

The Influence of Accounting Practice on Accounting Professional Moral Reasoning Ability

Mao Ni*

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China

*Corresponding author: maoni.m@qq.com

Keywords: Accounting Practice, Accounting Professional Moral Reasoning Ability, Accounting Defining Issue Tests.

Abstract: When accountant ethics is concerned, people will also pay attention to the impact of accounting practice on accounting ethics. Then, it is a question worthy of in-depth study that whether accounting students' accounting practice can improve their professional ethics reasoning ability or not. This paper tracks the level of moral reasoning ability changes of accounting students from university in Nanjing before and after the accounting practice to explore the effect of accounting ability by using the Accounting DIT. The study found that accounting practice helps to improve the accounting professional ethics reasoning ability of accounting students, but there is still a gap between the impact of accounting practice education on the moral reasoning ability of accounting students and accounting students' participation in accounting work.

1. Introduction

The Ministry of Education's "Opinions on Strengthening and Regulating the Management of Internships in General Universities" believes that strengthening the cultivation of college students' practical ability, innovative spirit and social responsibility is an important part of improving the quality of higher education. Internship is one of the major parts of practical teaching in colleges and universities. In recent years, with the joint efforts of universities and government agencies, enterprises, institutions, and social organizations and other employers, the integration of industry, education and research has been deepened, and the internship and employment of college students have been carried out steadily. Accounting practice is an important part of the training of accounting talents. It is an important way for accounting students to understand the society, contact the actual production, and acquire and master the relevant knowledge of the production site. It has the ability to cultivate students' practical ability, innovative spirit, and establish a sense of professionalism and responsibility. Important role.

The purpose of undergraduates' internships has shifted from past professional practice to employment and vocational ability development. Accounting internship is an important consideration for cultivating accounting professionals with higher vocational ability. For today's accounting students, the purpose of participating in accounting internships is to acquire knowledge, consolidate skills and improve practical abilities, in order to prepare for better integration into the work environment. But at the same time, participating in accounting practice will expose accounting students in a complex business environment and expose them to real accounting ethical issues. With the goal of cultivating accounting students with high moral quality and high-level professional skills in accounting education, we hope to explore whether accounting internship education can improve accounting students' existing moral knowledge reserves and conduct moral reasoning when facing complex business situations. What about the ability? Is there any significant difference between the influence of accounting practice education on the moral reasoning ability of accounting students and the influence of real accounting work on the moral reasoning ability? If there is no significant difference between participating in accounting work and participating in accounting internships in terms of moral reasoning, then it will be a smooth transition to prove the effectiveness of accounting

internship education when entering the accounting industry. If there is a significant difference between accounting personnel participating in accounting work and students participating in accounting internships, then under the premise that moral education can actually increase the moral reasoning of college students [1]. Therefore, effective moral education is crucial to narrowing this gap.

2. Related concepts and research hypotheses

2.1 Moral reasoning

Moral Reasoning (MR) refers to the process in which individuals use their own moral knowledge and related experiences to infer another moral judgment from one or more moral judgments [2]. The theoretical basis of moral reasoning ability comes from the "cognitive moral development theory" (CMD) created by the famous American psychologist Kohlberg [3]. CMD was originally designed to study the moral development of children, but in the twenty years after its introduction, the theory has been further researched and developed, and it has been applied in more and more research fields, including of course the accounting field that emphasizes moral education. Kohlberg's theory divides the moral level of individuals according to the classic "three levels and six stages", as shown in Table 1.

