and the average score of each item was 4.23, indicating that students were satisfied with teachers' teaching; the average degree of students' satisfaction with the course design was 109.62 (S =12.91), and the average score of each item was 3.92, indicating that students were satisfied with the course design.

Table 1. Satisfaction analysis of active and contemplative students

Learning styles		x	s	t
Satisfaction with the teacher	Active style	49.25	5.76	0.79
	Contemplative style	47.92	5.60	
Course design satisfaction	Active style	114.63	9.90	2.15*
	Contemplative style	107.46	13.57	

Note: \*P<0.05, \*\*P<0.01, \*\*\*P<0.001, hereinafter inclusive.

**3.2.2 Satisfaction analysis of students with different personality characteristics**

T-test ("Table 2") shows that in terms of course design, extroverted students are more satisfied than

Table 2. An analysis of introverted and extroverted student satisfaction

Personality characteristics		$\bar{x}$	s	t
Satisfaction with the teacher	Introversive type	47.53	5.75	-1.38
	Extravert type	49.74	5.25	
Course design satisfaction	Introversive type	107.00	13.45	-2.04*
	Extravert type	114.32	10.67	

**3.2 Analysis of Different Types of Students' Satisfaction with the Course**

**3.2.1 Satisfaction Analysis of Students with Different Learning Styles**

T-test ("Table 1") showed that in terms of course design, active students had higher satisfaction than contemplative students, and the difference was statistically significant, yet the two styles had no significant difference in the evaluation of teacher satisfaction.

introverted students, and the difference is statistically significant. There is no significant difference in the evaluation of teacher satisfaction among introverted and extroverted students.

**3.3 Correlation Analysis of Satisfaction and Grades**

According to the correlation analysis ("Table 3"), students' satisfaction with teachers was positively correlated with their satisfaction with course design, and their satisfaction with course design was positively correlated with their usual performance and final grades, and their usual performance was positively correlated with their

final grades, all of which were statistically significant.

Table 3. Analysis of the correlation between satisfaction and usual grades and final grades

	$\bar{x}$	s	1	2	3	4
1 Satisfaction with the teacher	48.32	5.63	1			
2 Satisfaction with the course design	109.62	12.91	0.38**	1		
3 Usual grades	84.05	7.49	0.05	0.31*	1	
4 Final grades	74.21	7.67	0.08	0.71***	0.48***	1

### 3.4 Regression Analysis of Students' Usual and Final Grades on Course Design Satisfaction

Linear regression analysis was performed by input method, with students' satisfaction with the course design as the dependent variable, and the students' usual performance and final grades were

taken as the independent variables. As shown in "Table 4", usual and final grades could significantly positively predict students' satisfaction with course design, and together they explained the 55% variation rate of students' satisfaction with course design. The regression equation was established:  $\text{course design satisfaction} = 25.75 + 0.36 \times \text{usual grades} + 0.80 \times \text{final grades}$ .

Table 4. Regression analysis of students' usual and final grades on course design satisfaction

Independent variables	R	R <sup>2</sup>	F	B	t
constant				25.75	1.73
Usual grades	0.74	0.55	30.97***	0.36	2.19*
Final grades				0.80	7.18***

## 4. DISCUSSIONS

### 4.1 An Overall Profile of Course Satisfaction

The results showed that the students' satisfaction with the course was relatively high. The average value of each item reached 4 points, indicating that students were relatively approved of the teaching method of PAD Class. First, students were satisfied with the teaching methods and quality of teachers, and they supported the return of teachers' role from "indoctrinator" to "guider", which forced teachers to constantly improve their professional knowledge level and give timely answers to difficult problems. In this way, students also had more respect and higher evaluation for teachers. Second, students were satisfied with the reasonableness of the classroom arrangement and their performance in the course. This was mainly because the PAD Class changed students' knowledge from passive acceptance to active exploration. The key and difficult points in the teacher's course aroused students' enthusiasm to explore knowledge actively. At the same time, feeling the pressure from peers, they tended to be more careful when finishing their reading notes out of class so they had something to say in the discussion in next class. They highlighted the questions so as to make their arguments to the point

in the discussion. In this way, teachers and students can inspire each other. It not only greatly enhances the initiative of students in learning, but also constantly constructs the knowledge points through the three processes of presentation, assimilation, and discussion, so that students can grasp the knowledge more firmly. Therefore, students are fond of the teaching mode of PAD Class.

