# The Exploration of Professional Identification for College Students among Different Employment Scopes

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#### Abstract

This study compared and analyzed the situation of the college students' professional identification among different employment scopes to explore the influence from the scopes to the professional identification. The result indicates that the present situation of college students' professional identification is not satisfactory. We did not find remarkable difference between implicit and explicit identification. The result shows that college students among different employment scopes lack of enough implicit professional identification.

Keywords: Professional identification, College students, Employment

#### **1. Problem Proposed**

Induction psychologists (Hu, Zhihai and Huang, Helin, 2006, p.1498-1501) consider that the identification can be explained as a feeling, an attitude, an process of cognition and study, it belongs to the domain of attitude. Kelman (Hou, Yubo, 2002, p.105-121) indicate that to form and change the attitude will experience three different processes, one of them is identification (the rest is obedience and internalization)(Hou,Yubo,2002, p.105-121). So, professional identification can be regarded as an process of cognition, feeling and study of one's specialty, in other words, it's an positive attitude of one's profession(Wang, Dingming and Liu, Yongcun, 2007, p.18-22). Just as the attitude is consist of cognition, feeling and intension (Shi,Ronghua, 1989, p.45-60), the professional identification can be classified four different dimensionality: First is to understand one's profession which is the premise and base of producing professional identification; Second is the feeling and attitude of one's profession, that is to say, whether it will be positive or not to the attitude of the major, whether it will be satisfied with their major and accept their study or not: Third is the motivation to learn their major positively and the behavior caused by the study; Fourth is the high-effect of professional learning which is produced by the above dimensions. Some scholars subdivide the professional identification into four dimensions that are professional cognition, professional selection, professional interests and professional learning (Hou, Yubo, 2002, p.105-121), this study uses the above four dimensionality as the theory principle of 'professional identification questionnaire'.

According to the view of social cognition, the identification is belonged to the field of attitude, and is more significant to the study of implicit attitude (Luo, ZhengXu and Miao, Danmin, et., 2001, p.361). Implicit Association Test (IAT for short) is a intricate test, it can measure implicit cognition sensitively and explicitly. Physiologically IAT is based on neurol network model. The model is formed of the theory that the information is stored on a series of knots that is stratified organized according to the semantic relations, thus measuring the distance between two concepts on this kind of nerve knots to survey the contact between the two concept. IAT is based on the automatic process of attitude, it can survey the individual implicit attitude through measuring the tightness level of automatic process between the two kinds of words (conception words and attribute words) via a classification task (Ma, Fang and Liang, Ningjian, 2008, p.35-39).

One research indicate that the dissatisfaction at their major caused by the negative attitude will produce more psychological problems among college students (Luo, Zhengxu and Miao, Danmin, et., 2001, p.361) (Greenwald, A.G., McGhee E., Schwartz, J.L.K., 1998, p. 757-759). But some graduated students who has worked for two or three years will change their jobs themselves, leaved the vocations related to their major. Recently, the high wastage rate of university students is very common. The undergraduate subject factor should be not neglected although lots of objective reasons exist. The research attempts to make explanation on psychological significance from the scope of employment of different university students on the plane of professional identification situation. To generalize research results from domestic and overseas in the past, lots of studies on professional identification are almost explicit investigations, the defect is we can not find out the real personal idea

(especially the participants have some misgivings), also the defect provides capacious research space for our study.

#### 2. Research Method

#### 2.1 Participants

We select the students from the profession of tourism management and psychology by reason that the professional orientation of tourism management is so clear whereas the orientation of psychological students is so vague that we choose students from the two professions as our participants.

260 students ranging from freshman to senior were selected randomly from the profession of tourism management and psychology of QuFu normal university, and ultimately acquired 253 effective questionnaires, which include 113 students of tourism management (44 boys and 69 girls, 31 freshmen, 30 sophomore students, 31 junior students and 32 senior students), and include 140 psychological students (58 boys and 82 girls, 36 freshmen, 36 sophomore students, 36 junior students and 32 senior students). Among those students, 178 people only take explicit investigation questionnaires, 82 people both take explicit investigation questionnaires and IAT, the rest 75 people only take IAT, all the results from participants are effective. Additionally, all the participants who joined our study are volunteer, and manipulate computer proficiently.

#### 2.2 Instruments

#### 2.2.1 Explicit Questionnaire

Self make-up investigation questionnaire of professional consciousness(Hu,Zhihai and Huang,Helin, 2006, p.1498-1501) (Chen,Xiangli, Zhang,Lehua and Yang,Zhaoning, 2007, p.1136-1138) (Adams, Kim and Hean, 2006, p.55-68): Referring to the questionnaire framing of other professional identification, the questionnaire was made up after many interviews and pre-tests, and consist of 16 items accessed by the 5-likert scale. All the items are enclosing the condition of undergraduates' professional identification and scaled from the professional identification of view of four dimensionalities which are professional cognition, professional selection, professional interests, professional study, such as 'I register for my profession' etc. (see attached list 1). The questionnaire has well reliability after tested; the cronbach  $\alpha$  is 0.82, the reliability of Spearman-Brown is 0.80, both are beyond the underline 0.8, in accord with the demand of the test framing.

