

# Research on the Relationship between Interpersonal Trust and Implicit Altruism Behavior of High School Students

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**Abstract**—Interpersonal trust and Altruism behavior are hot issues in the study of human social psychology. By an Interpersonal Trust Scale, the Questionnaire of Explicit Altruism behavior and Implicit Association Test (IAT), 30 high-school students are measured. All data are analyzed with SPSS19.0 and scientific statistical methods. The results indicate that significant implicit altruistic behavior was found, and no correlation was discovered between Interpersonal trust, Explicit Altruism behaviors as well as Implicit Altruistic behaviors.

**Keywords**—high-school students; interpersonal trust; explicit altruism behavior; implicit altruism behavior

## I. INTRODUCTION

Interpersonal trust influences the evaluation of individual's interpersonal communication and reflects the attitudes of individuals toward humanity. The existing researches show interpersonal trust influences pro-social behaviors. Some scholars address the relations between people giving others a hand and people receiving helps affect the frequency of occurrence of altruism behavior. Ye Xiaohong have researched the relationship between interpersonal intimacy and implicit altruism behavior. Interpersonal trust is the basis to establish good interpersonal relationship. As a special psychological state and behavior of human, it plays a vital role in interpersonal communication. Altruism behavior is a voluntary behavior without expectation for reward and return. It is the supreme form of pro-social behavior. In this paper, high school students are research object. The empirical research method is used to discuss the relationship between interpersonal trust and altruism behavior.

## II. OBJECTS AND METHODS

### A. Research Object

Some senior high school has 300 students including 150 male students and 150 female students. All have normal eyesight, know well about basic computer operation and don't participate in similar experiments recently.

### B. Research Method

Experimentation and questionnaire are applied to the research. The former uses IAT (Implicit Association Test) and the latter uses Interpersonal Trust Scale (ITS).

All data are analyzed with SPSS19.0 Chinese version.

## III. RESEARCH RESULTS

### A. Effect Size of Implicit Altruism Behavior

The analysis result of implicit altruism behavior is shown in "Table I".

TABLE I. REACTION TIME AND EFFECT SIZE OF TESTED IAT

	Compatible connection task		Incompatible connection task		IAT effect size — Incompatible compatible
	M	SD	M	SD	
Reaction time	742.885	135.823	1063.433	268.552	320.548
Log Koc	2.864	.076	3.013	.112	2.544

Note: Reaction time (unit: millisecond) and log koc (lg function with 10 as the base number) of data in the table

Conduct pared-samples T test for reaction times of compatible task and incompatible task ( $t=6.293$ ,  $df=24$ ,  $p=0.000$ ). The reaction times of them are obviously different; the results are shown in "Table II".

TABLE II. PARED-SAMPLES T TEST OF IAT EFFECT SIZE (LOG KOC)

	T	df	Sig(2-tailed)
Reaction time	6.293	24	0.000**
Log Koc	6.711	24	0.000**

Note :  $p<0.05$ \* ;  $p<0.01$ \*\*

The statistic analysis of mean reaction time and log koc of compatible connection task and incompatible connection task shows obvious IAT effect. The students tested react faster in compatible connection task than incompatible connection task. Therefore, high school students tested in the experiment have obvious tendency of implicit altruism attitude. The altruism attitudes of the high school students sample are automatic.

### B. Relationship between Implicit Altruism Behavior and Explicit Altruism Behavior

Carry out Pearson analysis for IAT effect size and scores of "explicit altruism behavior questionnaire" to compare the relationship between implicit altruism behavior and explicit altruism behavior. The results are shown in "Table III".

TABLE III. RELATIONSHIP BETWEEN IMPLICIT ALTRUISM BEHAVIOR AND EXPLICIT ALTRUISM BEHAVIOR

	R	N	Sig.(2-tailed)
IAT effect size	.144	25	.492
Log Koc	-.091	25	.702

The correlation coefficient between IAT reaction time and effect size and scores of explicit altruism behavior  $r=0.144$ ,  $p=0.492$ ,  $p>0.05$ , without obvious correlation; the correlation coefficient between log koc and score of explicit altruism behavior  $r=-0.091$ ,  $p=0.702$ ,  $p>0.05$ , without obvious correlation. It shows implicit altruism behavior and explicit altruism behavior have no obvious correlation. Implicit altruism behavior is stable and separate from explicit altruism behavior.

### C. The Relationship between Interpersonal Trust and Implicit and Explicit Altruism Behaviors

Pearson analysis is adopted for compare the relationship between interpersonal trust and implicit altruism behavior and explicit altruism behavior respectively, in order to discuss the relationship between interpersonal trust and implicit and explicit altruism behaviors. The results are shown in "Table IV".

TABLE IV. THE RELATIONSHIP BETWEEN INTERPERSONAL TRUST AND IMPLICIT AND EXPLICIT ALTRUISM BEHAVIORS

	R	N	Sig.(2-tailed)
Implicit altruism behavior	-.323	25	.116
Explicit altruism behavior	-.234	25	.260

Statistic data about relationship between implicit altruism and explicit altruism behaviors and interpersonal trust are shown in table 4. The results show the correlation between implicit altruism and explicit altruism behaviors and interpersonal trust is not obvious.

## IV. DISCUSSION

### A. Implicitness of Altruism Behavior Tendency

The research indicates the altruism behavior of high school students has obvious IAT effect and implicit tendency. Individuals are faster in connection of words about self-concept and altruism than that of self-concept and non altruism. The tendency is the same among male and female students. It shows in implicit cognition, the altruism tendency of students tested is automatic.

### B. Relationship between Interpersonal Trust and Implicit and Explicit Altruism Behaviors

In this research, the interpersonal trust has no relationship with implicit and explicit altruism behaviors. It fails to conform to the research results of Yu Yan on relationship between interpersonal trust and implicit and explicit altruism behaviors. In Yu Yan's research, implicit altruism behaviors don't relate to interpersonal trust but explicit altruism behaviors have positive correlation with interpersonal trust. Furthermore, interpersonal trust can foresee explicit altruism behaviors.

## V. CONCLUSION

The results show: The altruism behavior of high school students has automatic implicit tendency. No significant correlations exist between interpersonal trust and explicit and implicit altruism behaviors.

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