Table.1. Kohlberg's Moral Reasoning Stage Theory

Level	Stage	Content
Level 1: Pre-conventional morals	Stage 1: to avoid the penalty and obedience-oriented	The judgment of right or wrong behavior does not focus on the behavior itself, but judges from the consequences of the behavior, and to consider whether to act in order to avoid punishment
	Stage 2: the self-interest oriented	The judgment on whether the behavior is ethical or not comes first from one's own interests and needs
Level 2: Conventional morals	Stage 3: the harmonious interpersonal relationship oriented	First consider whether your actions are helpful to others, whether you can become friends with others, and whether you can maintain a harmonious relationship with other people in your environment.
	Stage 4: the legal order oriented	Aware of the existence of social order, identify with social norms, consciously abide by the law, and hope that others will also obey the law and social order in a rigid manner
Level 3: Post-conventional morals	Stage 5: social contract oriented	Believe that some social customs such as law are not immutable, and can judge good and evil from multiple angles such as morality and law
	Stage 6: universal ethics orientation	Making moral judgments more considers the universal ethical principles of mankind, rather than some specific rules and regulations

Accounting professional ethics reasoning ability, in short, is the psychological process of accounting professionals and accounting students to solve specific complex moral dilemmas. Accounting professional ethics is the standard for accountants to practice, and the level of accounting professional ethics reasoning reflects the level of accounting ethics. Accounting majors should pay more attention to ethical issues. The moral reasoning of accounting students not only face the moral problems in life, but also encounter various professional ethics dilemmas in their future study and accounting practice. They need to accept and follow the relevant national accounting laws and regulations and the profession of accountants. Ethics, etc., have a great dependence on the moral reasoning ability of accounting students.

2.2 Moral reasoning ability measurement

In order to make a more convenient and objective measurement of moral reasoning ability, Rest compiled a moral reasoning ability measurement scale based on Kohlberg's theory which called the Defining Issues Test (DIT) [4]. This scale requires participants to understand some items at a deeper level before they can select and rank moral reasoning ability. The DIT scale generally includes 6 moral dilemma story situations, each of which is followed by 12 related questions. These questions involve all aspects that participants need to consider when solving this dilemma. Each question also corresponds to the various stages in CMD. But among the 12 questions, there are also "M" questions that contain 1-2 questions to test the participant's response attitude, which is "meaningless". When taking the test, the participant needs to read the dilemma story first, and then judge the situation. Whether the protagonist "should", "not should" or "cannot judge" take a specific action, after making the choice, carefully read and think about the 12 questions after the item to determine the impact of these questions in their decision-making. The degree is given five points from "very important" to "very not important". On the basis of the completion of the scoring, select 4 of the 12 questions that are considered the most influential, that is, the "most important" questions, and rank them, respectively, 4, 3, 2, and 1 point, and the total score is 60 points. P score is the most commonly used DIT indicator in the study of accounting student ethics [5]. It represents the relative importance an individual attaches to the highest two stages of moral development (the 5th and 6th stages). These two stages are called post-conventional morality.

After Rest developed the DIT method, a large number of scholars have applied this tool in research and proved the validity and reliability of DIT. Every year, about 500 scholars apply DIT to different fields [5]. The most common research content is to use DIT for the evaluation of moral reasoning ability. Uysal (2010) pointed out that based on Rest's cognitive development method, a large number of studies have tested the moral cognition of accounting professionals and students. An important research branch of DIT is the measurement of the moral reasoning ability of accounting students who are the main force of accounting professionals in the future. Judging from the existing literature, Armstrong (1987) earlier used the DIT method to test the auditor's moral reasoning ability. St Pierre et al. (1990) used 69 American senior accounting students as subjects and used DIT to measure their moral reasoning ability. The study found that the average P score of accounting students was 43.42. Later in the United States, many scholars such as Ponemon and Glazer (1990), Icerman and Kenneley (1991) used accounting students as subjects and DIT as a measuring tool to conduct in-depth research on the level of accounting students' moral reasoning ability. Ponemon (1993) extended the student target to graduate students, while Eynon et al. (1996) compared the American and Irish junior accounting students as the object of comparison, and explored the differences in the moral reasoning ability of accounting students under different cultural backgrounds. Canada, Australia, Malaysia, Tunisia and other parts of the world have carried out relevant studies. The question test is used to test the moral reasoning ability of accounting students, and further explore various factors that affect the moral reasoning ability of accounting students, such as gender and age.

