Higher Ruminative Tendency of Anger in Trust-Forgiveness Young Adults

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Abstract—**Objective: To examine the prediction that the trust-forgiveness trait facilitates less interpersonal anger for young adults.**

Method: 453 participants were recruited from Mainland China, classified as trust-forgiveness (TF), trust-unforgiveness (TU), mistrust-forgiveness (MF) and mistrusting-unforgiveness (MU) through the Dyadic Trust Scale (DTS), The Tendency to Forgive Scale (TTF) and the Dissipation-Rumination Scale (DRS).

Result: Positive correlation was found between trust, forgiveness and rumination of anger. One-way ANOVA revealed significantly higher ruminative tendency in TF participants than TU, MF and MU.

Conclusion: The findings indicated the association between trusting-forgiveness trait and less angry thoughts, and confirmed the interpersonal ruminator role of trusting-forgiveness trait.

Keywords-trust; mistrust; forgiveness; unforgiveness; rumination; anger

I. INTRODUCTION

The past several decades have witnessed the development and practice of trust and forgiveness theory. Considering interdependence commonly involves in team working, it is inevitable that people need to depend others in different ways for achieving their individual or organizational goals [1]. On the other hand, based on the view of group relations and social orders, trust has played the key roles in the span of various intellectual disciplines and analysis levels with an effective intergroup collaboration emphasis [2].

Rotter classically defined trust as "a generalized expectancy held by an individual that the word of another … can be relied on" [3], followed by Moorman, Deshpande and Zaltman "Trust is defined as a willingness to rely on an exchange partner in whom one has confidence" [4]. Attempting to establish the conception of trust, Morgan and Hunt further highlighted the importance of confidence between partners with the emphasis on reliability and integrity and argued that act willingness is an implication in defining the trust concept [5].

In addition to the above views, trust is as well conceptualized as the willingness to be vulnerable towards partner's action based on particular important expectation [1]. In addition, a confident expectation was suggested to be highly associated with the definition of trust by Lewicki, Mcallste, and Bies [2]. Obviously, previous incorporations of conceptualizing trust have common views on some key word like "Willingness", "Confidence", "Expectation" and "Partner". In the current study, based on those classical definitions, trust is more likely to be accepted as a confident expectation to beneficial outcome with the reliability and willingness towards risk between intergroup partners.

Apart from trust, another relationship impact factor, forgiveness promoted by intergroup contact [6], has established a core image that has reached a higher level more than literature, business or even politics. The word forgive used to be adopted by Greek scholars for presenting the meaning of letting it go as well as actively forgetting the past

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wrongdoings and punishment [7]. The idea that forgiveness plays an important role in the maintenance and development of interpersonal relationship or organizational collaboration as an effective adjustment factor is not a fresh thing [8].

For conceptualization of forgiveness, Novitz reproduced the model of forgiveness built based on emotional views in which he insisted that forgiveness is a complex task, part of which includes destabilizing negative emotions, and part of which involves coming to understand the wrongdoer's actions from the point of view, within the context of personal life. He further indicated that what one forgives is not a wrongful action but to forgive the person who is considered to be responsible and blamed for wrongdoings [9]. Apparently, forgiveness could be more likely to be a focus on the interpersonal relationship rather than a negative outcome. However, other researchers also argued that the conceptualization of forgiveness should be a cautious process to avoid trivializing sufferings [8]. Benefited from previous experienced research finds, forgiveness is inclined to be understood as a positive strategy towards to accept past wrongdoings by offenders with good expectation on future relationship in the present study.

It is commonly recognized that prior positive experience exhibits a greater degree of trust that prior negative experience [10]. When a complaint occurs or conflict rises, a trust relationship is supposed to facilitate the de-escalation of anger level or reduce the probability of anger. Accordingly, a peaceful situation constructed by rational thoughts or behaviors exhibited by intergroup parties is expected to benefit the outcome (forgiveness) towards to the offender and activate the progress of re-trust building. As indicated by McLernon, Cairns, and Hewstone, trust is necessary for reaching forgiveness [8]. To place trust in all members in a particular group is not easy but will definitely promote the development of intergroup relations to be strong for facing various conflicting issues.

