

The relationship between adult attachment and love concept of college students: a moderated mediator model

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Abstract: In order to explore the influencing factors of college students' love view, this study used love questionnaire, adult attachment scale and interpersonal trust scale to investigate 790 college students. It was found that the adult attachment is dependent love view and interpersonal trust. There is a linear correlation between them; for girls, interpersonal trust and love are also linearly related, but not for boys; for girls, interpersonal trust depends on the closeness dimension, anxiety dimension and love concept of adult attachment. There is an intermediary role between them; for boys, interpersonal trust does not have an intermediary role. In summary, there is a gender difference in the mediating effect of interpersonal trust, that is, gender has a moderating effect. The results of this study provide a certain theoretical support for better exploring the influencing factors and mechanisms of the concept of love from the perspective of growth factors.

1 Introduction

As one of the core concepts of human beings, the concept of love has undergone huge changes in recent years, and many both funny and annoying love concepts have emerged, such as: "money supremacy concept", "carpe diem concept", "maverick concept", etc. It has caused many adverse effects. Therefore, it is very important to explore the influencing factors of the love concept and the development of education. As the future pillar of the homeland construction, the study of college students' love concept is particularly important. It can be found through research that which factors promote the formation of correct the concept of love. Training and education from an early age can also find some undesirable factors that can be eliminated and contained in advance. This study mainly explores the influence of the early and formed traits of adult attachment on the concept of love, so that through the education at a young age, college students can have a correct concept of love, and at the same time it also can promote the formation of other good qualities of college students to build our motherland.

2 Research reviews

2.1 The relationship between the concept of love and interpersonal trust

The concept of love is simply the individual's fundamental view of love. Wang Hong, Luo Qiong and others found in

the investigation that contemporary college students have a positive attitude towards campus love, and they have a strong autonomy in the issue of love. The mate selection criteria are still influenced by tradition and can better handle the relationship between love and school. The ability of resisting frustration is strong, and there are also problems such as multiple love motives, neglect of love ethics, weak sense of sexual protection and high consumption of love. Huang Shushu obtained a survey of 90 "post" college students: the total score of romantic relationship was significantly negatively correlated with ordinary trust, and the total score of romance was significantly positively correlated with special trust. Special trust has a significant positive predictive effect on romantic relationships; ordinary trust has a significant negative predictive effect on romantic relationships.

2.2 The relationship between the concept of love and adult's attachment

Adult attachment refers to the recall and reproduction of adult childhood attachment experience and the current evaluation of childhood attachment experience. Many scholars have found that there is a close relationship between love and adult attachment. Feeney et al. found out that college students with safe attachment have a family of mutual trust and a stable relationship. Cao Xingfu's research results show that in the adult attachment style, the romantic, altruistic, realistic, and possessive types of attachment avoidance and love attitude show significant negative correlations. The six dimensions of attachment anxiety and love attitude are significantly positively

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correlated.

2.3 Relationship between interpersonal trust and adult's attachment

Interpersonal trust is a generalized expectation that an individual is reliable about other people's words, promises, verbal and written statements. Rubin attributes interpersonal trust to the main components of love. Wang Lishuang found that attachment avoidance, attachment anxiety and interpersonal trust are not significant; while Li Guolu found that the attachment anxiety dimension of adult attachment has a statistically significant negative correlation with interpersonal trust. There is also a significant negative correlation between interpersonal trust and loneliness.

2.4 Research hypothesis

In summary, the research on the concept of love, interpersonal trust and adult attachment mostly incorporates trust and attachment into the dimension of love. There is no in-depth exploration on how interpersonal trust and adult attachment affect and influence the concept of love. This research will study this and assume that interpersonal trust has an intermediary role between adult attachment and love.

3 Participants and research methods

3.1 Participants

In this study, 850 people were randomly selected from South China Normal University and South China University of Technology for investigation, 820 questionnaires were recovered, and 790 valid questionnaires were used. Among them, 403 boys and 387 girls.