### 4.2 Differences in Course Satisfaction

In terms of course design, the active learning style was more satisfied than the contemplative learning style. Active types include actors and pragmatists. The actors are curious and eager to exert their subjective initiative. The novel teaching mode of the PAD Class can mobilize the active initiative of the actors. Pragmatists have a strong application ability to turn theory into practice, pay attention to the completion of the task, and the homework reading notes and thinking questions of PAD Class can just mobilize their practical ability. The contemplative style includes the theorist and the reflector. Theorists have strong logical thinking and can organize abstract knowledge, so they need to be given time to construct knowledge, but they are weak in practical application. Reflectors tend to self-reflect on knowledge in a relaxed and quiet environment and have a rigorous attitude towards learning. On the whole, while the active type tends

to do, the contemplative type tends to think [7]. The assimilation and discussion in next class of the PAD Class are the crucial link, which is the learning style that active students excel in. However, contemplative students are better at systematically understanding knowledge through comprehensive and specific teaching by teachers. Therefore, active students are more satisfied than contemplative ones, and they are more suitable for PAD Class.

In terms of course design, extrovert students were more satisfied than introvert students. Introverted students like to think quietly and independently. Since they are not good at socializing, they feel uncomfortable in the discussion. When others are in discussion, they are likely to bury themselves in a book, resulting in a low degree of participation. Extroverted students, on the other hand, prefer a group learning style. They are active in the interactive discussion class, and can take the initiative to lead the group members to participate in the discussion, and actively report the results on the stage. In this process, not only is students' interest in learning stimulated, their understanding of knowledge is deeper, but their theoretical application ability and scientific research ability are also exercised. Therefore, extroverted students are more satisfied with and more suitable for the PAD Class than introverted students.

In the evaluation of satisfaction with the teacher, there is little difference between different types of students. This is mainly because the evaluation content is about the quality and role orientation of teachers themselves, which is not closely related to the learning initiative of students themselves. Therefore, whatever type of students' evaluation of teachers is basically the same.

### ***4.3 The Relationship Between Course Design Satisfaction and Grades***

This study shows that the higher students' satisfaction with teachers is, the higher their satisfaction with course design is, which indicates that the improvement of teachers' professional level is the premise to ensure the implementation effect of PAD Class and also the premise for colleges and universities to improve the quality of education. The breadth and depth of a teacher's knowledge is undoubtedly the basis for winning the respect of students, and its importance is even more prominent in the link of answering questions and doubts. It ensures the effectiveness of teacher-

student interaction, and encourages students to finish reading notes carefully in the internalization and absorption process, as well as to go deeper into the group discussion, so as to be more satisfied with the design of the course.

In addition, usual performance and final grades can predict students' satisfaction with course design. Since the PAD Class values the process evaluation, the evaluation method should reflect the students' internalized absorption after class and the input discussion next class. Total student rating = 40% usual grade + 60% final grade, in which the usual performance is made up of reading notes and discussing grades. There are seven reading notes, each graded 3-5 points, with a full score of 35 points, according to the quality of the completion. Students who raise an inspiring question during the discussion or make a presentation on stage will get 5 points, with a total of 40 points for usual performance. If full marks are obtained for usual performance, students can get a passing grade in the overall evaluation as long as they get 40 points in the final exam. Therefore, getting high marks for usual performance is the motivation for students to study actively. The higher the usual performance is, the more clearly students understand and master the important and difficult points of the course. Being able to write reading notes with their own characteristics indicates that students have not only sorted out and concluded the content of the textbook, but also have divergent thinking. In this way, they are more able to express their own views and be inspired in the discussion in next class and thus have higher satisfaction for the course design. At the same time, the PAD Class encourages students to spread their learning to ordinary times, so that they can study throughout the semester, which avoids the disadvantages of learning based on final scores, for example, students do not learn usually, leading to the phenomenon of teacher marking the key points and students cram before the test. However, in the PAD Class, students conduct comprehensive learning in the three links of presentation, assimilation, and discussion in the next class. According to the Ebbinghaus Forgetting Curve, the forgetting speed of students is significantly reduced. Therefore, students with excellent performance in the usual process learning have a thorough understanding of the knowledge points, and can effectively maintain them. Naturally, they will have a high correct rate of recall and recognition in the exam, thus have a higher satisfaction with the course design.

## 5. CONCLUSION

The empirical study shows that the students are more satisfied with the application of PAD Class in the teaching of personality psychology, and the PAD Class is more suitable for the students with active learning style and extroverted personality characteristics. On the other hand, it also proves that the higher the students' satisfaction with the course design, the higher their satisfaction is with the teachers. At the same time, the students' satisfaction with the course design is affected by the usual performance and the final grades. The results can provide practical basis and reference for the objective evaluation of the effect of PAD Class.

## AUTHORS' CONTRIBUTIONS

Yueliang Jia implemented the PAD Class teaching mode, analyzed data and wrote the paper. Yueming Jia contributed to the teaching program design and the revision of the paper.

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