

A Correlational Study of Adolescent Romantic Parasocial Attachment and Academic Motivation

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ABSTRACT

Nowadays, with the popularization of mass media, parasocial romantic attachment is turning out to be a prevalent phenomenon among teenagers. It is necessary to study the relationship between adolescent romantic parasocial attachment and academic motivation. Previous studies compared the difference between parasocial contact and social contact on prejudice. This study aims to further compare them in the case of romance. Besides, studies related to parasocial romantic attachment have mainly focused on its effects on real-life romance, so this study investigated its potential effect on academic motivation. This study used a questionnaire to investigate whether there is a positive correlation between the strength of adolescent romantic parasocial attachment and the intensity of academic motivation. We concluded that there is evidence that the strength of adolescent romantic parasocial attachment and the intensity of academic motivation are positively correlated. However, this might happen by chance, because the results were not statistically significant.

Keywords: *adolescent romantic parasocial attachment, academic motivation, personality, questionnaire*

1. INTRODUCTION

Adolescent Romantic Parasocial Attachment (ARPA) can be defined as perceived romantic relationships with media figures in adolescence that (a) involve the investment of time, energy, and emotion; (b) are mediated; and (c) involve some degree of idealization. It consists of four components: emotions (including empathetic reactions and self-generated emotions), cognitions (including attention allocation, evaluating behaviors, making connections, and exploring identity and schemas), behaviors (based on the attachment theory, proximity seeking [2]), and fantasies (based on the object-relations theory, fans attach to their internal representations by fantasizing [3]).

The biological mechanism behind it is that, according to the Media Equation, some primitive parts of the brain tend to perceive the TV characters as physically present. Although higher-order cognitive processes can correct these perceptions, the emotions triggered by TV and reality are the same. [4]

Academic motivation is defined by the process undertaken by a student that initiates, guides, and maintains goal-oriented behaviors related to academic functioning and success. It has three components:

activation (initiation of pursuing the goal), persistence (the continued pursuit toward the goal) and intensity (the amount of effort devoted to the goal). [5]

The Parasocial Contact Hypothesis states that parasocial contact has the same effect on reducing prejudice towards minority group categories as social contact does. [6] Therefore, this study aims to further compare the similarities and differences between the effects of parasocial contact and social contact in other aspects. In this case, it is romance. Besides, little research examined the effects of parasocial romantic attachment on real-life romantic attachment, even though most of them focused on studying the effects of romantic parasocial attachment on real-life romantic attachment, for example [7], with little regard to other aspects of the effect. Therefore, this study also aims to further the influence of parasocial romantic attachment. The hypothesis of the study is that there is a positive correlation between the strength of adolescent romantic parasocial attachment and the intensity of academic motivation.

2. LITERATURE REVIEW

Based on the uses and gratification theory [8], people make use of mass media to find models of behavior and

form personal identities. Combining with the social learning theory [9], the good qualities presented by the TV models are likely to be imitated in people's real lives. According to the uses and gratification theory, people use mass media for social interaction purposes, thus making it a substitute for real-life companionship. Research has shown that early romantic relationships in real life generate positive emotions that are associated with motivation. [10] Besides, high-quality interpersonal relationships in students' lives contribute to their academic motivation. [11]

3. METHODOLOGY

The method used is a questionnaire targeting the ARPA, academic motivation, and personality. Personality did affect both intrinsic and extrinsic motivation [12] [13], which is a confounding variable identified in this study. Personality questions act as filler questions. The questionnaire was released online on March 29th, 2022, and March 31st, 2022.

3.1 Samples

Opportunity sampling is used in this study. The sample includes 58 adolescents aged from 12 to 18, 22 males and 36 females. They were studied at either junior high school or senior high school in China.