3.2 Research methods

3.2.1 The concept of love questionnaire

Using the "90-year-old female college students' the concept of love questionnaire" compiled by Chen Zijun and Huang Yingying's "90-year-old male college students' the concept of love questionnaire", both of them are vocabulary questionnaires, all using Li Kete's 5-point score, "1" means very non-conforming, "5" means very consistent. Among them, the former has a total of 36

vocabulary, including four dimensions: knowing, conflicting, defensive, and wave. In this study, the cloned Bach coefficient of this questionnaire is 0.88; the latter has 58 vocabularies, including three dimensions: knowing each other, loving each other. In this study, the cloned Bach coefficient of the questionnaire was 0.87.

3.2.2 Adult attachment scale

Using the Adult Attachment Scale (AAS) revised by Wu Weili, the scale has 18 items, divided into three subscales and two dimensions. The three subscales are closeness, dependence and anxiety, respectively. For: Anxiety Dimensions, Intimate dependence Dimensions, Li Kete scored 5 points. In this study, the clone Bach coefficient of the close-dependent subscale is 0.62, and the clone Bach coefficient of the anxiety subscale is 0.81.

3.2.3 Interpersonal trust scale

The Interpersonal Trust Scale (ITS) translated by Wang Xiangdong and Xilin et al. has a total of 25 items. The scoring method is Li Kete's 5-point scoring. The higher the score, the higher the interpersonal trust. In the present study, the clone Bach coefficient of the scale was 0.60.

3.3 Data processing

Statistical analysis was carried out using SPSS 22.0 software. The intermediate inspection procedure was carried out according to the latest five-step mediation test method proposed by Wen Zhonglin et al.

4 Research result

4.1 Verification of the common method deviation

In this study, the Harman single factor test was used to test the deviation of the common method for the variables of the boys' and girls' questionnaires. The results showed that, after the rotation, the boys and girls respectively got 7 and 8 factors with the eigenvalue greater than 1, and the variances explained by the first one factor are 19.49% and 13.22%, respectively, which are far less than the critical criterion of 40%. It can be seen that there is no common method bias effect in this study.

4.2 Descriptive statistics and related analysis

Table 1 Results of correlation analysis between different variables of male students

	\bar{x}	s	Love view	interpersonal trust	affinity dependence	anxiety
Love view	213.28	19.52	1			
interpersonal trust	77.66	7.96	-0.102*	1		
affinity dependence	3.33	0.44	0.24**	-0.26**	1	

anxiety	2.82	0.77	-0.09	0.22**	-0.50**	1
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*** When the confidence level (two side) is 0.001, the correlation is significant.

** When the confidence level (two side) is 0.01, the correlation is significant.

* When the confidence level (two side) is 0.05, the correlation is significant. Same as below

It can be seen from Table 1 that, for boys, the concept of love is not related to interpersonal trust, and is

significantly positively correlated with adult attachment and affinity dependence, and negatively correlated with anxiety dimension; interpersonal trust was not correlated with adult attachment, which was negatively correlated with the dimension of closeness dependence, and positively correlated with the dimension of anxiety; the intimate dependence dimension was significantly positively correlated with the anxiety dimension.

Table 2 Analysis of correlations between different variables of female students

	\bar{x}	<i>s</i>	Love view	interpersonal trust	affinity dependence	anxiety
Love view	136.20	12.05	1			
interpersonal trust	77.38	6.92	-0.39**	1		
affinity dependence	3.33	0.46	0.42**	-0.24**	1	
anxiety	2.81	0.75	-0.44**	0.31**	-0.55**	1

As can be seen from Table 2, for girls, the concept of love is not related to adult attachment, significantly positively correlated with intimate dependence, and negatively correlated with interpersonal trust and anxiety dimensions; interpersonal trust is not related to adult attachment, and close to dependence dimension. Significant negative correlation was significantly

negatively correlated with the dimension of anxiety; intimate dependence on latitude and anxiety dimensions was significantly positively correlated.

