Study on the Influence of Positive and Negative Emotion on College Students Interpersonal Trust

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Abstract. Interpersonal trust, as a kind of psychological contract, is the starting point, premise and foundation of the cooperative relationship, and also an important part of human resources. Related research shows that the trust crisis of college students has become increasingly evident, and it is extremely urgent to improve the interpersonal trust of college students. By combining the methods of questionnaire and experimental method, through a 2 x 3 experimental design, this study of interpersonal trust level differences of male and female students in positive emotion, negative emotion and normal emotional state shows that there is no significant difference in the level of interpersonal trust among boys in different emotional states, while girls' interpersonal trust level in positive emotional state is significantly higher than that in normal mode and the level under negative emotional state much lower than that under normal state.

Introduction

Interpersonal communication is a both psychological and behavioral process for people to convey information, to exchange ideas and feelings and to understand each other, which is also an important part of people's daily life. College students are in a special period where they desire for communication, understanding and friendship. Especially for those who are far away from their home and have to study and live in school, good interpersonal relationship is beneficial not only to their normal study, and life but also to the deep need of their psychological development. However, at present, there is a certain degree of trust crisis in the interpersonal communication among college students. If we do not take it seriously and let it go, it must bring the negative effect on students' ability of social adaptation and the formation of a sound personality, which is not conducive to a harmonious and stable campus. Research data shows that only 17.44% of college students have a high degree of trust in reliability of the acts of others, 70.93% of them only have a general trust degree, which is not enough to coordinate the relationship between themselves and others, 11.13% of them have a low trust degree who have difficulty in getting along with other students and teachers in collective[1].

Previous studies have shown that people with high levels of interpersonal trust are more likely to show trust when interacting with others. They can have better communication and cooperation with others, and then form a good interpersonal relationship, and at the same time be able to maintain a healthier psychological state; communication and cooperation with others better, then formed the good interpersonal relationship. [2]On the contrast, people with low levels of interpersonal trust tend not to believe others with heavy suspicion when communicating with others. They are inevitably over-cautious when doing things. And they will become anxious in this state for a long time, which, in the long run, will cause unhealthy psychology, and even severe mental illness[3].

In this study, the influence of emotion on interpersonal trust of college students is discussed in detail from the point of views which the previous research has ignored. Most of the previous studies are to discuss the factors that affect the interpersonal trust of college students and the corresponding strategies. However, in many cases, they have neglected the role of emotion in interpersonal trust judgment. In fact, most decisions of trust are made in the rich emotional context. In this paper, the subjects are randomly selected so that the experimental results can be better promoted, which
provides the basis for improving the psychological health of college students and enhancing their social adaptability.

Experimental Study

Experimental Objective

In this study, we want to examine the influence of positive and negative emotions on the interpersonal trust of students of different genders in a college through the experimental treatment on the level of these students' normal emotional state so as to get the baseline level of interpersonal trust of college students in different genders and the influence of positive emotion and negative one on it. And thus we can find methods to alleviate the interpersonal trust crisis of college students.

Experimental Hypothesis

The hypothesis of this study is that there is no significant difference in the level of interpersonal trust between male and female college students, but once the positive emotion is artificially induced, there is no significant difference in the level of male students' interpersonal trust and the baseline level of male college students, while there is a significant difference in the level of female students' interpersonal trust and the baseline level of female college students, in which the former is significantly higher than the latter, and once the negative emotion is artificially induced, there is also no significant difference in the level of male students' interpersonal trust and the baseline level of male college students, while there is a significant difference in the level of female students' interpersonal trust and the baseline level of female college students, in which the former is significantly lower than the latter, that is, there is interaction.

Experimental Process

Baseline Data Measurement.

