

The Relationship Among Adolescents' Self-esteem, Emotional Intelligence and Friendship Quality

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Research Article

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Abstract

Background: The purpose of this study is to analyze the relationship among self-esteem, emotional intelligence and friendship quality of adolescents.

Methods: A total of 333 adolescents were investigated with the help of a questionnaire and the qualitative data of interviews were used to demonstrate the results. The data were analyzed by exploratory analysis and typical correlation analysis.

Results: Self-esteem can explain 21.3% of the variance of friendship quality. All levels of self-esteem are positively correlated with company help, intimate communication, positive value, trust and respect in friendship quality, but negatively correlated with conflict and betrayal in friendship quality. Emotional intelligence can explain 36.4% of the variance of friendship quality, and all levels of emotional intelligence are positively related to the level of companionship, intimate communication, positive value, trust and respect in friendship quality, but negatively related to the level of conflict and betrayal in friendship quality.

Conclusion: There is a typical relationship among self-esteem, emotional intelligence and friendship quality, and interpersonal self-esteem, trust and respect, companionship and help, and intimate communication are the main explanatory factors. Emotional adjustment, cognitive reappraisal, emotional control and company help, trust and respect, positive value, intimate communication are the main explanatory factors.

Background

Individuals will have a need for interpersonal intimacy during their adolescence. This need for intimacy depends on the sensitivity and mutual satisfaction of the needs of friends to meet each other. If teenagers lack the experience of interaction with close friends, it is easy to cause obstacles in life, personality and socialization ability in the future. Some scholars believe that individuals with high-quality friendship relations are easier to cooperate with others and have more social behavior characteristics than those with low-quality friendship relations, and have confirmed that there is a significant positive correlation between friendship quality and self-esteem^[1]. Lv Shuai^[2] also believes that there is a positive correlation between individual self-esteem and peer relationship. Moreover, The concept of youth friendship will develop from concrete to abstract with age, and the importance of friendship to young people also increases with age^[3]. Raboteg^[4] takes adolescents as the research object, and finds that individual self-esteem has a positive impact on the intimate friendship relationship between themselves and their friends, but some studies think that the relationship between friendship intimacy and self-esteem is weak^[5]. Therefore, the correlation between self-esteem and friendship quality is worthy of further discussion. Although there are few literature on the relationship between emotional intelligence and friendship quality, there are still traces to be found. When Yang Yulong^[6] studied the predictors of youth friendship, he found that if adolescents can perceive the feelings and beliefs of others and adjust

their own emotions in the interpersonal communication experience, it is helpful to the formation of friendship relations. Schwarz^[7] also pointed out that with the growth of age, friendship is more and more important for teenagers' emotional adaptation. Those who have better emotions are not easy to feel lonely. If individuals can not effectively control their own emotions or use emotion regulation strategies, they will fall into interpersonal difficulties and be difficult to establish close friendship with others. Hou Wenxia^[8] explored in the study of children's peer relationship and emotional abilities, it is found that the higher the children's cognitive ability and the ability to understand multiple emotions, the better their interpersonal relationship. As the individual's emotion regulation strategies and expressions change dynamically with age, timely research on the relationship between adolescents' emotional intelligence and friendship quality is also a topic worthy of in-depth discussion.

Methods

research object

395 students were selected from Luoyang Railway Information Engineering School by random cluster sampling method. After deleting the invalid questionnaires, 333 valid questionnaires were obtained, and the effective recovery rate was 84.30%. Among them, 186 boys (55.86%) and 147 girls (44.14%). The average age of the subjects was 16.65 years old.

research tools

Using Barrow^[9] adolescent self-esteem scale, the scale consists of 4 levels of 26 items: physical self-esteem, school self-esteem level includes 5 items, interpersonal self-esteem, academic self-esteem level includes 8 items. Likert-4 points were used to score the scale. 1 means "completely inconsistent", 4 means "completely consistent". The higher the score is, the higher the level of self-esteem is.