4.3 Analysis of mediating effect and regulation effect

Table 3 Relationship between Adult Attachment and Dependency Dimensions and Girls' Views on Love: A Test of the Mediating Effect of Interpersonal Trust

	equation1: Love view		equation2: interpersonal trust		equation3: Love view		Bootstrap test			
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
affinity dependence	0.42	9.05** *	-0.24	-4.82***	0.35	7.67***				
interpersonal trust					-0.31	-6.80**	1.93	0.49	0.11	3.05
R2	0.18		0.06		0.26					
F	81.96***		23.19** *		68.94** *					

The results of equation 1 show that the intimate prediction dimension has a significant positive predictive effect on the concept of love ($\beta=0.42$, $t=9.05$, $P<0.001$); the result of Equation 2 shows that the close-dependent dimension has a significant negative predictive effect on interpersonal trust ($\beta=-0.24$, $t=-4.82$, $P<0.001$); the results of Equation 3 show that interpersonal trust has a significant negative predictive effect on the concept of

love ($\beta= -0.31$, $t= -6.80$, $P<0.01$). The Bootstrap test results also show that the mediation effect is significant ($LLCI = 0.11>0$, $ULCI= 3.05>0$), so, for girls, intimate and interpersonal trust has a mediating effect between the concept of love and the intimate dependence dimension, and the ratio of the mediating effect to the total effect is 18% ($a \times b/c = -0.24 \times -0.31/0.42 = 0.18$).

Table 4 Relationship between Adult Attachment Anxiety Dimension and Female Love concept: Intermediary Effect of Interpersonal Trust

	equation1: Love view		equation2: interpersonal trust		equation3: Love view		Bootstrap test			
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
anxiety	-0.44	-9.58***	0.32	6.49**	-0.35	-7.67***				
interpersonal trust					-0.28	-6.04***	-1.41	0.3	-2.07	-0.90
R2	0.19		0.10		0.26					
F	91.65*		42.13*		68.29*					

The results of Equation 1 show that the anxiety dimension has a significant negative predictive effect on the concept of love ($\beta=-0.44$, $t=-9.58$, $P<0.001$); the result of Equation 2 shows that the anxiety dimension has a significant positive predictive effect on interpersonal trust ($\beta=0.32$, $t = 6.49$, $P < 0.001$); Equation 3 results show that the negative predictive effect of interpersonal trust on the concept of love is significant ($\beta = -0.28$, $t = -6.04$, $P <$

0.001). The Bootstrap test results also show that the mediation effect is significant ($LLCI = -2.07 < 0$, $ULCI = -0.90 < 0$), so for girls, anxiety can positively predict 19% of the concept of love, and interpersonal trust is in the dimension of anxiety and There is a mediating effect between the concept of love, and the ratio of the mediating effect to the total effect is 20% ($a \times b / c = 0.32 \times -0.28 / -0.44 = 0.20$).

Table 5 Relationship between Adult Attachment and Dependency Dimensions and Boys' Views on Love: A Test of the Mediating Effect of Interpersonal Trust

	equation1: Love view		equation2: interpersonal trust		equation3: Love view		Bootstrap test			
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
affinity dependence	0.24	5.00***	-0.26	-5.45**	0.23	4.60**				
interpersonal trust					-0.04	-0.83	0.48	0.75	-0.74	2.31
R2	0.06		0.07		0.06					
F	24.93**		29.69*		12.79**					

The result of Equation 1 shows that the positive predictive effect of the close-dependent dimension on the concept of love is significant ($\beta=0.24$, $t=5.00$, $P<0.001$); the result of Equation 2 shows that the close-dependent dimension has a significant negative predictive effect on interpersonal trust ($\beta=-0.26$, $t=-5.45$, $P<0.001$); Equation 3 results show that interpersonal trust has no significant

predictive effect on the concept of love ($\beta=-0.04$, $t=-0.83$, $P>0.05$). The Bootstrap test results show that the mediation effect is not significant ($LLCI = -0.74 < 0$, $ULCI = 2.31 > 0$). Therefore, for boys, intimate dependence can negatively predict 6% of love, but interpersonal trust does not mediate between intimate dependence and love.

