

The Prevalence of Anger Rumination and its Relationship with Coping Strategies and Assertiveness in Students

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Objectives: The aim of this study was to examine the prevalence of anger rumination and its relationship with coping strategies and assertiveness in students of Mohaghegh Ardebil University. **Methods:** the present research was a descriptive correlational study. The study population consisted of all students enrolled in the academic year 1390-91 (N = 8344). In the first step, to determine the prevalence of anger rumination, 400 students were selected based on multistage cluster sampling method and Sadolwsky's anger rumination questionnaires was completed by students. Next, 100 of these students were selected based on simple random sampling and the Lazarus and Folkman, coping strategies questionnaire, and the Shrink assertiveness questionnaire were administered on them. Data were analyzed by descriptive indicators, Pearson's correlation coefficient and multiple regression analysis. **Results:** The results showed that the prevalence of anger rumination in students of Mohaghegh Ardabil University is 11%. Anger rumination with problem-oriented coping strategies and assertiveness showed a negative and significant correlation while (anger rumination) with emotion-oriented coping strategies showed positive and significant correlation. Also results of multiple regression analysis showed that emotion-oriented coping strategy and assertiveness could predict significantly the student's anger rumination. **Discussion:** Since the identification of different kinds of obsessive and intrusive thoughts is important achieve to desirable control of thoughts, so, investigate of prevalence of anger rumination in order to manage it is valuable. So teaching problem-oriented coping and assertiveness ability as a factor of anger control could reduce the prevalence of anger rumination among students and thereby help to management vicious cycle of aggressive behavior.

Keywords: anger rumination, problem- oriented and emotion- oriented coping strategies, assertiveness

Emotion indicates physical and psychological health. From evolutionary perspective, anger is one of the common emotions and a frequent response to frustration and abuse. While all people are faced annoyance situation during their lifespan.

Although anger is a part of our lives, it keeps us from reaching our goals.

Cause of people are in conflict with anger is this point that anger is human's natural response, on the other hand, anger can disrupt interpersonal relationships and keeps us from reaching our goals (Kleinke, ۲۰۰۴. Quoting khodayarifard, 2007). Anger rumination involved undesirable cognitive processes that appears during the experience of anger and then continues. Anger rumination is comprised of three

distinct processes. There are memories of past experiences of anger, regard present experience of anger counterfactual thoughts against the experience of anger (sukhodolsky and golub and cromwell, 2001).

Conceptualization of anger rumination accomplishes affect social - structural and factorial-analytical patterns. If anger is generally considered as an emotion, anger rumination can be defined as thinking about this emotion. Anger rumination phenomenological involved repeating and automatic experience of moments of anger and fantasy about the revenge. Anger rumination or thinking and mental repetition periods of anger is conceptualized as a multidimensional construct that differentially is associated with expression of anger, negative emotionality, life satisfactory, emotional attention and social trends. It seems that the production and the experience of anger processes intertwined with anger rumination process. These factors could be responsible

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for the escalation and continuation of anger (Sukhodolsky, 2001). Sukhodolsky and colleagues reviewed studies related to anger the literature on ruminative thoughts (Trapnl, 1993) ego-centric attention (Ingram, 1990), emotion regulation (Gross, 1998) and counterfactual thoughts (Roese, 1998) through the transparent structures, the theoretical construct of anger rumination were divided into three processes. Memories of past experience of anger, immediate experiences of anger and counterfactual thoughts about anger (quoting Sukhodolsky et al 2006).

The results suggest that anger rumination is the main prerequisite of aggressive behavior (Charlie et al, 1998, Max-Blackwell, 2004, Sheil et al, 2006).

In some studies the relationship between anger rumination and other disorders are discussed. For example, it has been shown that sleep has a negative impact on the quality of the anger rumination (Karbly et al 2008) and there is a positive correlation between depression and anger rumination (Roth and shanon, 2011) as well as anger rumination has intermediary role between depression and immunity (Ray & Jedlikowski & Hampel & Layton & Wintering 2008).

Since anger rumination according to Sukhodolsky and his colleague's definition (2001) is an inevitable and recurring cognitive process, this definition is very similar to definitions made for obsessive thought. In current research, we used some common cognitive-behavioral methods including distraction and thought-stopping thinking used to reduce obsessive thoughts. The result of Maxwell and his associates study (2004) suggest that active coping strategy or problem-oriented anger controlling moderate aggressive thought. Moreover, scale scores of men in active coping strategy and social support is lower than women's, while men's score in physical aggression and anger rumination are more than women. Active coping strategies are the best strategies for controlling anger and aggression.