This study is made on the undergraduate students of a certain university. Inclusion criteria: Undergraduate students; Informed consent; Taking gender into account, much attention is paid to the proportion of students of different sex in the selection of objects. Exclusion criteria: Students who are not willing to take part in the study. Students whose questionnaire response is not complete. A total of 150 questionnaires were issued, and 110 questionnaires were recovered, accounting for 73.3%.

Interpersonal trust scale is used with a total of 25 topics, using the 5-point symmetrical scoring method, in which the 1 represents the complete agreement, and 5 complete disagreement. Reverse scoring subjects get reverse score, and SPSS is used for statistical analysis.

Table 1. Scores of interpersonal trust scale for male and female students

| Gender   | male  | female |
|----------|-------|--------|
| Interpersonal Trust | 75.2±9.2 | 75.4±5.2 |

Table 2. Significant differences in interpersonal trust score between male and female students

|                        | F  | Sig. | t     | df  | Sig. (2-tailed) |
|------------------------|----|------|-------|-----|-----------------|
| Homogeneity Of Variance| 8.942 | 0.003 | -0.140 | 108 | 0.889           |
| Non-homogeneity Of Variance | 85.455 | 0.889 |       |     |                 |

Through the questionnaire, as table 1 and table 2 show the baseline level of male and female college students’ interpersonal trust scores can be roughly established and there is no significant difference in the level of interpersonal trust between male and female students. (Confidence Interval 95%).
Subjects.

This study randomly selected 40 college students, including 20 boys and 20 girls. All subjects had normal hearing and corrected visual acuity. In the end, 28 subjects were effectively tested, including 14 boys and 14 girls.

Experimental Design.

The experiment was designed to test the two factors completely randomly. The independent variables are gender (male, female) and emotion (positive emotion, negative emotion). And the dependent variable is the Interpersonal Trust Scale scores.

Experimental Tools.

Interpersonal Trust Scale, Films and TV programs to induce emotions, spss17.0

Selection of films and programs that induce positive emotions and negative emotions: In this experiment, subjects’ emotions were induced by watching films. First, through interviews and open-ended questionnaires, the video material that can induce positive emotions and negative emotions was collected, such as movies, video clips, sketches and so on. And then 80 subjects were randomly selected. A survey of these videos on the intensity of emotional responses was made with 5-point scale. The movie *Lost in Thailand* was used to induce positive emotion, of which, as the survey shows, the average of positive emotional intensity reached 4.16. The movie *1942* was used to induce negative emotion, of which, as the survey shows, the average of negative emotional intensity reached 4.05.

Steps.

1. 20 college students were randomly selected including 10 boys and 10 girls to watch *Lost in Thailand* in multi-Media Classroom. 2. After watching the movie, the subjects were required to finish anemotional test, that is, they should report their current feelings. and then they should finish a 10-level scoring questionnaire according to their existing emotional state, in which the level ranges from 1 (not at all) to 10 (more than usual). 3. The subjects whose scores were 8, 9 or 10 were retained. And then let them do the scale of interpersonal trust. 4. Their scores were statistically analyzed by spss.17.0. 5. Another 20 college students were randomly selected including 10 boys and 10 girls to watch *1942* in multi-Media Classroom. 6. After watching the movie, the subjects were required to finish anemotional test, that is, they should report their current feelings. and then they should finish a 10-level scoring questionnaire according to their existing emotional state, in which the level ranges from 1 to 10 (more than usual). 7. The subjects whose scores were 8, 9 or 10 were retained. And then let them do the scale of interpersonal trust. 8. Their scores were statistically analyzed by spss.17.0.