According to Burnette et al., forgiveness could be understood as the act of writing off a moral debt [7]. The utterance, "I forgive you" presented as a way of releasing a wrongdoer from moral indebtedness. Benefited from this understanding to forgiveness, the process of itself eventually becomes the real matter of changing injured party's attitudes towards the offenders. Apparently, the need for self-protection or self-defense may be reduced among people who have a sense of forgiveness [11]. People with more forgiveness are allowed to flexibly shift mental resources such as taking partners' perspective or regulating anger [7]. Thus, intergroup members with prior trust to each other will react to past wrongdoings with less negative feelings such as anger or anger, toward the wrongdoer than do those classified as mistrust.

Furthermore, It has been already indicated that hostile reactive attitudes may be correspondingly reduced by involved forgiveness which typically requires existing trust towards the offender [7]. Horsbrugh used to propose a volitional model of forgiveness that highlights what we do when we forgive others [12]. On this classical model, similarly, forgiveness was reported to include on giving up hostile responsive attitudes and generate a commitment to the well-being of the offender.

There are important parallels between trust theory and forgiveness. Based on previous studies, the idea that trust positively links to forgiveness is suggested. Both involve such constructs as communication, empathy, and emotion-regulation and both involve a complex set of psychological changes focused on the self and the other [7]. For instance, intergroup individuals usually need to respond with empathy and overcome negative feelings like anger or anger in order to reduce conflicts [13]. Under risky or even threatening situations, both the processes of trust and forgiveness can be helpful for generating interpersonal solutions of reducing damage to mutual relationship. The concerns of individuals with sense of mistrust and unforgiveness may be controlled by one's negative emotions and thoughts.

In the current study, the relationship between trust-forgiveness trait and rumination of anger, participants was investigated. The correlation between trust, forgiveness and rumination of anger was examined as well.

II. MATERIALS AND METHODS

A. Participants & Procedures

A total of 453 normal healthy university students (age: 19.1 ± 3.4; 281 females, 172 males) born in 14 different provinces of mainland China were recruited from 8 universities in Shanghai for the present study. They reported a negative history of neurological and psychiatric problems. The experimental procedure was approved by the Research Ethics Committee of Fudan University, Shanghai, China. Informed consent was obtained for each subject prior to commencement of the study.

The sample was of varying locations (30%, Shanghai; 15%, Zhejiang; 14%, Jiangsu; 7%, Anhui; 7%, Henan; 6%, Guangdong; 5%, Shandong; 4%, Sichuan; 3%, Hunan; 3%, Hubei; 2%, Fujian; 2%, Liaoning; 1%, Hebei; 1%, Beijing). To examine the relation between trust and forgivingness, and more importantly, to investigate the effect of the trust-forgiveness link on ruminating offensive or angry thoughts, participants were required to complete a battery of questionnaires including measures of trusting, forgivingness tendency and rumination of anger. All the scales were translated into Chinese for administration. Through cluster analysis, participants were respectively classified as the following four groups: trust-forgiveness (TF), trust-unforgiveness (TU), mistrust-forgiveness (MF), and mistrust-unforgiveness (MU).

B. Measuress

The 8-item Dyadic Trust Scale (DTS), a seven-point Likert scale to test perceptions of benevolence, honesty, sincerity, dependency, and fairness in relationships [14], was employed to examine the status of trust relationship among young adults. Participants were respectively classified as trust (positive other) and mistrust (negative other) according to the DTS. Example items are "My partner is primarily interested in his (her) own welfare", and "I feel that I can trust my partner completely." Participants reported their

extent to which they agreed with each of the 8 statements on the DTS on 7-point Likert scales anchored with strongly disagree (1) and strongly agree (7). In the current study, the reliability coefficient (Cronbach's alpha) of the DTS was α=0.78.

The Tendency to Forgive Scale (TTF), a 4-item measurement for forgiveness [15], was adopted to discriminate the degree of forgiveness for further categorizing participants as trust-forgiveness (TF), trust-unforgiveness (TU), mistrust-forgiveness (MF) and mistrust-unforgiveness (MU). Example items are "I tend to get over it quickly when someone hurts my feelings," and "When people wrong me, my approach is just to forgive and forget." Participants indicated the extent to which they agreed with each of the four statements on the TTF on 7-point Likert scales anchored with strongly disagree (1) and strongly agree (7). Items 2 and 3 are reverse scored. Thus, higher scores on the TTF indicate a greater tendency to forgive. Reliability coefficient (Cronbach's alpha) for the TTF was α=0.75.