#### 2.2.2 IAT

Using IAT 2.0 psychology test software program which is Chinese localized and the information of the test is recorded automatically by the computer as the tool in this test, the ABC of the reaction time is accurate to millisecond. All the selected words are following the requests: Firstly the words must be common in our daily life; Secondly, the words are neutral as far as possible. The main employment scope of business administration is limited in company, so we chose the company situation as the opposite of tourism management and psychological situation.

The target words which need the students of tourism management test are: company situation—office building, clerk, client, advertizing plan, marketing manager, business negotiation, secretary, business hall; travel situation—restaurant, tour guide , luxury room, lobby manager, catering services, sight spot, tourist, travel agency. The association attribute words are: positive words—high income, respect, beauty, fashion, dignity, high educated, future, wealth; Negative words—low income, low educated, discrimination, insignificance, grievance, drop behind, difficulty, disesteem. The compatible part are travel situation—positive words, company situation—negative words; incompatible part are travel situation—negative words, company situation—positive words.

The target words which need the psychological undergraduates test are: Psychological situation— educational rectification, psychological consultation, psychological science research, human resource, polygraph, crisis intervention, psychological test. The compatible part are psychological situation—positive words, company situation—negative words, the incompatible part are psychological situation—negative words, company words—positive words. The target words and the association attribute words are same with the test that the students of tourism management take.

#### 2.3 Procedure

#### 2.3.1 Professional Identification Questionnaire

The execution of the professional identification was strictly following the procedure of group test adopted unitive introduction and answer sheet. The participants were concentrated in batches, then sent questionnaires

and collected them after 15 minutes.

# 2.3.2 IAT

The method of individual test is adopted in the study, during the process, the left side and the right side of the screen present the label of category, in the center of the screen present stimulus words. If the stimulus words were judged to the left, you can make reactions through pressing the key 'E'. If the words were judged to the right, you can press the key 'I' to make reactions. The test is grouped in 7 steps (see table 1 and 2). Participants will accomplish all the tests themselves according to the instruction. The time of the reactions and the situation of whether the reactions are right or wrong are all recorded by the computer automatically

## 2.4 Data Handling

## 2.4.1 Professional Identification Questionnaire

Gathering the original scores of all the items, then reverse scoring several items, the total score represents the level of professional identification. Meanwhile calculate the scores separately of the four-dimensionality that are professional cognition, professional selection, professional interests and professional study.

## 2.4.2 IAT

The scoring method is referred to Greenwald etc. proposed in 1998: The computer will eliminate the data automatically which the error rate exceed 10% (the experiment will not statistic and analyze the error rate), the specific data handling is: 1) Only take the data of the two test; 2) If the reaction time exceed the 300ms,we will mark for 3000ms,if below the 300ms,we will mark for 300ms,and the error reaction will not be dueled with; 3) acquire the mean of the two tests; 4) the mean difference of all the test groups divided by the mean difference of the compatible and incompatible test task is the effect d of IAT; 5) make d for the sensitivity indicator, the high value represent high sensitivity of the measurement instrument. Finally acquired valid data from 75 people include 30 boys and 45 girls, 32 people from the profession of travel management and 43 people from the profession of psychology. All the data are dueled with SPSS for windows 13.0.

## 3. Results Analysis

# 3.1 Professional Identification Questionnaire

The sample overall average of the professional identification questionnaire is 40.83, the full mark is 80, and the standard deviation is 8.70, the lowest score is 25, the highest score is 69. Most people are ranging from 34 to 42, and take up 43.9% of the totality. Generally speaking, the situation of the totality is not so optimistic. According to the previous research, we take 38 to be the separatrix which approaches median between the high score group and low score group (Hu, Zhihai and Huang, Helin, 2006, p.1498-1501), that is to say, there are 132 people above 38 points belong to the high identification group, and 121 people below 38 points which belong to the low identification group.

We make the analysis of variance by regarding the professional identification totality as the dependent variable, grade and gender as the independent variable, the results see the table 3 and table 4.

From table 3 and table 4 we can acquire that the figure of the grade and the gender has no significant difference statistically. Namely that the different grade and different gender can not influence the situation of professional identification. The result doesn't consist with the previous research, the possible reason is that primary grade students enter university not long, having strong interests in their major, seniors are facing press of employment and the further study, having deeper cognition with their profession than freshmen, so they have higher score in dimensionality of profession cognition and profession study and the result support my viewpoint. We speculate the gender variable will not influence the profession identification because the undergraduates are open-minded, the professional gender stereotype is somewhat reduced.