3.2 Design/Procedure

The questionnaire contained both closed (Likert scale) and open questions, for a total of 42 questions. The ARPA part is designed to correspond to the four components (emotions, cognitions, behaviors, and fantasies). The parasocial romantic partner is operationalised to include both two-dimensional and three-dimensional figures. The options for the general duration of using mass media were designed according to the cultivation theory [14], which classified light viewers as less than two-hour exposure to mass media per day, medium viewers as less than four-hour exposure to mass media per day, and heavy viewers as at least four-hour exposure to mass media per day. The academic motivation part is designed to include the three

components of academic motivation (activation, persistence, and intensity). In measuring personality, questions were designed based on the 4 dimensions of the Myers–Briggs Type Indicator (MBTI) [15] (Extraversion vs. introversion as a source of energy; sensing vs. intuition as a method of gathering information; thinking vs. feeling as a method of making decisions; judgment vs. perceiving as a method of dealing with the outside world).

Specifically, extroverts usually obtain energy from interactions with others, while introverts usually obtain energy through introspection of their own thoughts. In gathering information, sensing means using them to focus on concrete, detailed information and facts, while intuition means using them to focus on more abstract, theoretical, and holistic information and the relationship between facts. In making decisions, thinkers rely on objective facts, logic, causality, and rational analysis, while feelers rely on subjective feelings, emotions, and sense of worth. People who usually live with a planned and organized lifestyle and like to be in good order are classified as judgment, while people who usually live with a flexible and impromptu lifestyle, like things to be selective and random, are classified as perceiving. All questionnaires will be delivered in an online format with the following instructions: This study is about the effect of mass media on people. It will take you a few minutes to complete. Your personal information will be well protected, and the whole process is anonymous.

4. DATA ANALYSIS

The questionnaire provides both quantitative and qualitative data.

4.1 Analysis of the quantitative data

The first step is to calculate the product of the general duration and the frequency of using mass media, which was the total length of exposure to mass media. This became the coefficient of the rest of the questions related to the depth of ARPA. The result was shown in the graph below.

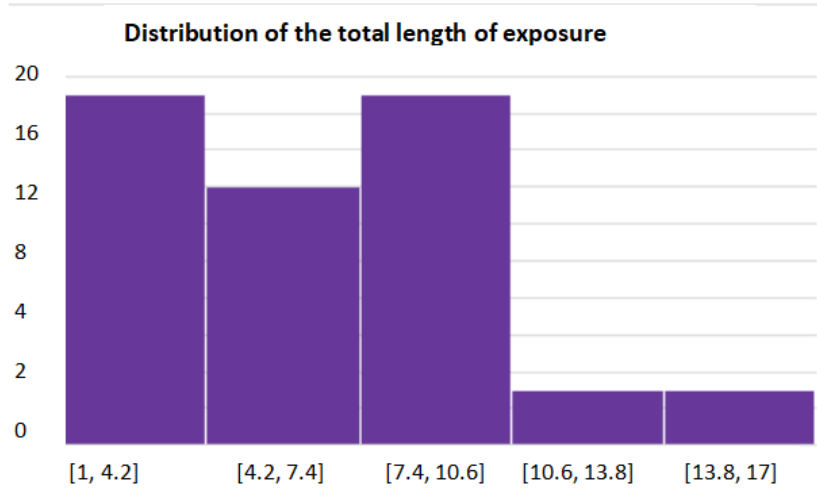


Figure 1 A histogram shows the distribution of number of participants respond to different total lengths of exposure

Then, it multiplies the computed product and the total ratings of the rest of the ARPA questions. The result

became the overall intensity of ARPA, which was shown in the graph below.