Ruminative tendencies of anger were assessed by the Dissipation-Rumination Scale (DRS). The DRS is a 20-item, self-report scale used to assess an individual's tendency to ruminate with angry responses towards interpersonal offense [15]. Responses are rated from 0=completely false for me to 5=completely true for me. Items, having correlations with forgivingness greater than 0.40, were excluded from the scale to guarantee that the measurement of angry anger wouldn't be too close to forgiveness, which generated an 8-item "forgivingness-corrected" measurement [7]. Examples of included items are, "I can remember very well the last time I was insulted," and "Sometimes I can't sleep because of a wrong done to me," Example of excluded items include, "When someone offends me, sooner or later I retaliate,"' and "I hold a grudge for a very long time towards people who have offended me." For the translated Chinese version, the scoring was reversed to maintain the consistency with DTS and TTF for comparison. Thus, higher scores represent more rumination of angry thoughts. Reliability coefficient (Cronbach's alpha) for the DRS was α=0.77.

III. RESULT

A. Descriptive Analyses

In the present study, 63% of the participants (N=286) were classified as trust (positive others) and 37% (N=167) were categorized as mistrust (negative others). An independent t-test indicated that males (M=5.54, SD=1.76) exhibit high trust scores than females do (M=4.31, SD=1.61, t=2.73, p<0.01). 65% of the participants (N=294) were classified as forgiveness and 35% (N=159) were categorized as unforgiveness. Higher forgiveness tendency was found in males (M=4.09, SD=1.42) compared with females (M=3.11, SD=1.50, t=2.61, p<0.01). In addition, males did show higher scores (M=4.12, SD=1.43) suggesting more angry rumination than females (M=2.89, SD=1.67, t=2.02, p<0.05).

According to the scores of DTS and TTF, participants were respectively categorized as trust-forgiveness (TF) (44%, N=198), trust-unforgiveness (TU) (19%, N=88), mistrust-forgiveness (MF) (21%, N=96) and mistrust-unforgiveness (MU) (16%, N=71). Compared with participants who are classified as trust (M=4.34, SD=1.54), mistrust participants showed significantly lower score in forgiveness (M=2.09, SD=1.31, t=2.94, p<0.001).

B. Association between trust-forgiveness trait and rumination of anger

As support to our assumptions (see Table I), a strong correlation between trust and forgiveness was indicated (r=0.76, p<0.001). In addition, both trust and forgiveness tends to significantly correlate to rumination of angry thoughts (trust: r=0.56, p<0.01; forgiveness: r=0.63, p<0.01).

TABLE I. CORRELATIONS, RELIABILITY, MEANS AND STANDARD DEVIATIONS FOR TRUST, FORGIVENESS AND RUMINATION OF ANGER

Variable	Trust	Forgiveness	Rumination of Anger
Trust	-		
Forgiveness	0.76 ***	-	
Rumination of Anger	0.56 **	0.63 **	-
Reliability	0.78	0.75	0.77
Mean	4.78	3.51	3.35
SD	1. 66	1.47	1.05

*** p<0.001, ** p<0.01

As shown in Fig. 1, one-way ANOVA revealed no significant difference of the scores of anger ruminative tendency that was found between TU and MF adults (p>0.05), whereas TF participants demonstrated significantly highest scores indicating highest tendency to ruminate with conflicting responses (F = 3.34, p<0.01) compared with the other three groups (TU, MF, MU). Nonetheless, MU participants demonstrated relatively lower ruminative tendency than TU (t=2.01, p<0.05) and MF (t=2.24, p<0.05).
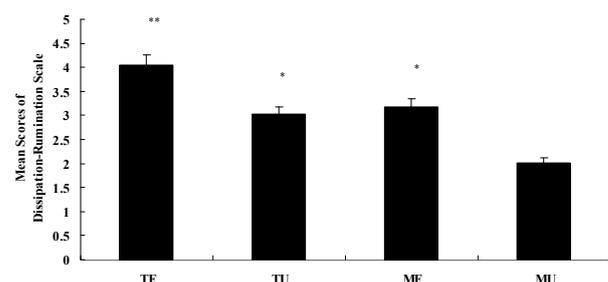