Result Analysis

Table 3. Significant differences in interpersonal trust score between male and female students in positive emotional state

|                         | F   | Sig. | t    | df | Sig. (2-tailed) |
|-------------------------|-----|------|------|----|----------------|
| Homogeneity Of Variance | 0.758 | 0.401 | 2.374 | 12 | 0.035          |
| Non-homogeneity Of Variance | 2.374 | 10.313 | 0.038 |

Table 3 shows that there is no significant difference in the scores of interpersonal trust between male and female students in the positive emotion. (Confidence Interval 95%)
Table 4. Significant differences in interpersonal trust score between male and female students in negative emotional state

| F       | Sig.  | t      | df | Sig. (2-tailed) |
|---------|-------|--------|----|----------------|
| Homogeneity Of Variance | 3.982 | 0.069  | -4.441 | 12 0.001 |
| Non-homogeneity Of Variance | -4.441 | 8.196 | 0.002 |

Table 4 shows that there is a significant difference in the scores of interpersonal trust between male and female students in the negative emotion. (Confidence Interval 95%)

Table 5. Significant differences between male and female students’ interpersonal trust scores in positive and negative emotional states and the baseline level

| µ       | σ       | x      | n   | Z     |
|---------|---------|--------|-----|-------|
| Female students in positive emotional state | 75.1636 | 9.21907 | 80.7143 | 7 2.1630 |
| Female students in negative emotional state | 57.5714 | 7      | -5.0487 |
| Male students in positive emotional state | 75.3636 | 5.22587 | 74.5714 | 7 -0.40 |
| Male students in negative emotional state | 69.4286 | 7      | -1.0048 |

Because the significance level is 0.05, the Z value should compare with ±1.96. And because it is Two-sided Test, we can through Table 5 get the conclusion that the female students’ Interpersonal Trust Scale score in the positive emotional state was significantly higher than that in the baseline level, and on the contrary, the female students' Interpersonal Trust Scale score in the negative emotional state was significantly lower than that in the baseline level, while there was no significant difference in male students' interpersonal trust scale score in the positive emotional state and in the baseline level, and similarly, there was no significant difference in male students' interpersonal trust scale score in the negative emotional state and in the baseline level. (Confidence Interval 95%)

Table 6. Significant differences of male interpersonal trust score in positive emotional state and in negative emotional state

| F       | Sig.  | t      | df | Sig. (2-tailed) |
|---------|-------|--------|----|----------------|
| Homogeneity Of Variance | 1.978 | 0.185  | 1.820 | 12 0.094 |
| Non-homogeneity Of Variance | 1.820 | 9.593 | 0.100 |

Table 6 shows that there is no significant difference for male students in the scores in positive emotions and in negative emotions. (Confidence Interval 95%)

Table 7. Significant differences of female interpersonal trust score in positive emotional state and in negative emotional state

| F       | Sig.  | t      | df | Sig. (2-tailed) |
|---------|-------|--------|----|----------------|
| Homogeneity Of Variance | 2.058 | 0.177  | 9.579 | 12 0.000 |
| Non-homogeneity Of Variance | 9.579 | 8.740 | 0.000 |

Table 7 shows that girls' scores in positive and negative emotions are significantly different. (Confidence Interval 95%)

**Discussion and Conclusion**

Interpersonal communication is a practical problem that people with the social attributes have to face, and interpersonal trust is the foundation and premise of it. However, college students are often confused by the problems encountered in interpersonal communication, which can influence their learning and life. This study investigated the present situation of interpersonal trust among 110...
college students from different angles and depths by using the interpersonal trust scale. And the result is that there is no significant difference in the level of interpersonal trust between male and female students. Both male and female students’ interpersonal trust levels are near the intermediate value of 75. And the standard deviation of male students’ interpersonal trust level is larger than that of female students’, that is, the individual difference of male students’ interpersonal trust level is larger than that of female students’. The most important result of this study is to find the interaction between the two independent variables of gender and emotional state. Male students’ interpersonal trust scale score, no matter in positive emotional state or negative one, maintains almost the same level as that in the baseline level. So we can say that males are more stable. No matter what emotional states they are in, their interpersonal trust keeps more rational and more stable. On the contrary, the female students’ interpersonal trust level in the positive emotional state is significantly higher than that in the baseline level, while their interpersonal trust level in the negative emotional state was significantly lower than that in the baseline level, that is, females' interpersonal trust level fluctuations are relatively large, and they are more emotional and more irrational.