Comparing the difference of the total score and each dimensionality results, explored the situation in different employment scopes, the results as shown from table 6.

As is shown from table 6, the total score of the psychology students in professional identification is lower than travel management, in other words, the professional identification level of the undergraduates of broad employment scope is lower than the narrow employment scope. Concrete analysing the four-dimentionality, we find that there are significant difference statistically on professional selection, professional interests and professional study between psychology and travel management, that is the professional identification level of the undergraduates of broad employment scope on these three-dimensionality is higher than the narrow employment scope. But on professional cognition, the psychological is lower, however, has no significance. We suggest that the employment scope of psychology is broad, and the content is miscellaneous, but the difference varies from

individual to individual.

## 3.2 IAT

Compared the IAT reaction time of psychology with the travel management, we acquired the results, as is shown from table 7.

We can see from table 7, the participants of different employment scope exhibit the difference of implicit professional identification, but not statistically. The reaction time of compatible part is shorter than the incompatible part, the phenomenon illustrate that the travel management students have more associations with their profession than psychological students, and have more identification, although the connection is not so close. Meanwhile, in the study we acquired d=1.13, and >0.08(Greenwald A G, McGhee E, Schwartz J L K, 1998, p.1464-1408). So the test reflect effectively real implicit attitude.

## 3.3 The Comparison between the Results of Explicit Questionnaire and IAT

Attitude is consist of the explicit and the implicit, the two may keep uniform, may not. Some researches show that the explicit attitude can change caused by the long professional study, environmental influence and the interaction between students, and many students have the thought of 'Taking things as they come'. However, the implicit attitude is often difficult to change (Hu, Zhihai and Huang, Helin, 2006, p. 1498-1501). We can pay attention to the results from the experimental that the mean (40.33 points) of the travel management students' professional identification which compared with the foregoing setting (38points) belongs to high professional identification group; whereas the psychological (43.88) belongs to the low professional identification group. From the results, we can be shown that the travel management students have high-score in explicit questionnaire, but have low-score in IAT, which reveals the separation between the explicit and the implicit; but the psychological results are both lower, and doesn't reveal the separation, mean that the professional identification level is not so adequate on the level of explicit and implicit among psychological students.

## 4. Discussion

## 4.1 Discuss the Current College Professional Identification

From the results of this study, we don't have a optimistic view of the general conditions of college professional identification. It's worth to pay close attention to the situation that most of the students' professional identification is in the middle or even the secondary level. Review the questionnaire of low professional identification we can find out, the 43.9% participants (the 111 people whose score is below 38) get lower scores in two dimensions, the professional interest and choose. Most of questionnaire shows that what they learn is not professional interest or voluntary selection. Some of them (86) perhaps is considering future employment or other reasons, their scores in the professional knowledge and professional learning are not very lower compared with the other two, though they don't like their profession. Therefore, the professional interest and professional choice seem do more to the professional identification.

From the perspective of the two major, the average professional identification score of the tourism management students is 40.33, compared with the former 38 point, the mean belongs to high professional identification, while the students major in psychology got 34.88 which belongs to the low professional identification which is lower than the tourism management students'. The reasons of students major in psychology have lower professional identification as follow: First, psychological profession pursuit theory so excessive that neglect cultivation of emotion, will and self-confidence, etc. These factors affect the students' individuality healthy development; Second, scores is overweighed recently, but neglect the cultivation of students' practical ability; third, a great portion of students is adjusted, they are lack of interest in psychology, and the learning motivation is not enough.

# 4.2 The Affection of Gender and Grade on Professional Identification

From the perspective of gender factors, genders don't affect professional identification. On the one hand, with the proceeding of quality education, the difference between boys and girls major in the same subject is constantly reducing. That is study skills between male and female are not only limited in one aspect but also in the direction of comprehensive. On the other hand, college students have more opportunities to communicated, differences of gender personality are reduced, therefore the major differences brought by the character will be relatively shrinking.

In this research, we don't find the grade have remarkable affection to professional identification, in other words, there's no changes in attitude from grade one to four. That is, the level of professional identification in different employment scopes doesn't change over time.

## 4.3 The Analysis of Implicit Professional Identification

Students major in tourism management and psychology tend to relate their major to active words, this shows the implicit association test is compatible reaction time is shorter than incompatible events. Though the two major identify with their profession, the situation need to improve. The two profession in different employment scopes have consistent low implicit professional identification. We consider this that the college students hold high expectation for decent and stable jobs. Compared to the business administration, the two profession is inferior.

