

THE RELATIONSHIP BETWEEN DEMOGRAPHIC CHARACTERISTICS AND ANGER RUMINATION AMONG THE STUDENTS OF SCHOOL OF NURSING AND MIDWIFERY

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ABSTRACT

Introduction: Anger rumination is an iterative and inevitable process that, in different situations and occasions, leads the individual towards relatively fixed patterns of thoughts and behaviors. The relationship between demographic characteristics and anger rumination in the students of the School of Nursing and Midwifery, was surveyed.

Methodology: The study was carried out as a descriptive-analytical work and study population was comprised of the students of the School of Nursing and Midwifery, Tehran Shahid Beheshti University. The participants (n=210) were selected randomly. Data gathering tool was a questionnaire with two sections: one section was about demographics and another one was about anger rumination. The questionnaire was filled by the participants and the collected data was analysed in SPSS (v.18) using statistical tests.

Findings: Mean age of the participants was 20.93 ± 3.20 years and mean general score of anger rumination was 40.92 ± 9.36 .

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Smoking and economic condition were significantly related to anger rumination. Most of the demographical variables had not significant relationship with anger rumination.

Discussion: As indicated by the findings, smoking and economic condition were significantly related to anger rumination. Educations about the skills of controlling anger and anger rumination should be a priority for the authorities of university.

Keywords: anger rumination, anger, demographic characteristics

INTRODUCTION

Anger rumination is a cognitive, inevitable, and iterative process that appears when one experiences anger. It leads the individual toward a relatively fixed pattern of thoughts and behaviors in different situations and occasions [1]. In other words, anger rumination is a style of thought rumination that happens automatically and iteratively after experiencing anger. Those who ruminate anger tend to experience anger as a mental image with all aggressive details of revenge [2]. Aggressive individuals utilize anger to regulate their negative affection. Therefore, aggressive behaviors affects modification of special traits. That is, anger rumination is a way to regulate emotions and also a cause of provoking anger [3]. Anger rumination, in some people, coincides with an increase in aggression and it is an attempt to regulate negative affection. In general, cognitive regulation of emotion is defined as a set of internal and external processes that are in charge of reviewing, evaluating, and adjusting emotional reactions [4]. The contents of anger rumination include avenging the cause of anger, critical review of the situation, and probability of aggressive impulses that decreases the chance of forgiving. Since anger rumination happens with hatred and unwanted thoughts, it entails three emotion self-regulating processes including managing the severity of demonstrating anger, controlling the desire for aggressive measures, and suppression of thoughts [5].

Although, anger is a natural and even useful emotion, it is not free of risk. It may lead to problems at work, in personal relationships, and in the quality of life, when it is beyond control and destructive [6]. The destructive consequences of anger affect the individual and those around them. Anger is a serious concern in any society as, in many cases, it leads to behaviors that negatively affects national economy. In addition, anger is correlated with severity of depression, cocaine and alcohol abuse, and attempting suicide [7]. Despite deep cultural changes in life style in the modern age, many individuals are not equipped with main and essential skills to face with life issues. Consequently, this group of people are more vulnerable in the face of daily life problems and requirements. Students are a major national

capital and one of the key social classes. In addition, they are mostly in the age range of experiencing a great deal of emotions [7]. Anger control skills in students can be effective on achieving better educational performance and development of better and more proper relationship with family and society. With such skills, the students have more chance to adopt a reliable approach to their lives [8]. Aggressive behaviors in girls lead to a variety of negative responses by peers, instructors, and teachers including social rejection. It is also correlated with poor educational performance, drug abuse, and sense of guilt [9]. On the other hand, entering university environment is a source of many educational, financial, communicational, social, and family stressors [10]. In the face of these hardships, students may be challenged with failure, conflicts, pressures, and stresses that trigger a range of physical and psychological reactions [11]. One of the key factors in educational performance and mental health of students is their emotional responses to stress sources and approaches to regulate them [12]. Findings of studies have shown that programming and emotional regulations have a positive relationship with educational performance [13].

Studies have also reported a negative and significant correlation among anger, hatred, and all aspects of concentration. In addition, anger rumination is significantly and positively related to anger and aggression. Anistis et al. studied a group of students in Florida and showed that anger rumination is a predictor of physical/verbal aggression and hostility [14]. Individuals with a tendency to anger rumination enjoy less social support and are at a higher risk of cardiovascular diseases and high systolic blood pressure [15, 16]. Many studies have reported that anger rumination is related to depression and fear of separation, which are consequently related to anxiety [17, 18]. Taking into account the importance of the topic, specially in students, that may affect one's balance of life and consequently educational performance, not to mention many other problems, the present study is an attempt to survey the relationship between demographical specifications and the level of anger rumination in the students of School of Nursing and Midwifery, Tehran Shahid Beheshti University in 2016.

METHODOLOGY

A descriptive-analytical study was carried with a study population of all the graduate and post-graduate students in the School of Nursing and Midwifery, Tehran Shahid Beheshti University in 2016. Using simple random sampling method, 210 students were selected. Data gathering was done using a questionnaire with two sections; one about demographics and another about anger rumination. Demographical information consisted of age, gender, education, marital status, economic condition, and smoking habit.