Using the adolescent emotional intelligence scale and friendship quality scale of Zhu Yin^[10], the adolescent emotional intelligence scale consists of 50 items at five levels: emotional cognition, emotional expression, emotional regulation, emotional reflection and positive motivation, each containing 10 items; the youth friendship quality scale consists of 35 items in five levels: accompanying help (13 items) The scale was scored with likert-4 points, from 1 "completely inconsistent" to 4 "completely consistent". The higher the score, the higher the emotional intelligence and the higher the friendship quality.

validity and reliability of the scale

The contents of the three scales were examined by 8 psychological experts and 23 students. The data were processed by spss20.0 software and analyzed by exploratory analysis method. The factor load values of the three scales are between 0.596 and 0.824, the explanation rate of the factors on the three scales is between 52.62% and 70.22%, and the Cronbach's Alpha coefficient in the study is between 0.731 and 0.868, The scale has good validity and reliability.

Procedures and statistical methods

Taking the class as the unit to carry out the group test, the researcher and the trained graduate students of physical education as the main test. With the consent of the participating schools and the consent and cooperation of the head teacher, use students' extracurricular time to adopt rules such as informed, voluntary, anonymous, and truthful answering. The questionnaire was filled out on the spot and retrieved on the spot, and SPSS 20.0 was used to conduct exploratory analysis and canonical correlation analysis on the data. The test level was $\alpha = 0.05$.

Results

canonical correlation analysis between adolescents' self-esteem and friendship

There was a canonical correlation between adolescents' self-esteem and friendship. Only one group of canonical correlation was statistically significant (Wilk's = 0.765, Chi-sq = 87.432, $P < 0.001$).

Table 1

Summary of canonical correlation analysis between adolescents' self-esteem and friendship

Self-esteem	χ^2	friendship quality	η^2
Physical self-esteem	-0.466	company help	-0.553
Interpersonal self-esteem	-0.899	trust and respect	-0.739
School self-esteem	-0.403	affirms value	-0.757
Academic self-esteem	-0.541	intimate communication	-0.712
		Conflict and betrayal	0.492
Overlap coefficient	7.80%	overlap coefficient	9.20%
Extraction variance percentage	37.00%	Extraction variance percentage	43.50%
		(ρ)canonical correlation coefficient	0.461***
		(ρ^2)Typical root value	0.213

notes: * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

It can be seen from Table 1 that the canonical correlation coefficient of the first group is $\rho = 0.603$ ($p < 0.001$), which is statistically significant. Therefore, the four variables of self-esteem mainly affect the quality of friendship through the first group of typical related factors. The first canonical factor of self-esteem can explain 21.3% of the total variance of the first canonical factor of friendship quality, and η^2 can explain 43.50% of the total variation of friendship quality. The four variables of self-esteem can explain 9.20% of the total variation of five variables of friendship quality through the first group of typical factors (χ^2 , η^2).

χ^2_1 can explain 37.00% of the total variance of self-esteem, and the five variables of friendship quality can explain 7.80% of the total variance of self-esteem through the first group of typical factors (η_1, χ^2_1).

In the first group of canonical correlation, interpersonal self-esteem (-0.899) had a high correlation with positive value (-0.757), intimate communication (-0.712), trust and respect (-0.739). From the positive and negative sign of factor load, each level of self-esteem was positively correlated with company help, intimate communication, positive value and trust and respect in friendship quality, but it was positively correlated with conflict and friendship quality Betrayal is negatively correlated.

canonical correlation analysis between emotional intelligence and friendship of adolescents

There is a canonical correlation between adolescents' emotional intelligence and friendship. Among the 5 groups of canonical correlation factors extracted, only one canonical correlation is statistically significant. (Wilks' = 0.607, Chi-sq = 162.833, $P < 0.001$).