# 4.4 The Comparative Results of Implicit and Explicit Questionnaire

Compared with the results of the questionnaires and IAT, results of the students major in tourism management present separation of implicit and explicit, while psychology students does not who have low professional identification. The reason of this phenomenon may be tourism management students will work for service industry such as hotel and travel agency, they should observe carefully all regulations and try to refrain their emotions. These professional requirements dose not conform to the independence and freedom that advocated by contemporary college students. They feel hard to approve service work, so they have low implicit professional identification. The cause of high explicit professional identification may be their worry to be laughed. However, the results of students major in psychology present no separation of implicit and explicit, we infer they have less scruple and fill the questionnaires honestly. Additionally, the psychology students are relaxed when they are testing because they are familiar with scales and questionnaires.

#### 4.5 Suggestions

In order to improve the professional identification, we propose several suggestions as follow:

1. We should cultivate 'elite' and 'specialized' college students by improving training mode. In current college education training mode, many students are in embarrassing situation that the professional knowledge is not accurate, even the basic knowledge is blank. That is also the cause of employment difficulty. As students major in narrow range of employment have higher identification than the wide, improve training mode maybe a good solution.

2. To strengthen the education and guidance of college students and high school students, lead them choose the suitable profession from their actual conditions. There are many reasons for professional choice, such as interests, enthusiasm and problems of employment. Professional identification base on professional positive attitude. Different majors have to different participants; we should lead the college students to understand the major and themselves.

3. To enhance the training of professional qualification (An,Qin, 2007, p.499-501). The professional training is not only a sequentially learning process, but also a self exploration process to get society acknowledgement. Under the guidance of national policy, some career identify (such as teacher and Psychological consultant, etc) gain more attention. In this condition, to strengthen the professional qualification training assist students to get the certificate for promoting employment and professional identification.

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Table 1. IAT procedure 1

steps	times	task description	(left side)label(right side)	presented material	
1	20	target words distinguishment	business administration—travel management	target words	
2	20	attribute words distinguishment negative—positive		association attribute words \aattribute	
3	20	compatible connection task (practice)	business administration + negtive— tourism management + positive	all the words	
4	40	compatible connection task(test)	ditto	ditto	
5	20	target words distinguishment	business administration—tourism management	target words	
6	20	incompatible connection task (practice)	tourism management + negative —business administration + positive	all the words	
7	40	incompatible connection task(test)	ditto	ditto	

#### Table 2. IAT procedure 2

step	times	task description	(left side)label(right side)	presented material	
1	20	target words distinguishment	business management—psychology	target words	
2	20	attribute words distinguishment	negative—positive	association attribute words	
3	20	compatible connection task (practice)	business administration + negative—psychology + positive	all the words	
4	40	compatible connection task(test)	ditto	ditto	
5	20	target words distinguishment	psychology-business management	target words	
6	20	incompatible connection task (practice)	psychology + negative—business administration + positive	all the words	
7	40	incompatible connection task(test)	ditto	ditto	

score section(points)	number	percentage		
25-33	53	20.9		
34-42	111	43.9		
43-51	54	21.3		
52-60	30	11.9		
60-69	5	2.0		

Table 3. The score distribution Situation of Professional Identification Scaling

Table 4. Analysis of Variance In Travel Management Professional Identification

variance source	variance	degree of freedom	mean deviation	F	Sig
grade	246.491	3	82.164	0.918	0.638
gender	107.211	1	107.211	1.198	0.435
grade*gender	77.939	3	25.980	0.292	0.832

Table 5. Psychological Professional Identification Variance Analysis

variance source	variance	degree of freedom	mean deviation	F	Sig
grade	254.991	3	84.997	1.825	0.146
gender	0.116	1	0.116	0.020	0.960
grade*gender	233.559	3	77.853	1.672	0.176

Table 6. The Comparison of Each Dimensionality Results in Different Employment Scopes and Their difference

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profession		degree of freedom	mean	standard deviation	t	Sig
profession cognition	psychology	140	8.7643	2.25245	1.777	0.077
cognition	travel management	113	9.3274	2.78850		
profession selection	psychology	140	9.8143	2.80438	6.050	0.000**
	travel	113	12.5841	4.16346		
profession interests	psychology	140	10.6286	2.02269	5.215	0.000**
	travel	113	12.0973	2.37909		
profession study	psychology	140	8.7786	2.16269	5.021	0.000****
	travel	113	10.3363	2.66462		
total score	psychology	140	37.9857	6.93856	6.001	0.000**
	travel	113	44.3451	9.38252		

Note: \*\*express p < 0. 01

Table 7. The Comparison of IAT Reaction Time
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	compatible part		incompatible p			
	reaction time(ms)	SD	reaction time(ms)	SD	t	sig
travel	888.799	186.344	996.445	248.964	30.752	1.225
psychology	900.125	176.333	1002.115	196.334	35.664	1.332