

A Study on College Students' Psychology of Revenge and Interpersonal Forgiveness and the Relationship with Health Education

Zhi-Yong Zhuang¹, Wei Qiao^{2*}

¹ School of Physical Education, Huaqiao University, Quanzhou, CHINA

² Department of Physical Education, Xiamen Institute of Technology, Xiamen, CHINA

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ABSTRACT

Psychology of revenge is a psychological tendency to directly damage the interpersonal relationship on university campus, while interpersonal forgiveness is the emotion-focused countermeasure and an effective way to resolve interpersonal conflict. This study concerns about the effect of Health Education on college students' psychology of revenge and interpersonal forgiveness. Total 1321 college students of 14 universities in 10 cities in China are investigated the psychology of revenge, interpersonal relationship, and the relationship with Health Education with questionnaire survey. The research reveals that Health Education could effectively reduce college students' psychology of revenge, effectively promote the interpersonal forgiveness, and significantly enhance the negative effects of interpersonal forgiveness on psychology of revenge. Positively promoting college students' participation in Health Education is an important route to enhance the interpersonal relationship as well as an effective way to construct harmonious university campus.

Keywords: college students, health education, psychology of revenge, interpersonal forgiveness

INTRODUCTION

Along with the development of social economy, the relationship among people in the society becomes more complicated and changes the relatively pure interpersonal relationship on campus; a lot of campus violence is announced by the media (Bhandari & Yasunobu, 2009; Guàrdia et al., 2006). Similarly, violence on university campus is not rare. Such violence is closely related to college students' psychology of revenge, which could directly result in revenge behaviors to influence and damage the relationship among people on campus and in the society and affect the construction of good campus and humanistic environment, and even result in more serious injuries (Hu, Zhang & Zhong, 2005; Jung & Song, 2015). A university is the bridge to connect the school and the society and is the miniature of the society. The reality of university life largely reflects the reality in current society, and various contradictions in the society would appear in the interpersonal relationship on campus. College students are in the youth growth period and present ambiguity on the comprehension of society and interpersonal relationship to appear some special conflict and contradiction (Clammer, 2000; Wu & Tai, 2016). Campus violence would happen because college students, in the special environment of university campus and with the characteristics at the age stage, have limited ways to handle and cope with interpersonal relationship. Such violence appears possible because of college students' psychology of revenge. However, some people might present the psychological tendency completely opposite to the psychology of revenge after being violated, i.e. interpersonal forgiveness. People with such psychological tendency show weaker revenge tendency and might have the motivation to keep positive relationship with the violator (Guàrdia et al., 2006; McCullough et al., 2003; Sloan & Bowe, 2014). Interpersonal forgiveness has been largely studied and is the major factor in people's individual communication (Kim & Oh, 2018; Moorhead, Gill Minton, & Myers, 2012). Being the emotion-focused countermeasure,

Contribution of this paper to the literature

- Physical education does not simply present positive effects on college students' physical health, but could remarkably promote the mental health.
- Many college students do not leave houses due to the convenient shopping and payment. Such a situation would seriously affect college students' physical health and might influence the mental health.

interpersonal forgiveness is an effective route to resolve interpersonal conflict. McCullough et al. pointed out interpersonal forgiveness as the change of individual pro-social motivation after being violated, including the reduction of revenge and avoidance motivation as well as the enhancement of benevolence motivation (McCullough, Bono & Root, 2007; Sloan & Bowe, 2014). Research findings showed that interpersonal forgiveness could promote well-being, enhance physical & mental health, and reduce interpersonal conflict, enhance relationship satisfaction (Karremans, Paul & Van Lange, 2008; Wu & Tai, 2016).

The positive effect of Health Education on people's psychology has been generally agreed. A lot of researchers proved the positive effects of Health Education on participants' (especially college students) self-confidence development, interpersonal communication capability development, and social adaptability as well as the function to enhance participants' interpersonal trust ability, induce the potentials, and enhance the social adaptation and perfect personality. Nevertheless, research on the effect of Health Education on college students' psychology of revenge and interpersonal forgiveness is still little. Such research would expand college students' psycho-education tactics and routes, reduce the occurrence of university violence, and advance college students forming good interpersonal relationship.

RESEARCH HYPOTHESIS

Health Education Could Significantly Reduce College Students' Revenge Tendency and Remarkably Enhance the Interpersonal Forgiveness

Health Education is the best social education for people venting emotion, the best way to adjust bad mood, e.g. effectively releasing people's depression (Bosscher, 1993), as well as an important method to form good interpersonal relationship (Koo & Lee, 2014). There has not been the special research on the effects of Health Education on college students' psychology of revenge and interpersonal forgiveness. Research found out the positive effect of Health Education on college students' interpersonal relationship and interpersonal trust as well as the remarkably positive correlations between interpersonal trust and interpersonal forgiveness. In other words, increasing trust among people would notably enhance interpersonal forgiveness attitudes and tendency (Krishna, 2014; Wieselquist, 2009). Meanwhile, typically negative correlations existed in between psychology of revenge and interpersonal forgiveness.