But the current DIT test that measures moral reasoning ability is mainly in general situations. According to the Field Theory, a person's behavior (B) depends on the interaction between the individual (P) and his environment (E), that is, $B=f(P, E)$. It can be seen that the situation has a significant influence on the moral behavior of individuals. Welton et al. and Throne believe that it is not enough to use the general dilemma scenario of "Heinz steals medicine" in the existing DIT for the measurement of the moral reasoning ability of accountants and accounting students at work [6-7]. They are quite different from the moral dilemma in the real accounting situation [6], which is just "moral reasoning ability in general situations". Therefore, the measurement of accounting professional ethics reasoning ability depends on the accounting context, which is of great significance to this evaluation process [7].

As for domestic research, from the overall research situation of the entire academic circle, research topics related to accounting professional ethics are still very concerned. However, most of the researches discuss the problems of accounting professional ethics and the distortion of accounting

information, or the evaluation and suggestions on the current accounting ethics education. There are few targeted discussions on the current accounting ethics from the psychological level of accounting personnel (including accounting students). Under education, whether the individual's accounting professional ethics reasoning ability can reach a relatively high level. When facing more complicated moral dilemmas in accounting positions, this ability can be used to identify moral dilemmas, analyze and judge problems, and make decisions. Ethical accounting decisions. Yang Shuxiang and Zeng Fanying (2014) used an audit case-based problem determination test to study that the development level of auditors' moral cognition is positively correlated with ethical decision-making. Zhang Qian and Yang Shaogang (2018) used the DIT2 developed by Rest et al. to conduct an empirical study on the moral judgment ability of contemporary college students with 811 subjects in Guangdong Province as an example, and found that gender, majors, and experience of student leaders influence college students' moral judgments Ability has a significant impact, and education level, academic performance, and only child have no significant impact on college students' moral judgment ability.

2.3 Research hypothesis development

Kohlberg and Rest emphasized the importance of social cooperation in encouraging personal moral development. Daily social interaction and interaction make the workplace experience an informal way of learning ethics. Social interaction stimulates moral thinking, which may improve a person's level of moral judgment. The famous psychologist Lewin also believes that a person's behavior depends on the interaction between the individual and his environment. It can be seen that the situation has a significant influence on the moral decision-making of individuals. Therefore, the actual entry of individuals into work is closely related to their moral decision-making process. Shaub and Thorne found through research that audit work experience has no significant effect on moral reasoning ability [6-7]. Dellaportas et al. found that one year of work experience does improve the moral judgment ability of graduate students [8]. Studies by Borkowski and Ugras (1992) and Peachey (2002) stated that students' moral awareness has declined after one year of work. They found that when people have more work experience, they will be under pressure to achieve their goals and forced to compete on the corporate ladder. The longer the working hours, the more self-centered people become. On the other hand, those who have not yet joined the workforce are more idealistic and tend to have better moral judgments. Massey (1997), Massey and Thorne (2006), Bernardi and Arnold (2004), Scofield et al. (2004) have all explored this relationship. Most of the aforementioned researches on the influence of work experience on moral reasoning ability are not specific to specific majors, but for us accounting students, the current accounting environment is becoming more and more complex, and the accounting profession requires accountants to be prepared to face more and more complex and frequent occurrences. Higher ethical dilemmas require more professional ethics judgments. Accounting students, as the backbone of the accounting industry, their moral reasoning ability is very important. The public has higher psychological expectations for the moral reasoning level of accountants.

Kohlberg asserted that the environment affects the speed of moral development, indicating that social experience may affect the speed of progress from having a self-centered morality to complying with social and professional norms and adopting universal ethical principles. In other words, the interaction in the workplace can improve the individual's moral thinking, so that the individual considers not only his own interests, but also his own influence on others. When dealing with colleagues, employers, and clients, individuals are more inclined to act in accordance with social and professional standards. Rest et al. (1999) supported this view, adding that interaction with others may provide a "person with mature moral thinking", which may positively affect the moral development of students. At the same time, a good corporate culture can also help new employees identify how to make ethical and professional judgments. Therefore, this article proposes the following assumptions:

H1: After accounting graduates participate in accounting work, their accounting professional ethics reasoning ability will be improved.