Theoretical principles and literature emphasize the distinction between anger and anger rumination (Maxwell and colleagues, 2005). If anger is considered as an emotion, then anger rumination will be considered as thinking about the emotion. Anger rumination is an inevitable and recurring process that appears in the course of anger, and then it goes and continues and is considered as the responsible for increasing and continuing of anger (Sukhodolsky, 2004). People's reaction against psychological problem is not the same, many people are resistant to these pressures and tries to deal with them, some collapse early and will be submitted, some others control it by religious beliefs and some of them leave it to rituals and metaphysical powers. Cognitive theorist's view on the on controlled, evil and aggressive behaviors is that these behaviours are characterized by a range of cognitive-social distortions and poor skills of problem-solving (kazdin, 1994).

Coping strategies are cognitive and behavioral abilities which an anxious person applies to control some special stressful internal and external needs. Aldwin and Revenson (1998) believe that the kind of coping strategy chosen against mental stress, depends on the duration and severity of stress, i.e.; emotional-oriented strategy is negatively associated with mental health and problem-oriented strategy is positively associated with mental health.

Other research results such as those of Maxwell and colleagues (2004) show that active coping strategy or problem-oriented anger control tempers aggressive thoughts. Also research results of Lahsayizade and Golmoradi (2010) suggest that when people use emotional strategies to cope with the problems, they show more aggression in attacking, anger and malice, while other strategies such as rational and avoidance act in reverse. Evidence suggests that negative behaviors such as violence and aggression arises from the lack of skills that are necessary for effective dialogue with peers (Pellegrini, 2003, Ostrov, Pilat, Crick, 2006). Among some important social skills, there is assertiveness which is necessary for enjoying social and behavioral health and, in general, for having successful performance (Shahniyaylaq and Rezaei, 2001, Karayozoglu, 2008). Different research results indicate that there is an inverse relationship between aggression and assertiveness (Ostrove and colleague, 2006). Ashouri and his colleagues (2008) stated that lack of social skills such as assertiveness results in interpersonal aggression.

Thus, taking into account the negative effects of anger, and aggression, anger rumination as a variable that increases the intensity and duration of anger and aggression and underlies many psychological disturbances is necessary. Considering that coping strategies and assertiveness are two important variables associated with anger rumination, the present study seeks to examine the prevalence of anger rumination and its relationship with coping strategies and assertiveness in students.

Method

Study design and participants

The present research is a correlative description. At first stage, in order to identify the degree of anger rumination prevalence, 400 students were selected using multi-stage cluster sampling. After students gave their consent to answer the questions, the anger rumination questionnaires designed by Sukhodolsky were completed in group in the university. In second stage, 100 people were randomly selected and they answered the questions in the questionnaires namely coping strategies scale by Lazarus and Folkman and Assertion questionnaire by Shering.

Instruments

Anger Rumination Scale: This scale is a 19-question test which has been designed by Sukhodolsky (2001) to assess tendency to think about present irritating situation and to remember past irritating experiences. The questions of test related to 4 subscales of Anger Rumination including post-thoughts of anger, spirit of revenge, anger-related memory, recognition of reasons using 4 point Likert scale ranging from score 1 (very little) to score 4 (very much). The test's scoring is in a way that the higher score indicates the more anger rumination. The calculation of scores obtained from the questions of 4 subscales submits the total score of anger rumination. The psychometric features of anger rumination have been proved in researches done all over the world (Sukhodolsky et al., 2001; Maxwell et al., 2005). Sukhodolsky et al. (2001) argued that exploratory factor analysis of 19 questions in the scale can make 54% of whole variance clear. Their research reported 93% Cronbach's Coefficient Alpha for internal consistency of scale and satisfying reliability of posttest ($r = 0.77$) after one month. (Maxwell et al. 2005) reported that the consistency coefficients of subscales in this test were from 0.68 to 0.85. Besharat et al. (2009) pointed that the content validity of anger rumination scale for each subscales such as post-thoughts of anger, spirit of revenge, anger-related memory, recognition of reasons were 0.70, 0.70, 0.82, and 0.70, respectively. In the study done by Maxwell (2008), inner reliability of features follows as: post-thoughts of anger = 0.81, spirit of revenge = 0.73, anger-related memory = 0.75, recognition of reasons = 0.71. In general, all the evidences suggest the high validity and reliability of this scale.

Coping strategies scale: this scale has been created by Lazarus and Folkmen in 1985. It includes 65 items

which measures 8 problem-oriented and emotion-oriented coping methods. This questionnaire involves many strategies namely coping, distancing, self-control, looking for social supports, responsiveness, escape-avoidance, planned solution, and positive reevaluation.