Table 6 Relationship between Adult Attachment Anxiety Dimension and Boys' Love concept: A Test of the Mediating Effect of Interpersonal Trust

	equation1: Love view		equation2: interpersonal trust		equation3: Love view		Bootstrap test			
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>	<i>Effect</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>

anxiety	-0.09	-1.85**	-0.22	4.66**	-0.07	1.64				
interpersonal trust					-0.09	-1.69	-0.48	0.40	-1.45	0.11
R2	0.10		0.06-5		0.20					
F	3.41		21.27**		3.13*					

The results of equation 1 show that the anxiety dimension has no significant effect on the prediction of the concept of love ($\beta=-0.09$, $t=-1.85$, $P>0.05$); the result of Equation 2 shows that the anxiety dimension has a significant positive predictive effect on interpersonal trust ($\beta=-0.22$, $t=-4.66$, $P<0.001$); Equation 3 results show that interpersonal trust has no significant predictive effect on the concept of love ($\beta=-0.07$, $t=-1.64$, $P>0.05$). The Bootstrap test results also show that the mediation effect is not significant ($LLCI = -1.45<0$, $ULCI= 0.11>0$), so for boys, anxiety can negatively predict 10% of the concept of love, but interpersonal trust is in the dimension of anxiety and there is no intermediary between the views of love.

As can be seen from the above analysis of the mediating effect, for girls, interpersonal trust plays a mediating role in the intimate dependence dimension, anxiety dimension and the concept of love, while for boys, interpersonal trust does not have a mediating effect. It can be concluded that gender plays a regulatory role in the mediation model of love concept, intimate dependence dimension and anxiety dimension, and interpersonal trust, and through comparison, it is adjusted to the second half of the path.

5 Discussion

5.1 The number of security attachments is much higher than other studies

This study shows that the number of safe attachments among college students is the highest, which exceeds the sum of the other three types. This is different from the results of other studies. For example, Sun Yuan, Zhang Yunan and others have found that the proportion of college students with secure attachments Only 19.8%^②; He Ying's survey results for a lower proportion of safe attachments to 13.3%^③; Fang Lei's results are very close to He Ying's, only 13.8%^④.

Point: First, the culture is different in different regions, and the students in this area have a small security and caring environment to facilitate the formation of safe attachment. Second, the type of attachment that has been affected by the environment has changed.

5.2 Relationship between interpersonal trust and intimate dependence and anxiety dimension

The study also found that interpersonal trust has a

significant negative correlation with the dimension of intimate dependence and is significantly positively correlated with the dimension of anxiety, and the interpersonal trust score of the secure attachment students is lower than that of the non-secure attachment. For this, the previous research results are quite different: Zuo Enling found that there is a significant positive correlation between attachment avoidance, attachment anxiety and interpersonal trust^①, and some people have significant negative correlations^②, and some results show that their correlation is not significant^③. Although the above conclusions were tested using the Intimate Relationship Experience Scale (ECR), Luo Xianglian has demonstrated a good match between the two dimensions of ECR and AAS^④. The test results are comparable, which indicates that in the group of college students, the relationship between adult attachment and interpersonal trust varies greatly depending on time and region. First, students with safe attachments, especially those who rely on higher scores, have a higher sense of security, have better relationships with people around them, and benefit from them. Therefore, when they grow up, they are more likely to be close to each other, and they like to ask for help, but It is also because there are more people close to the surrounding area, and the general decline in interpersonal trust. Studies have shown that the level of interpersonal trust has dropped significantly between 1998 and 2009^⑤. Environmental changes may also be a major decline in interpersonal trust. Second, the reason is that those students with non-secure attachment types, especially those with higher anxiety scores, have a lower sense of security and desire the trust of others, while trusting each other is their best strategy, that is, "If you want to take something from others, you must give it to others firstly." It can also be seen that it is very important for college students and other groups to cultivate interpersonal trust. It is not only limited to the closeness of the surface.

5.3 The mediating role of interpersonal trust and the role of gender regulation

For girls, interpersonal trust has a mediating role in the intimate dependence dimension, anxiety dimension and the concept of love. That is to say, the intimate dependence dimension and anxiety dimension can not only directly affect the concept of love, but also indirectly affect the concept of love through interpersonal trust. But for boys, interpersonal trust does not have an intermediary role, and proximity to the dimension and anxiety dimension only directly affects the concept of love. According to the

results, we can get close to children in childhood, let them experience great care, safety, and form a secure attachment, which can largely lead them to form a correct and good concept of love when they grow up. For boys, the main factors that shape the formation of the boy's the concept of love are to grow in order to better carry out education from an early age. This also provides a certain theoretical support for the influencing factors of the concept of love in the future, and also provides a new perspective for further exploration of the concept of love between boys and girls using different questionnaires to separate research.

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