The practice of internship has already appeared in England in the 1880s. According to the place where the internship takes place, the leader, and the professional relevance, the practical activities

during the school period can be roughly divided into the following three categories: the practical activities closely related to the professional that occur in the school and organized by the school are generally course training; Practice activities that are not related to majors within the school and organized by the school are generally part-time work; practical activities that occur outside the school and are closely related to the major are the graduation internships, which is the internship referred to in this article. Typical graduation internship activities have certain characteristics: designated internship time, credits, and evaluation and supervision by both the school and the enterprise (Lorenzo-Aiss, 1996).

According to the theory of situational cognition, "legal marginal participation" is an important mechanism of learning and cognition (Lave and Wenger, 1991). The so-called "legal" refers to the qualification and identity of an individual as a member of the "community of practice", and "marginal participation" indicates the degree to which the members of the community are invested in or included in a specific field of practice and organization of practice. Community participants can obtain learning resources from practice to improve their cognition level, and gradually deepen from the "peripheral" position to the "core" [9]. Therefore, the "legal" status and the degree of "participation" are the key factors that determine the improvement of the individual's level of awareness in practice. The research of Satt et al. believes that compared with individual moral education, practical training can significantly improve the moral reasoning ability of accounting students [10]. Brown-Liburd and Porco (2011) believe that accounting students' internships, volunteer activities, joining student unions and other extracurricular activities have affected their moral reasoning ability; Saat et al. conducted a survey of students participating in industrial training in Malaysia[11]. Training will have a positive impact on the moral reasoning ability of accounting students. Deng Deqiang et al. believe that accounting internship can improve the moral reasoning ability of accounting students in the accounting context, but the results in the general context are not significant [9]. Therefore, accounting internship, as an important way for accounting students to "legally" enter the work position, will also have an impact on their professional ethics judgment ability. On this basis, hypothesis 2:

H2: After accounting students participate in accounting internships, their accounting professional ethics reasoning ability will be improved.

With the goal of cultivating high-level accounting talents with both ability and political integrity, this research will further explore whether there are significant differences in the impact of accounting internship and accounting work on the moral reasoning ability of accounting students. For accounting graduates and accounting students, it is generally believed that participating in accounting work and accounting internships will bring different workplace experiences due to responsibilities, assessment pressures, system constraints, and complex interpersonal relationships. Therefore, according to the theory of contextual cognition, different types of accounting practices (such as accounting internships and accounting work) will allow accounting students to "involve" in the context of accounting practice. There are differences in the "legal" status and degree of "participation". Differences will cause accounting students to be exposed to actual accounting ethical issues and different levels of interaction with other relevant employees at different levels, which will affect the development of their moral reasoning ability. For example, due to the peculiarities of accounting work, some positions may involve the internal core materials of some companies, and the time for students to participate in internship learning is mostly limited. Enterprises do not want to spend a lot of time on training, so most of the internship positions are relatively simple and single. There is a certain difference from formal work. Therefore, the following assumptions are made:

H3: Accounting work and accounting practice have different effects on accounting students' accounting professional ethics reasoning ability.

3. Research and design

3.1 Experimental design

The experimental design of this article will select the 2015 and 2016 accounting majors of a university in Nanjing as the specific experimental objects, and the 2015 as the senior year. After graduation, some students choose to directly participate in the work, which is the experimental group for the work. The students who did not participate in the work automatically become a control group. The 2016 students are the juniors. According to the requirements of the accounting training program of the school, they need to complete at least 200 hours of "graduation internship" during the first half of the senior year. The students who actually participate in the internship are the experimental group. Due to the postgraduate entrance examination, etc. Students who gave up the internship automatically became the control group. Therefore, we have selected two time points: Time point 1 is June 2019, which is before the 2015 students graduate to participate in accounting work and before the 2016 students start accounting internship education, and time point 2 is December 2019. During the period Accounting students carry out accounting internships or accounting work respectively. Choose two time points to conduct ADIT questionnaire survey respectively.