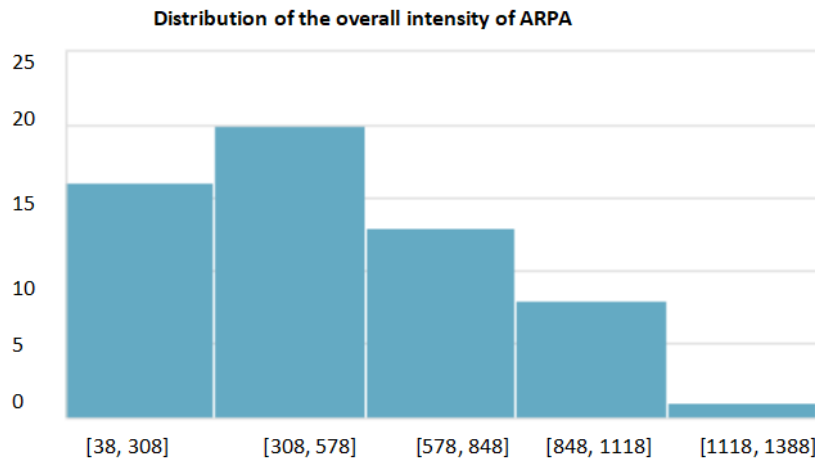


Figure 2 A histogram shows the distribution of number of participants respond to different overall intensities of ARPA

The next step is to add the ratings of all questions related to academic motivation. The result became the

overall intensity of academic motivation, which was shown in the graph below.

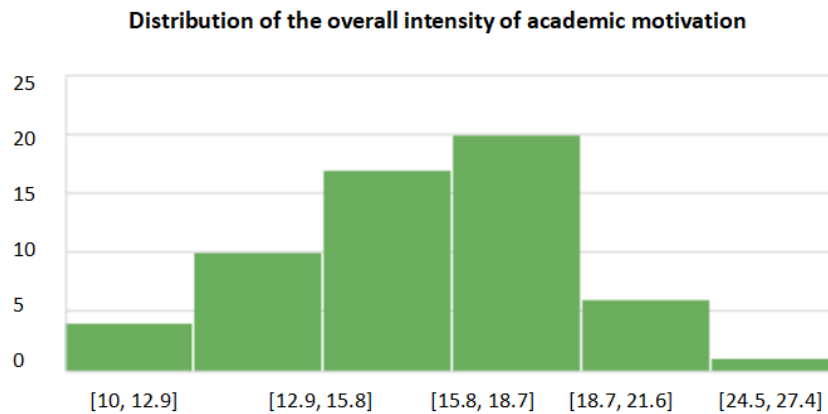


Figure 3 A histogram shows the distribution of number of participants respond to different overall intensities of academic motivation

The fourth step is to draw a scatter-plot of the academic motivation intensity corresponds to the ARPA intensity based on the two lists of data.

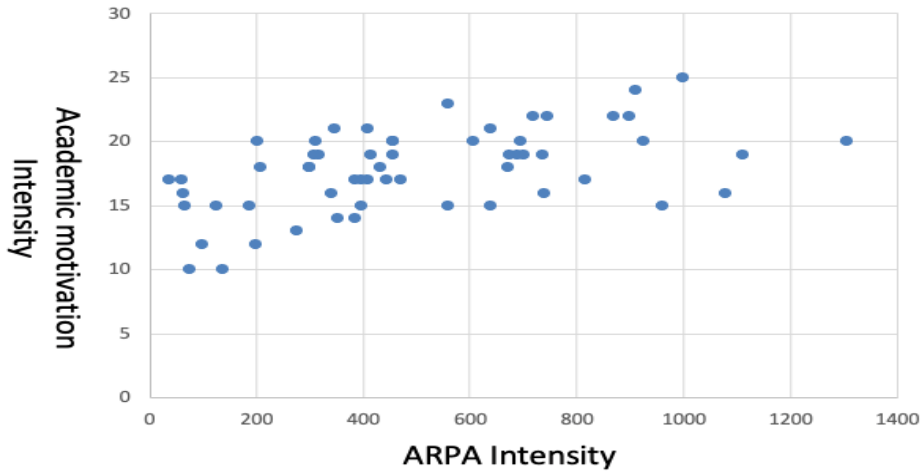


Figure 4 A scatterplot of the academic motivation intensity corresponds to the ARPA intensity

According to the least squares regression line ($y=15.055+0.00553x$), the correlation coefficient (r) was 0.521, which represents a relatively strong positive linear correlation between the intensity of academic motivation and the intensity of ARPA.