The data obtained from baseline data shows that there is no significant difference in the level of interpersonal trust between male and female, which is not consistent with previous studies. Maybe the occurrence of the data errors is because that as the data was collected outdoors in summer, the students randomly selected might get impetuous because of the weather. Or it is because the number of male and female students selected is too small. Or maybe the reason is that the subjects are selected from the west campus of the university where most students are learning the liberal arts and the proportion of male and female students in the west campus is in serious imbalance. All these factors can cause the sampling bias, which leads to the error of the data, and thus we get the conclusion that there is no significant difference in the level of interpersonal trust between male and female students. Most of the previous studies have discussed the interpersonal trust crisis of college students and the corresponding countermeasures. In the baseline data measurement of this experiment, the interpersonal trust level of the male and female students are all around the intermediate value of 75[4]. The score is not too low, which cannot explain the interpersonal trust crisis of college students. Except the reasons mentioned above, it may also because that the west campus of the university is located near the downtown with the small area, simple architecture style and strong cultural atmosphere. And it may be because of the factor of gender that the individual difference of male students' interpersonal trust level is greater than that of female students’. That is, males tend to come and go freely, which cause the individual difference of their interpersonal trust level much larger. On the contrary, females love to be together, chatting with each other and thus influencing each other, which cause the individual difference of their interpersonal trust level much less.

Trust plays an important role in the social life and interpersonal trust has an important influence on the mental health of college students. It is easy to affect the behavior of individuals with certain emotion at some important moment, especially those college students who are physically and mentally immature [5]. So it is necessary to discuss some interventions according to the results of this study.

From the whole point of view, the male students' interpersonal trust level is relatively stable, but from the individual point of view, their individual differences are great. So in the future education, male students with low levels of interpersonal trust shall be screened out and be given positive intervention. For example, we can use cases to analyze the reason for their low level of interpersonal trust. [6]And then we need to find the problem-oriented strategies. on the other hand, the emotional state has greater influence on female students' interpersonal trust level[7]. Thus, in school education, female students shall be presented or conveyed more positive information, and even facing negative information,[8] female students shall be induced to think it from a more positive point of view. And for girls, when in a negative emotional state, they should try to avoid making some decisions, and instead, they’d better choose a healthy way to vent their negative emotions out[9]. According to the result that the female students’ interpersonal trust level can be easily affected the accompanying emotions, we believe that we can enhance the interpersonal trust level of female college students from the following two aspects:
On the one hand, the guidance of female college students’ interpersonal communication shall be strengthened[10]. For the one thing, we shall advocate and strengthen the education of honesty and integrity. And we shall rely on the power of media and public opinion to increase the publicity of the credit behaviors and the condemnation of dishonest behaviors, which leads to the favorable and positive social atmosphere[11]. it is also important to induce female college students to improve their personal qualities. Under the circumstances that the trust mechanism is not well-established, it is urgent for female college students to change the present situation of Moral Vacuum and Value Loss with their practical action, to re-establish their faith and to unify their outlook on life, values, world view[12]. For female college students, they not only need to get the education of trust mechanism, but also improve their personal qualities to cultivate the sense of trust in their daily life[13]. For the other thing, they can understand the reality of our society through social practice and other means. And they can get a correct and objective understanding of social reality through the analysis of the phenomenon of trust crisis that they shall pay more attention on the positive side of the society and to adjust their social cognition[14].

On the other hand, the institutional construction shall be strengthened to establish a fair, just and open system rules[15]. Though institutional improvement, even if girls are in a negative emotional state, the trust situation can also be effectively improved. And through regulating people's basic behavior by the system, the trust rules of female college students can be established. Meanwhile, it is of vital importance for the establishment and maintenance of trust to guarantee the standardization, fairness and transparency of the system execution.

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