Because of the characteristics of moral issues, people are more sensitive about them, so this article uses a situational simulation questionnaire to solve this problem. The measurement of accounting professional ethics reasoning ability This article adopts the Accounting DIT (ADIT) developed by Deng Deqiang et al. (2018) based on the accounting context. There are 12 items after each situation. Repeated observation through multiple situations and multiple items to avoid random errors. The Cronbach α value of the questionnaire is 0.865, indicating that ADIT has a better level of reliability. "Accounting Professional Ethical Reasoning Ability in the Accounting Context" measures three variables: ADIT-P1, ADIT-P2, and ADIT-P3, which respectively reflect the three corresponding stages of moral reasoning, that is, taking instrumental self-interest as Oriented, guided by interpersonal relations and rules and order, guided by universal ethics and social contracts. The higher the score in each stage, the higher the moral reasoning level of the surveyed person in that stage. Calculated as follows:

$$ADIT_P2 = (Score\ of\ Stage\ 3 + Score\ of\ Stage\ 4) / 30 * 100\% \quad (1)$$

$$ADIT_P3 = (Score\ of\ Stage\ 5 + Score\ of\ Stage\ 6) / 30 * 100\% \quad (2)$$

3.2 Model construction and variable definition

Based on the above experimental analysis, this article intends to examine the impact of participating in accounting practice (accounting work and accounting internship) on the moral reasoning ability of accounting students. After the questionnaire is retrieved, invalid samples will be eliminated according to certain criteria. We conduct statistics and analysis on the questionnaire data, and use statistical analysis software such as Excel and SPSS to verify the impact of accounting practice on the moral reasoning ability of accounting students. This article uses linear regression to evaluate the impact of accounting practice on the development of accounting professional ethics reasoning ability. The relative change degree of ADIT score at each level is taken as the explained variable, whether to participate in accounting practice (AP) is a dummy variable, participation in accounting practice is 1, and the control group that does not participate in accounting practice is 0. Gender and age are considered as control variables. The main variables are defined in Table 2.

Table.2. Variable definition

Variable name	Variable code	Variable definition
Relative change degree of ADIT_P3	$\Delta ADIT-P3$	The relative change degree of ADIT stage 5 and 6 scores before and after participating in accounting practice
Relative change degree of ADIT_P2	$\Delta ADIT-P2$	The relative change degree of ADIT stage 3 and 4 scores before and after participating in accounting practice
Accounting practice	AP	Dummy variable, 0 for not participating in accounting practice, 1 for participating in accounting practice

The formula for calculating the relative change of ADIT score is as follows:

$$\Delta ADIT_P = \frac{\text{scores after AP} - \text{scores before AP}}{\text{scores before AP}} \quad (3)$$

Then this study constructed the following regression model:

$$\Delta ADITP3 = \alpha_0 + \alpha_1 \times AP + \alpha_2 \times Sex + \alpha_3 \times Age + \epsilon \quad (4)$$

$$\Delta ADITP2 = \alpha_0 + \alpha_1 \times AP + \alpha_2 \times Sex + \alpha_3 \times Age + \epsilon \quad (5)$$

In order to verify Hypothesis 3, to explore whether the two different types of accounting practice, accounting internship and accounting work, have different effects on accounting professional ethics reasoning ability, divide accounting students who have participated in accounting practice and accounting practice into two groups, and make differences between groups Test to compare whether there are differences in the relative changes in ADIT scores between the two groups.

4. Results

4.1 Sample description

In this study, two questionnaire surveys were conducted with the 2015 and 2016 accounting majors of a university in Nanjing as the specific experimental subjects. In both surveys, 155 questionnaires were collected and screened according to the following conditions: (1) Whether the answers to the questionnaire were complete; (2) The M questions set in the questionnaire were screened. If the set M item is ranked first in the importance ranking, the questionnaire will be regarded as an invalid questionnaire, and the questionnaire at another time point for the same subject will also be invalidated. We set the students who participated in the practice teaching as the experimental group, and those who did not participate in the practice as the control group. There are two corresponding experiments. Among them, the experimental group 1 and the control group 1 participated in the accounting internship. The experimental group 2 and the control group 2 participated in the accounting work experiment. Therefore, the descriptive situation of the final sample is shown in Table 3.