However, after proceeding a t-test for inference of the population slope ($H_0: \beta=0$ and $H_a: \beta>0$), the p-value was 0.495, which was greater than the significance level of 0.05, so we fail to reject H_0 , there is no convincing evidence that the true population slope is positive.

When analyzing the correlation between the intensity of academic motivation and personality:

The first step is to divide the intensity of academic motivation into 3 categories (light, moderate and strong), the personality measure has 8 categories (E, I, S, N, T, F, J, P).

The second step is to draw a two-way table for the intensity of academic motivation and the personality, and record the number of participants in each category as shown in the table below.

Table 1 A two-way table of the intensity of academic motivation and the personality

		The intensity of academic motivation		
		light (10-14)	moderate (15-20)	strong (21-25)
personality	E	3	12	1
	I	4	29	9
	S	3	18	6
	N	4	23	4
	T	4	25	8
	F	3	16	2
	J	5	24	5
	P	2	17	5

The third step is to use a chi-square test for homogeneity to test whether there is a statistically significant association between the intensity of academic motivation and the personality (H_0 : There is no

association between the intensity of academic motivation and the personality; H_a : There is an association between the intensity of academic motivation and the personality). The calculated chi-square was 5.496, which has a p-value

of 0.978, greater than the significance level of 0.05. Therefore, it fails to reject H_0 because there is no convincing evidence that there is an association between the intensity of academic motivation and personality.

However, the data suggested that the category of adolescents with high academic motivation and an extrinsic personality contributed the most (1.121) to the chi-square.

4.2 Analysis of the qualitative data

The qualitative data provided proof for the Likert scale questions. Most of the participants (55/58; 94.8%) could give examples and even vivid descriptions that corresponded to their stated ratings of the ARPA questions and the academic motivation questions.

5. DISCUSSION

5.1 Evaluation within the study

Firstly, this study had a highly standardized procedure, with each participant being informed and instructed in the same way, which increased the reliability and replicability.

Secondly, the study explored adolescent romantic parasocial attachment with a variety of mass media figures, including both two-dimensional and three-dimensional figures. This is because most of the characters in the two-dimensional world have anthropomorphic features. For example, Judie and Nick from the Disney movie *Zootopia* have the ability to think logically. As a result, the results can be generalized to a larger population outside of the study with different media figures preferences.

Thirdly, filler questions were designed according to the confounding variable identified, which largely reduced demand characteristics but increased validity.

Last but not least, as most of the participants provided specific examples and in-depth information for their ratings on the open-questions, this study had relatively high validity.

One of the things that needed to be improved was that, corresponding to the subjectivity of the self-reported measure, social responsibility might distort the results as some questions involve a certain degree of exposing private romantic episodes. Thus, brain imaging techniques such as fMRI and PET scans can be added to measure the brain's activities for gathering objective data.

What's more, a larger sample size might be used in order to increase the population validity of the study and make it representative of a greater variety of populations.

5.2 Future research suggestions

For investigating the correlation between ARPA and academic motivation, the intermediate factors could be both individual and situational. Situational factors stress environmental and demographic factors, e.g., family networks. Individual factors emphasis on an individual's personality, perceptions, etc. The exposure of mass media to adolescents and their academic motivation largely depend on the geographic location of the users as well as their family support. Besides, adolescents' different choices of romantic parasocial partners and their academic motivation are influenced by their personality. Therefore, further research could be carried out into controlling those intermediate factors, with an experiment design.

In addition, the study efficiency still needs to be tested to get an overall view of the ways that ARPA affects academic performance, which is also worthy of further study in the future.

6. CONCLUSION

In conclusion, this study used a questionnaire to investigate whether there is a positive correlation between the strength of adolescent romantic parasocial attachment and the intensity of academic motivation. There is evidence that the strength of adolescent romantic parasocial attachment and the intensity of academic motivation are positively correlated. However, this might happen by chance, because the results were not statistically significant.

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