Table 2
summary of canonical correlation analysis between emotional intelligence and friendship of adolescents

Emotional intelligence	χ^2_1	friendship quality	η_1
Emotional cognition	-0.501	companion help	-0.644
Emotional expression	-0.808	trust and respect	-0.645
Emotion regulation	-0.730	affirms value	-0.673
Emotional reflection	-0.794	intimate communication	-0.828
Positive motivation	-0.464	conflict and betrayal	0.461
Overlap coefficient	1.66%	Overlap coefficient	17.90%
Extraction variance percentage	45.70%	Extraction variance percentage	43.60%
		(ρ) Canonical correlation coefficient	0.603***
		(ρ^2) Typical root value	0.364
<i>notes: *$P < 0.05$; **$P < 0.01$; ***$P < 0.001$</i>			

It can be seen from Table 2 that the canonical correlation coefficient of the first group is $\rho = 0.603$ ($p < 0.001$), which is statistically significant. Therefore, the five variables of emotional intelligence mainly affect the five variables of friendship quality through the first group of canonical related factors. The first typical factor of emotional intelligence χ^2_1 can explain 36.4% of the total variance of the first typical factor

η_1 of friendship quality, and η_1 can explain 43.60% of the total variance of friendship quality. The four variables of self-esteem pass the first pair Typical factors (χ_1, η_1) can explain 17.90% of the total variation of friendship quality.

χ_1 can explain 45.70% of the total variation of emotional intelligence, and the five variables of friendship quality can explain 1.66% of the total variation of emotional intelligence through the first group of typical factors (η_1, χ_1).

In the first group of typical correlations, emotional expression (-0.808), emotional reflection (-0.794) emotional regulation (-0.730) and intimate communication (-0.828), affirmation value (-0.673), trust and respect (-0.645), companionship and help (-0.644), there is a high degree of correlation. From the point of view of the sign of the factor load, the various levels of emotional intelligence are positively related to the companionship and help, intimate communication, affirmation of value, conflict and betrayal, trust and respect in the quality of friendship. But it is negatively related to the level of conflict and betrayal in the friendship quality.

Discussion

analysis of the relationship between adolescents' self-esteem and friendship

In adolescence, the level of self-esteem develops rapidly and pays special attention to communication and interaction with friends. In this process, teenagers can more directly, objectively and comprehensively understand their own advantages and disadvantages by observing others and comparing with themselves. Therefore, the level of individual self-esteem will have an impact on the quality of their friendship^[11]. According to the correlation between each level of self-esteem and friendship quality, the higher the adolescents' physical self-esteem, interpersonal self-esteem, school self-esteem and academic self-esteem, the higher the degree of companionship and help, intimate communication, positive value, conflict betrayal, trust and respect with good friends, and the less conflict and betrayal with good friends; The higher the adolescent's evaluation and feeling of the overall mental state of the self, the higher the evaluation and feeling of the health, appearance, and movement of the body, their acceptance of others, the degree of popularity, perception of others' perceptions of themselves and The higher the evaluation and feeling of interpersonal interaction ability; the higher the evaluation and feeling of one's own importance in school and academic ability, the more it can improve the quality of friendship with others, and conflicts and betrayal are less likely to occur. Zimmermann^[12] took adolescents as the research object and measured the relationship between various levels of self-esteem and the quality of positive and negative friendships. It was found that the higher the school ability, social interaction, behavior and overall self-esteem scores of adolescents, the positive friendship quality is in intimacy, companionship and The higher the scores for help, safety, and trust, the higher the scores on all levels of self-esteem, the lower the negative friendship quality scores. Yu Jiazhen^[13] believed that adolescents' self-

esteem was significantly positively correlated with the dimensions of trust and support, positive value, company and entertainment, conflict and betrayal in friendship quality, and adolescents' self-esteem had a positive predictive effect on friendship quality. Huang^[14] also found that there was a significant positive correlation between individual self-esteem and positive friendship quality, affirmation and concern, conflict resolution strategy, help and guidance, company and entertainment, intimacy and exposure. However, the higher the level of individual self-esteem, the lower the conflict and betrayal.