Table.3. Descriptive statistics of sample size

Type of accounting practice	Accounting internship			Accounting work		
	Experimental group 1	Control group 1	Total	Experimental group 2	Control group 2	Total
Initial people	66	16	82	37	36	73
Questionnaire screening	(20)	(6)	(26)	(9)	(10)	(19)
Sample size	46	10	56	28	26	54

In the questionnaire issued after the accounting practice, we also investigated the issues related to accounting practice, including whether to participate in the practice, the number of days of practice, the nature of the accounting practice unit, the type of company and the degree of relevance between the accounting practice and the accounting business involved. See Table 4 for details.

Table.4. Sample introduction

Type of accounting practice		Accounting internship	Accounting work
Number of experimental group people		46	28
Enterprise nature	State-owned enterprise	8	8
	Private enterprise	36	18
	Government agencies	2	1
	Business unit	0	1
Type of enterprise	Leasing and business services	12	4
	manufacturing	7	9
	Wholesale and retail	6	0
	Information transmission, computer service and software industry	5	0
	Financial industry	3	2
	Transportation, storage and postal industry	2	0
	Construction industry	0	4
	other	9	7
Relevance to accounting	high	27	18
	general	16	6
	low	3	4

4.2 Questionnaire score statistics and analysis

According to the aforementioned calculation formula, the average value of the relative change degree of the ADIT score of the experimental group and the control group and the regression coefficient of accounting practice on accounting professional ethics reasoning ability are shown in the following table.

Table.5. average ADIT score and regression coefficient before and after accounting practice

Type of accounting practice	Accounting internship			Accounting work		
	Experimental group 1	Control group 1	Total	Experimental group 2	Control group 2	Total
Δ ADIT-P3	0.2854	-0.2680	0.353**	0.2921	0.0260	0.225*
Δ ADIT-P2	-0.0166	0.8600	-0.383**	0.5369	0.6393	-0.040
Δ ADIT-P1	0.1439	0.2270	-0.039	0.2396	0.3967	-0.039

Note:*, **, *** represent significant at the level of 10%, 5%, and 1%, respectively.

From the results of the above table, we can see that for accounting students participating in accounting internship, when the experimental group students make dilemma situational moral decision-making in the accounting context, the average value of Δ ADIT-P3 is 0.2854, and the change in thinking about the third level of CMD has increased. The average value of Δ ADIT-P2 is -0.0166, which is a slight decrease. The possible explanation is that the students have limited internship time, and in a short period of time, they feel the limitation of moral reasoning only relying on existing rules and the interpersonal relationships around them. That is to say, when facing the dilemma of accounting ethics, after participating in accounting internship, thinking about social contracts and general ethics has increased, while thinking about the harmony of interpersonal relationships and rules and order-oriented thinking has decreased. It is also worth noting that for the accounting internship control group, the situation is exactly the opposite. The degree of change of ADIT-P3 is negative for the students, and the degree of Δ ADIT-P2 is greater. One explanation is that the control group students are mostly preparing for the postgraduate entrance examination or preparing for the exam for studying abroad in the experimental stage. In view of the accounting major. The exam emphasizes accounting standards, auditing rules and other regulations. Therefore, when they are not

placed in a business environment, the students in the control group think more about the second level of CMD when facing problems, that is, to use rules and regulations. Think for orientation. From the perspective of regression coefficients, the changes of Δ ADIT-P3 and Δ ADIT-P2 in the experimental group are statistically significant compared to the control group.