Accordingly, the following hypotheses are proposed in this study.

H1: Health Education could notably reduce college students' revenge tendency.

H2: Health Education could significantly enhance college students' interpersonal forgiveness.

College Students' Interpersonal Forgiveness Shows Remarkably Negative Predictability on Revenge Tendency, and Health Education Could Notably Enhance the Negative Predictability of Interpersonal Forgiveness on Revenge Tendency

Research revealed that college students and youngsters with higher interpersonal forgiveness tendency would present lower revenge tendency after suffering from interpersonal violation (Hu, Zhang, Ja, Zhong, 2005; Rey & Extremera, 2016). In this case, it is proposed in this study that.

H3: College students' interpersonal forgiveness reveals significantly negative predictability on revenge tendency.

What is the function of Health Education on interpersonal forgiveness and revenge tendency? It is stated that Health Education could positively affect interpersonal relationship, enhance interpersonal trust, and reduce people's psychology of revenge; besides, interpersonal trust shows positive correlations with interpersonal forgiveness. For this reason, the following hypothesis is proposed in this study.

H4: Health Education, as a moderator, could remarkably enhance the negative predictability of interpersonal forgiveness to revenge tendency.

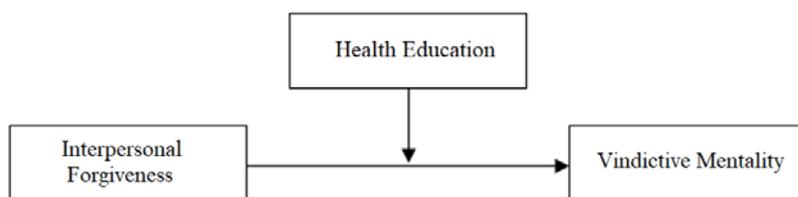


Figure 1. Theoretical model of the moderation effect of physical education

Table 1. Analysis of reliability

variable	n	question	α coefficient
psychology of revenge	1210	5	0.82
tendency to forgive	1210	4	0.80
attitudes towards forgiveness	1210	6	0.83
overall scale	1210	15	0.87

RESEARCH DESIGN

The Subject

Students of 14 universities in 10 major cities (Beijing City, Shanghai City, Wuhan City, Guangzhou City, Chengdu City, Xian City, Nanjing City, Shenyang City, Nanchang City, and Changsha City) are studied. Total 1400 copies of questionnaire are distributed, and 1321 copies are collected, with the retrieval rate 94.35%, where 1210 copies are valid, with the effective rate 91.60%.

Survey Tool

The scale used in this study is composed of three subscales of “Transgression Related Interpersonal Motivations Scale” (5 questions), “Tendency to Forgive” (4 questions), and “Attitudes toward Forgiveness” (6 questions).

“Transgression Related Interpersonal Motivations Scale” (TRIM) is made by McCullough et al., mainly to investigate college students’ psychology of revenge. “Tendency to Forgive” (TTF) and “Attitudes toward Forgiveness” (ATF) are made by Brown (2003), mainly to survey college students’ interpersonal forgiveness tendency and attitudes. Aiming at the characteristics of college students in China, the three scales are revised by Hu et al. (2005) to conform to the characteristics of college students in China and present favorable measurement validity.

RESULT AND ANALYSIS

Reliability and Validity Test

By calculating the Cronbach α coefficient (L. J. Cronbach), the internal consistency is tested and the reliability is confirmed. The results show the α coefficients of psychology of revenge, tendency to forgive, attitudes toward forgiveness, and overall scale being 0.82, 0.80, 0.83, and 0.87, respectively. The α coefficients of the subscales and the overall scale are higher than 0.80, revealing the reliability achieving the standard (Table 1).

Factor Analysis is applied to test the structural validity of scales. The factor load of psychology of revenge, tendency to forgive, and attitudes toward forgiveness is higher than 0.40, and the cumulative rate of explanation reaches 63.24%, 64.05%, and 66.12% that the 3 scales show better validity.

Analysis of Common Method Variance

Partial Correlation Analysis, concluded by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), is utilized for testing the significant common method variance (CMV) problem. The partial correlation analysis result reveals remarkable correlation coefficients of variables that the common method variance problem is not obvious in this study.