These eightfold patterns have been divided into two methods including problem-oriented (looking for social supports, responsiveness, planned solution, and positive reevaluation) and emotion-oriented (encountering, distancing, escape-avoidance, and self-control) (Lazarus, 1984). Lazarus and Folkmen reported .66 to .79 internal consistency coefficients for each coping strategy. Dejkam (1993) reported .61 to .79 cronbach's alpha coefficient and 0.01 to .39 correlation coefficients.

Assertion questionnaire: This questionnaire has been devised by Shering (1980) for measuring assertion degree. This test is a kind of 5-choice questionnaire including 32 questions and 5 choices have been provided for each item. The scoring of this test is based on Likert scale. This test has been standardized in Iran in 2003 by Sobhi Garamaleki. Correlation coefficient of reliability and posttest was .88. Shering (1980) suggested the reliability of test, through 0.90 Kudar and Richardson alpha coefficient and posttest, to be 0.77. This test is favorable regarding the reliability and it is an appropriate test to measure the degree of dare (Sobhi, 2003).

Regarding this point that the main goal of the current study is to investigate the degree of anger rumination prevalence and its relationship with coping strategies and assertion among the students, in order to analyze the data, Pearson correlation coefficient and multivariate regression were used.

Results

Table 1

Student's frequency distribution, separated by college and sex

college	Girl	boy
humanistic science	18	12
basal science	14	13
technical-engineering	14	8
agricultural	12	9
total	58	42

The rate of anger rumination prevalence among students was 11%.

Table 2

The mean and standard deviation of anger rumination, coping strategies and assertiveness among students

variables	mean	standard deviation
anger rumination	44.36	21.16
problem-oriented strategy	33.50	8.65
emotion-oriented strategy	31.80	8.54
assertiveness	72.96	13.33

As it can be seen in table 2, the mean and standard deviation of anger rumination scores were 44.36, 21.16 respectively and those of problem-oriented strategy were 33.50 and 8.65. Also, the mean and standard

deviation of emotion-oriented strategy scores were 31.80 and 8.54 respectively and those of assertion were 72.96 and 13.33.

Table 3*The matrix of variables correlation*

variables	anger rumination	problem-oriented strategy	emotion-oriented strategy
anger rumination	-	-	-
problem-oriented strategy	-0.255	-	-
emotion-oriented strategy	0.513	0.365	-
assertiveness	-0.828	0.249	-0.427

As it can be observed in table 3, there is no significant relationship between problem-oriented strategy and anger rumination. On the other hand, there is a positive relationship between emotion-oriented strategy and anger rumination ($p < 0.01$). Also, there is a negative relationship between assertion and anger rumination ($p < 0.01$). There is a positive relationship between problem-oriented strategy and assertion ($p < 0.05$). There is a negative

relationship between assertion and emotion-oriented strategy ($p < 0.01$).

Table 4*The results of the ANOVA table for a meaningful assessment of the entire model*

model	SS	df
regression	14200.176	3
remainder	48051.04	46
total	19005.280	49

Table 5*The result of regression analysis for prediction of anger rumination based on variables of problem-oriented and emotion-oriented coping strategy and assertiveness among students of both sex Variance analysis*

model	nonStd. coefficient	Std. coefficient	T	Sig.
	B	Std.error Beta		
constant	84.281	11.353	7.423	0.001
pr-or strategy	-0.417	0.179	-2.329	0.024
em-or strategy	0.762	0.233	3.363	0.002
assertiveness	-0.811	0.201	-6.850	0.001

As it can be observed in table 4,5, To determine the effect of problem-oriented and emotion-oriented coping strategies as predictive variables as well as anger rumination as criterion variable, the regression equation was used and the results indicated that 0.74 of anger rumination variance is made clear by features such as problem-oriented and emotion-oriented coping strategies and assertion. As it can be seen, the assertion and problem-oriented coping strategy can make anger rumination negatively clear ($p < 0.05$) whereas emotion-oriented coping strategy makes anger rumination positively clear ($p < 0.01$).

Discussion

The goal of this research is to examine degree of anger rumination prevalence and its relationship with coping strategies and the assertion among students. The findings obtained from the research showed that degree of anger rumination prevalence among students was 11%. This point suggests that anger rumination is relatively common among the students and some measurements must be taken to reduce this problem regarding hygienic policies since anger rumination is related to a wide range of mental disorders. Also there is a significant negative relationship between anger

rumination and problem-oriented coping strategies but there is a significant positive relationship between anger rumination and excitement-oriented coping strategies ($p < 0.05$). These findings echo those of Maxwell et al. (2004), LahsaiZadeh and GolMoradi (2010), and Taft (1957). Chatri and Kubasa (2009) believe that in problem-solving strategy, the involved faces the problem intellectually and focus on the management of the problems resulting from quarrelling and try to replace quarrel with other sources (as stated in LahsaiZadeh and GolMoradi, 2010). Consequently, mental pressures due to that problem are decreased and individuals face the problem using the rational strategies and notice that there is no need to have a violent action. On the other hand, when people apply tense behavior to face the difficulties, they show more anger rumination in offence, anger, and vengeance because they act irrationally without investigating the sources while they are too excited and emotional.