For accounting graduates, when they face dilemmas after participating in accounting work, the changes in moral reasoning based on social contracts and general ethics have also increased significantly, while the level of thinking at the second level of CMD is relatively reduced, but this change is not significant. In the control group, graduates who continue to study or study abroad to receive theoretical education in the school after graduation. The vast majority of students are preparing for CPA, ACCA and other exams. They are becoming more familiar with the understanding and application of various standards and laws. When facing practical problems, the thinking also revolves around laws and rules. However, the graduates of the experimental group engaged in accounting work will inevitably take the system as an important consideration because they are exposed to the new environment and enter the work position. Therefore, the average value of Δ ADIT-P2 will increase; The career goal of the company is looking forward to the realization of personal value. In communicating with leaders, colleagues, customers and other people, imitating and learning, form their own principles of dealing with things, cultivate their own critical thinking, so when facing problems, they also learn to think from multiple angles. Not only can the accounting practice attach importance to “rules”, but also other more complex issues (such as fairness and justice, social ethics, etc.) from real accounting situations, so Δ ADIT-P3 will increase significantly.

In summary, the data results of this study show that after accounting internships, the experimental group's moral reasoning is significantly increased on the third level of the CMD framework, and the dependence on the second level of the CMD framework is significantly reduced; After accounting work, the moral reasoning of the experimental group students also increased significantly on the third level of the CMD framework. Accounting practice enables accounting students to make decisions from the perspective of a higher level of social contract and general ethics when they conduct moral reasoning.

Group T test was performed on the degree of change of ADIT scores of different groups, and the results were obtained in the following table.

Table.6. T test for the difference of ADIT score changes in different groups

Group	Sample size	Average	Standard deviation	T test (sig value)
Δ ADIT-P3				
Experimental group 1	46	0.2854	0.6671	2.647**(0.011)
Control group 1	10	-0.2680	0.2863	
Experimental group 2	28	0.2921	0.8753	1.480*(0.085)
Control group 2	26	0.0260	0.4366	
Experimental group 1	46	0.2854	0.6671	-0.129(0.700)
Experimental group 2	28	0.2921	0.8753	
Δ ADIT-P2				
Experimental group 1	46	-0.0166	0.5805	-2.885***(0.006)
Control group 1	10	0.8600	0.8936	
Experimental group 2	28	0.5369	1.9764	-0.162(0.871)
Control group 2	26	0.6393	2.6381	
Experimental group 1	46	-0.0166	0.5805	-1.566*(0.094)
Experimental group 2	28	0.5369	1.9764	

Note:*, **, *** represent significant at the level of 10%, 5%, and 1%, respectively.

From the group T test results in Table 6, it can be seen that participating in the accounting practice and accounting work of the two sets of experiments, the corresponding experimental group and the control group have significant differences in Δ ADIT-P3. It can be considered that participating in the accounting practice can indeed improve its performance. Post-conventional accounting professional

ethics reasoning ability. For Δ ADIT-P2, there is a significant difference between the experimental group and the control group participating in the accounting practice, and the results confirm the above hypothesis test.

For the two experimental groups, statistically, accounting internship and accounting work have no significant difference in the changes in ADIT-P3 scores, while the changes in ADIT-P2 scores are significantly different. That is, there is no difference in the influence of accounting work on the accounting students' third-level accounting professional ethics reasoning ability, and the second-level accounting professional ethics reasoning ability is different. Based on this result, we analyze that this is related to the educational characteristics of the accounting profession. In accounting work, the degree of strictness and stimulus required by accounting students is significantly higher than that of accounting intern students who are only involved in real business situations at a shallow level. Therefore, when facing complex problems, graduates of accounting students will consider more comprehensively.

5. Conclusions

The research found in this article: First, accounting practice helps to improve the accounting professional ethics reasoning ability of accounting students. Whether participating in accounting internships or accounting work, the third stage moral reasoning ability of accounting students has been improved, which shows the effectiveness of accounting education at this stage. However, after participating in the accounting internship, when accounting students face ethical situations, their ADIT scores in the second stage, which is oriented toward interpersonal relationships and law, declined. Second, at this stage, there is still a slight gap between accounting internship education and the participation of real accounting students in their moral training. Accounting internship education has limited improvement in students' interpersonal relations and legal awareness.