Table 2. Regression Analysis of college students' interpersonal forgiveness to psychology of revenge

step	variable	F	R ²	β
Step 1: control variable	gender	1.442	0.002	0.421
	year			0.383
Step 2: independent variable	interpersonal forgiveness	0.659	0.007	-0.203**

** stands for P<0.01

Table 3. Moderation effect of Health Education time on interpersonal forgiveness and psychology of revenge

step	variable	F	R ²	β
Step 1	gender	1.442	0.002	0.421
	year			0.383
Step 2	interpersonal forgiveness	0.659	0.007	-0.203
	Health Education time			-0.187
Step 3	interpersonal forgiveness×Health Education time	2.572	0.250	-0.476

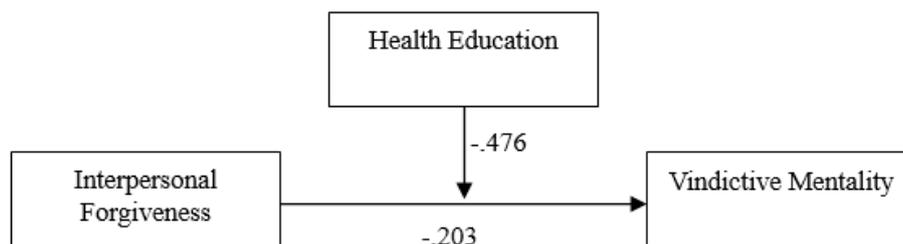


Figure 2. Moderation effect of physical exercise

Relationship among Health Education, Psychology of Revenge, and Interpersonal Forgiveness

Correlation Analysis is used for investigating the relationship between Health Education and psychology of revenge, interpersonal forgiveness. Time for participating in Health Education in a week is regarded as the indicator of participants' participation degree in Health Education, i.e. the correlation between Health Education time and psychology of revenge, interpersonal forgiveness. The analysis show notably negative correlations between Health Education time and psychology of revenge ($r=-0.43$, $p<0.01$) and significantly positive correlations with interpersonal forgiveness ($r=0.68$, $p<0.01$). It explains that college students participating more in Health Education show the lower psychology of revenge and higher interpersonal forgiveness. H1 and H2 are therefore proved.

Predictability of Interpersonal Forgiveness to Psychology of Revenge

After controlling the effects of demographic variables, Regression Analysis is applied to test the predictability of interpersonal forgiveness to psychology of revenge. The data analysis reveals negative effects of interpersonal forgiveness on psychology of revenge ($\beta=-0.203$, $p<0.01$) that H3 is proved. Meanwhile, it explains that college students with higher interpersonal forgiveness show lower psychology of revenge after being violated.

Moderation Effect of Health Education in Interpersonal Forgiveness and Psychology of Revenge

With Hierarchical Regression, the product of moderator and independent dichotomies is included in the regression equation to test the moderation effect of Health Education. Based on the control of demographic variables, interpersonal forgiveness, Health Education time, and interpersonal forgiveness×Health Education time are input to the regression equation. The data analysis shows that the predictability of interpersonal forgiveness×Health Education time to psychology of revenge increases when interpersonal forgiveness and Health Education time are controlled and ΔR^2 is significant ($\beta=-0.476$, $\Delta R^2=0.258$, $p<0.01$). It presents that Health Education time is the moderator of interpersonal forgiveness and psychology of revenge and could effectively enhance the predictability of interpersonal forgiveness to psychology of revenge. H4 is therefore proved (Table 1, Figure 1).

DISCUSSION

A lot of research proves the relationship between interpersonal forgiveness and psychology of revenge. This research on college students also discovers that interpersonal forgiveness could effectively reduce college students' psychology of revenge. However, how can college students' interpersonal forgiveness tendency and attitudes be enhanced? The time for the students participating in Health Education every week is regarded as a key variable in this study. The research findings show the notable correlation between Health Education time and psychology of revenge, interpersonal forgiveness, i.e. the longer Health Education time, the higher interpersonal forgiveness and the lower psychology of revenge. Meanwhile, it is discovered that Health Education time could effectively enhance the negative predictability of interpersonal forgiveness to psychology of revenge.

Accordingly, Health Education does not simply present positive effects on college students' physical health, but could remarkably promote the mental health. A lot of college students' mental problems are caused by the handling of interpersonal relationship. University campus is the place where college students, for the first time, leave family and live in the social environment alone. Properly dealing with the relationship with teachers and classmates is the primary basis of interpersonal relationship for college students devoting to the learning. College students with lots of forgiveness could establish good interpersonal relationship network, while those with strong psychology of revenge might be passive in the interpersonal relationship in the university that they might not establish good relationship with others, might result in loss of life and property, or might directly affect personal and others' life development. Having more college students participate more in Health Education could have them vent the negative emotion through Health Education, enhance the interpersonal communication in daily life through interpersonal communication in Health Education, and advance the sensory stimulation to turn away the attention through Health Education so as to effectively reduce the negative psychology of revenge.

Current situation of domestic college students participating in Health Education is worrying. A lot of college students would sit in front of computers after classes. Many college students do not leave houses due to the convenient shopping and payment. Such a situation would seriously affect college students' physical health and might influence the mental health. A university manager therefore has to encourage and promote college students participating in Health Education and has all college students participate in Health Education. College students could enhance the physical quality, shape good psychological quality, and eventually cultivate the lifelong exercise habit through the participation in Health Education.

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