Also the results obtained from the present results indicated that there is a significant negative relationship between anger rumination and assertion ($p < 0.05$). this finding is consistent with the results of researches done by Pellegirini (2003), Strof et al. (2006), and Ashuri et al. (2008). It can be explained

that since asserted people place a value for themselves and consider themselves as valuable and accepted in society and rely on themselves in interpersonal relationship and enjoy safe personality as well, they can establish intimate and satisfying relationship with other people and achieve their own needs favorably and their behavior is admired in society so that the anger rumination happens to a lesser degree. The efficient communicative strategy expresses the ideas clearly (Pellegirini, 2003; Strof et al., 2006; and Ashuri et al., 2008).

The results of this study and related literature prove the relationship between coping strategies and assertion, as well as anger rumination among students. Therefore, the presentation of educational programs and consulting services are suggested to inform about the importance of assertion and coping strategies and how to achieve them. In addition, it must be noted that since anger excitement and its rumination is so common and lack of efficient control of anger rumination can have negative consequences on individuals and other people, it must be considered separately. The limitations of present study was that the data collection was based on self-reported scales and these reports can be influenced by unconscious defenses, biased responses, personality introduction methods so that the results must be carefully generalized. On the other hand, there was no published study in this area, for this reason we didn't have another comparative reference for more efficient discussion.

References

- Ashori, A., Torkaman, M., Fadaie, Z. (2008). Effectiveness of group therapy focused on assertiveness in reducing aggression and improving academic achievement in high school students, *Journal of Psychiatry and Clinical Psychology*, 4, 393-389.
- Aldwin, C.M., & Revenson, T.A. (1988). "A Reexamination of the Relation Between coping and Mental Health ". *Journal of Personality and Social Psychology*, 53, 337-348.
- Basharat, M, & MohamadMehr, R. (2008). Evaluation of the anger rumination scale features psychometrics, the science. *Journal-Nursing and Midwifery Research*, 65, 36-43.
- Karayozogly, L., Kahve, E., & Adamisoglu , D. (2008). Self-esteem and assertiveness of final year Turkish university student. *Nurse Education Today*, 28(5), 641-649.
- KhodayariFard, M., Ghulam Ali Lavasani, M., Akbari Zrdkhaneh, s., Liyaghat, S., & Mmqaniyeh, M. (2007). *Investigation Characteristics Psychometrics and standardization of trait anger in ventory tool-mode 2 Spielberger among students of Tehran University*. Research Initiative.
- Lahsaiezade, A., & Moradi, G. (2010). Relationship between coping strategies and aggressive behavior of youth, a case study in West Islamabad. *Journal of Applied Sociology*, 38, 1389.
- Maxwell, J.P. (2004). Anger rumination: An antecedent of athlete aggression? *Psychology of Sport and Exercise*, 5, 279-289.
- Maxwell, J.P., Sukhodolsky, D.G., Chow, C.C.F., & Wong, C.F.C. (2005). Anger rumination in Hong Kong and Great Britain: Validation of the scale and a cross-cultural comparison. *Personality and Individual Differences*, 39, 1147-1157.
- Ostrov, J.M., Pilat, M.M., & Crick. N.R. (2006). Assretion Strategies and aggression during early childhood: A short-term longitudinal study. *Early childhood Research Quarterly*, 21,403-416.
- Pellegrini, A.D. (2003). Perceptions and functions of play and real in early adolescence. *Child Development*, 76.1522-1533.
- Rathus, J.H., Cavuoto, N., & Passarelli, V. (2006). Dialectical behavior therapy for intimate partner violence. In R. A. Baer (Ed.), *Mindfulness-based treatment approaches* (pp. 333–354). Boston: Academic Press.
- Rye, M.S., Pan, W., Jedlikowski, K., Hampel, L.J., Layton, A.J., & Wintering, M.L. (2008). Exploring mediators of the relationship between forgiveness and depression.
- Spielberger, C. & London, P. (1982). Rag Boomerangs. A day to preventing coronaries is emerging: Learn to handle anger and avoid seven deadly responses. *American Health*•1.
- Sukhodolsky, D.G., Golub, A., & Cromwell, E.N. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences*, 31,689-700.
- ShahniYeilagh, M., & Rezayi, A. (2000). *Assertiveness Training: How to be the one that you really are?* Shahid chamran university.

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