Figure 1. Comparison of the mean scores of Rumination of angry thoughts between TF, TU, MF and MU participants. (* p <0.05, compared with MU; ** p <0.01, compared with TU, MF, MU)

IV. CONCLUSION AND DISCUSSION

The current study indicated the gender difference between male and female both in trust. The research finding that higher tendency of trust found in male participants is

consistent with previous well-conducted studies on trust [17], [18]. One possible explanation for the lower trust tendency of female may be that women tend to be more risk-averse with less positive expectation of beneficial outcome brought by risky actions. Jianakoplos and Bernasek used U.S. sample data to examine household holdings of risky assets to determine whether there is gender difference risk taking and find that single women exhibit significantly more risk aversion than single men [19]. Similar results were found by Sunden and Surette [20].

Meanwhile, for the extent to forgiveness, the male participants revealed a greater tendency compared with the females did in the present study. Shackelford, Buss, and Bennett have indicated the male are more likely to forgive partner's emotional infidelity during a mutual relationship rather than a sexual one [21]. On the contrary, the female are more inclined to terminate the relationship and tend to be more difficult in forgiving the partners due to the emotional infidelity. This suggestion was verified again according to the current findings. On the other hand, previous finding reveal that the woman are more empathic than men but not differ in forgiveness according to Toussaint and Webb [22] whereas empathy is commonly regarded as the foundation of reaching forgiveness. From the view of point, it could be argued that there might be other factor leading to forgiveness but not empathy.

However, 37% of mistrust and 35% of unforgiveness among highly educated college young adults in mainland China are alarming numbers. Loss of trust and less of forgiveness in university students may be a great concern of the local society since the participants represent one of the important power of future social development. Although the unexpected result of the current investigation raised negative views, the importance of exploring the associated trust-forgiveness intergroup relationship has been again emphasized.

For the gender difference in rumination of anger, male participants showed less angry thoughts than female ones did. One may argue that female students report much less angry behaviors than males do during daily life. However, according to Bjorkqvist, Osterman, and Lagerspetz [23], females used more social manipulation anger whereas males use more rational-appearing. This may explain why female participants demonstrated more angry thoughts than male in the current study.

Our preliminary findings demonstrated the higher tendency of forgiveness among the participants who are classified as trust compared with those mistrust, which indicates the evidence of trust linked with forgivingness. Of course, one may argue that the current study has only covered the both sides of trust and mistrust rather than a complete comparison among more relation impact factors such as gratitude, optimism or positive beliefs. However, the core hypothesis of this study is to examine the relationship between trust-forgiveness trait and rumination of anger. According to the findings in the group comparison, TF participants demonstrated the highest ruminative tendency of angry thoughts. Interestingly, TU and MF participants didn't differ in rumination of anger whereas MU participants

indicated the lowest ruminative tendency towards angry, which did support our hypothesis on the ruminative role of trust-forgiveness trait towards anger. Furthermore, the fact that both trust and forgiveness fairly correlate with rumination of angry thoughts also generates some encouraging evidence.

Although some insights into the relationship among young adults have been shed in the present study, a few research limitations still remain. Given that this research only investigated the normal college students in mainland China, future studies for seeking further convincing evidence could be carried out among trans-regional or cross-culture cohorts. Besides, since the scales adopted in the current study is developed based on westerners' belief and culture, the investigation results might be challenged at some extent due to the non-homogeneity in ethnic, cultural and social structural backgrounds.

In conclusion, this study explores the relationship between trust and forgiveness and attempt to examine the trust-forgiveness link. The encouraging research findings have verified our prior hypothesis that trust-forgiveness linked trait will lead to less angry thoughts. The trust-forgiveness linked trait might be an effective ruminator for conflicts among young adults in mainland China. Meanwhile, to propose a convincing research paradigm or to initiate new research territory in interpersonal relationship is the one of the missions of this investigation. However, more work is definitely needed to be done to further clarify the contribution of this particular research field.

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