Based on the above conclusions, this article has the following suggestions. First of all, schools should pay attention to the high quality of accounting internship when formulating accounting talent training programs. The research in this paper finds that the "education" effects of different quality accounting practices are different. At present, although many colleges and universities have set up accounting practical courses in the accounting talent training program, but there is still a lack of effective measures to implement high-quality accounting practice teaching. We believe that, on the one hand, schools should do their best to create high-quality accounting practice opportunities for every student, and reduce students' independent search for low quality accounting internships. At the same time, the school must not only actively build an off-campus accounting practice base, but also reach a high-quality accounting practice teaching plan with the employer. On the other hand, to ensure the quality and effect of accounting practice, schools should pay attention to assessing the time and practical content of students' accounting practice. Second, the accounting practice education of accounting should focus on the comprehensive ability of accounting students to face moral dilemmas. It should not only emphasize the cultivation of moral reasoning ability based on moral principles, but also cannot relax the persistence of rule-oriented moral reasoning ability. When accounting students make ethical decisions, they not only rely on moral reasoning based on moral principles, but also rely on "rule-oriented" moral reasoning based on laws, accounting standards, and duties.

The research in this article also has certain limitations: (1) The limitations of the sample. First, due to the particularity of the accounting profession, the proportion of female students is relatively large, which may affect the conclusions of the research. Secondly, the total number of samples in this article is not particularly large, and maybe there is a chance effect. (2) Limitations of research methods. First, because the experimental research methods used in this article have inherent flaws of low external validity, it may lead to the generalization and insufficient representativeness of the research conclusions of this article. Secondly, the number of samples between the experimental group and the control group is quite different, which may lead to biased research conclusions. The above limitations also indicate the future research direction for us. We can expand the sample size of the experiment

and choose different regions and different schools. Try to participate in research to reduce the impact of chance and improve the external validity of research conclusions.

Acknowledgements

The authors gratefully acknowledge the financial support from Postgraduate Research & Practice Innovation Program of Jiangsu Province.

References

- [1] MD Mumford, Waples E P, Antes A L, et al. Exposure to Unethical Career Events: Effects on Decision-Making, Climate, and Socialization[J]. *Ethics & Behavior*, 2009, 19(5):351-378.
- [2] Bucciarelli M, Khemlani S, Johnson-Laird P N. The psychology of moral reasoning[J]. *Judgment & Decision Making*, 2008, 3(2):121-139.
- [3] Kohlberg L. Stage and Sequence: the cognitive-developmental approach to socialization[M]. Puka Bill Defining Perspectives in Moral Development, 1969.
- [4] Rest J., Flavell J H, Carmichael L, et al. Handbook of Child Psychology: Cognitive development[M].1983.
- [5] Bailey C D, Scott I, Thomas S J. Revitalizing Accounting Ethics Research in the Neo-Kohlbergian Framework: Putting the DIT into Perspective[J]. *Behavioral Research in Accounting*, 2010, 22(2):1-26.
- [6] Shaub, M. An analysis of factors affecting the cognitive moral development of auditors and auditing students[J]. *Journal of Accounting Education*, 1994, 12(1): 1-26.
- [7] Thorne, L. Refocusing ethics education in accounting: An examination of accounting students' tendency to use their cognitive moral capability[J]. *Journal of Accounting Education*, 2001, 19(2): 103-117.
- [8] Dellaportas, S., Cooper, B. J., and Leung, P. Measuring moral judgment and the implications of cooperative education and rule-based learning [J]. *Accounting and Finance*, 2008, 46(1): 53-70.
- [9] Deng Deqiang, Wen Subin, Zhao Yiyi, et al. Can Accounting Practice Improve the Accounting Professional Moral Reasoning Ability of Accounting Students? [J]. *Accounting Research*, 2018,8,87-94.
- [10] Saat, M. M., Porter, S., and Woodbine, G. The effect of ethics courses on the ethical judgement-making ability of Malaysian accounting students[J]. *Journal of financial Reporting and Accounting*, 2010, 8(2): 92-109.
- [11] Saat, M. M., Yusoff, R. M., and Panatik, S. A. The effect of industrial training on ethical awareness of final year students in a Malaysian public university[J]. *Asia Pacific Education Review*, 2014, 15: 115-125.