From the factor load values of the variables in the canonical correlation structure, it can be seen that interpersonal self-esteem scores the highest in all levels of self-esteem, and the highest scores in friendship quality are in the levels of close communication, affirmation value, and trust and respect, indicating that young people think they are affirmers of friends and make friends with themselves. Friends are more confident in their abilities, and the quality of their positive friendships is better. The research results of Paterson^[15] also show that the relationship between adolescents' social self-esteem and the quality of friendship is closer than the relationship between school self-esteem, physical self-esteem and friendship quality. In addition, Zhou Dan^[16] also found a close relationship between social self-esteem and friendship quality in the study of the relationship between adolescent self-esteem and friendship quality. Xue Liming^[17] analyzed that self-esteem is a monitor of human individual relationships based on the self-esteem meter theory, a subjective measure of the relationship between individuals and society and with others, and reflects the empirical argument of whether individuals have good interpersonal relationships. It can be seen that the level of individual self-esteem will affect the quality of their friendship. The higher the quality of friendship, the higher the degree of acceptance and recognition of the individual by others, and the higher the individual's evaluation of self-worth.

analysis of the relationship between emotional intelligence and friendship of adolescents

It can be seen from the correlation between adolescents' emotional intelligence and friendship at all levels: the higher the scores of adolescents' emotional cognition, emotional expression, emotional regulation, emotional reflection and positive motivation, the companionship and help of their good friends, intimate communication, affirmation of value, The higher the level of conflict and betrayal, trust and respect, the fewer conflicts and betrayals occur. It shows that the more adolescents can perceive their emotional state, can appropriately express their emotional feelings, can regulate the development of negative emotions to positive emotions, and honestly introspect their own emotional reactions and performance, and their sense of competence in their ability to control emotions is also the higher, the more you can support each other with friends, the higher the trust and dependence between each other, the higher the intimacy between each other, and the less prone to conflict and betrayal. Wang Fei^[18] believes that the emotional intelligence of high school students is significantly correlated with the quality of friendship. Individuals with high emotional intelligence will show more pro-social behaviors, get along well with their peers, and have good friendship quality; those with low emotional intelligence Individuals are not well-adapted to society, do not handle various interpersonal problems well, and cannot

understand partners' emotions in a timely manner. In another longitudinal study investigating the relationship between parent-child attachment and emotional regulation on mobility and the quality of friendship among urban children, it was found that lower emotional regulation ability predicted peer rejection, while higher emotional regulation ability predicted peer acceptance and recognition. People who know the reassessment have closer social relationships and are more popular with their peers, and expression inhibition is related to poorer interpersonal relationships^[19]. Hu Fangfang et al^[20] believe that college students who are accustomed to using cognitive reappraisal strategies prefer to share emotions, have more close relationships, and are more loved by their peers, while college students who are accustomed to expressing suppression strategies receive less social support and interpersonal The relationship is poor. Therefore, the adaptive emotional intelligence strategy of consciously developing cognitive re-evaluation can improve the individual's ability to regulate and manage emotions, which is of great significance for promoting interpersonal relationships and improving mental health.

Zhong Ping et al^[21] believe that individuals' trust and acceptance of friends and good communication are related to the individual's ability to express their emotions in appropriate ways. If there is a big gap between them, social anxiety will occur. Therefore, in the process of interaction between individuals and friends, emotional expression is an indispensable factor in interpersonal communication. Zhang Juying^[22] also pointed out that people with high confidence in emotional expression are better able to use effective strategies to regulate their emotions and have better control over their emotions. They will actively use strategies to change unpleasant emotions and have a high sense of self-efficacy in interpersonal interaction. Therefore, if individuals can express their emotions and feelings in a consistent manner, and can communicate well with good friends, they can feel the intimacy of friendship even more. In addition, Zhu Yin^[23] studied the results of improving the peer relationship of junior high school students and found that teenagers who actively share their experiences with friends have a higher quality of positive friendship. It can be seen that the emotional honesty and listening of friends can promote mutual intimacy and form a sense of security and trust between individuals.

Declarations

Supplementary information

Supplementary information accompanies this paper at <https://orcid.org/my-orcid?orcid=0000-0003-2962-934X>.

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Authors' contributions

Conception or design of the work Data analysis Statistical analysis Critical revision of the manuscript for important content: WEIYe

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Availability of data and materials

All data generated or analyzed during this study are included in this published article.

Ethics approval and consent to participate

This research was approved by the Henan University of science and technology Institutional Review Board. This article does not contain any studies with animals performed by any of the authors. Informed consent was obtained from all individual.

Consent for publication

Participants were made aware of the intent to publish the study during the original study's consent process.

Competing interests

The authors declare that they have no competing interest.

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