Anger rumination scale (ARS): The scale was introduced Suchodolski et al. to measure the tendency to think about anger provoking situations past and present. The scale is comprised of 18 items and four factors of anger post-thought (after a quarrel, I continue the quarrel in my head), memories of anger (I keep thinking about how I have been treated unjustly), revenge thoughts (after a quarrel, there are scenarios of avenging in my mind), and understanding the causes (I keep thinking why I am being mistreated.) The items are scored based Likert's four-point score (1= never,..., 4 = always). The score of "anger post-thought" ranges from six to 42 and the higher the score, the higher the anger post-thought. The score of "revenge thoughts" and "understanding the causes" ranges from four to 28 and the higher the score the more the revenge thoughts and longer time spend on understanding the causes. The score of "memories of anger" ranges from five to 35 and the higher the score, the more the memories of anger. In addition, the higher the total score, the higher the level anger rumination. Suchodolski et al. calculated Cronbach alpha for anger post-thought (0.86), revenge thoughts (0.72), memories of anger (0.85), understanding the causes (0.77), and the whole scale (0.93) [19]. Besharat et al. (2014) obtained Cronbach alpha for anger rumination (anger score), anger post-thoughts, revenge thoughts, memories of anger, and understanding the causes equal to 0.95, 0.89, 0.83, 0.87, and 0.78 respectively; which indicate a good correlation of the scale. Correlation coefficients (R) in a group of 214 participants who filled out the scale in 4-6 weeks interval for anger rumination, anger post-thoughts, revenge thoughts, memories of anger, and understanding the causes were 0.77, 0.79, 0.83, 0.81, and 0.74 respectively ($p=0.01$). Thereby, the scale is acceptable in terms reliability and test-retest score [20]. To determine content validity of the scale, it was provided to 10 university professors and the feedbacks were used to modify the scale. To test reliability of the scale, a pilot test with 15 students was performed and Cronbach alpha was obtained equal to 0.75. The collected data was analysed in SPSS (v.18) using Square Chi test, independent t-test, and Pearson correlation.

FINDINGS

Totally, 210 students of the School of Nursing and Midwifery, Tehran Shahid Beheshti University took part in the study. Mean age of the participants was 20.93 ± 3.20 years; in terms of gender, 59% were male and 40% were female. Moreover, 9% of the participants were married. The majority of the participants were in nursing, midwifery, surgery room, and anaesthesia fields; nursing students were the majority and surgery room and anaesthesia were the minority. The majority of students were in bachelors' program (91.9%) and 8.1% were in

masters' program. Additionally, 94.8% lived with their parents; and 98.1% had no physical disease; and 99% of the participants had no mental problems (Table 1).

Table 1. Demographics of the participants

Variables	Frequency
Gender	
M	125(59.8)
F	85(40.5)
Field	
Nursing	169(80.5)
Midwifery	19(9)
Surgery room	11(5.2)
Aneasthesia	11(5.2)
Employment	
Unemployed	169(80.5)
Employed in related field	33(15.7)
Employed in unrelated field	8(3.8)
Spouse's education	
Junior high school	1(5.2)
High school	2(10.5)
Bachelors' degree	11(57.9)
Masters' degree	5(26.4)
Monthly income	
Adequate	165(78.6)
Inadequate	45(21.4)
Religion	
Shia	183(87.7)
Sonni	24(11.4)
Others	1(0.5)
Smoking	
Positive	28(13.3)
Negative	182(86.7)
Job satisfaction	

Positive	151(71.9)
Negative	59(28.1)

Mean score and standard deviation of total anger rumination was 40.93 ± 9.36 . The relationship between demographical variables and anger rumination was examined by Pearson correlation and independent t-test. Among the variables under study, smoking ($p=0.001$) and economic condition ($p=0.030$) had a significant relationship with anger rumination. Moreover, anger rumination was not significantly related with age, gender, education level, field of study, marital status, employment, satisfaction with the field of study, history of mental/physical disease, and spouse's education/job (Table 2).

Table 2. The relationship between demographical variables and anger rumination

Variable	Mean \pm SD	P-value
Gender		0.742
M	40.75 \pm 9.28	
F	41.2 \pm 10.17	
Field		0.482
Nursing	41.07 \pm 9.65	
Midwifery	39.35 \pm 9.61	
Surgery room		0.129
Aneasthesia	40.27 \pm 9.50	
Employment	41.63 \pm 11.17	
Unemployed	45.64 \pm 8.53	
Employed in related field	45.18 \pm 8.62	
Employed in unrelated field		0.459
Spouse's education	41.09 \pm 9.62	
Junior high school	39.37 \pm 9.83	
High school		0.848
Bachelors' degree	41.09 \pm 10.51	
Masters' degree	41.88 \pm 9.43	
Monthly income		0.098
Adequate	40.25 \pm 9.41	

Inadequate	42.70±10.06	
Religion		0.082
Shia	40.43±9.55	
Sonni	44.08±10.19	
Others		0.030
Smoking	40.18±9.06	
Positive	43.69±11.16	
Negative		0.001
Job satisfaction	47.29±8.70	
Positive	39.96±9.41	

DISCUSSION

The mean score of anger rumination in the participants was 40.93 ± 9.36 , which is a relatively high score and indicates a high level of anger rumination among the subjects. Anger rumination was significantly related to smoking, average work hours per day, and economic condition. Moreover, anger rumination was not significantly related to age, gender, education level, and marital status.

Anger is a serious concern in the society as in many cases it leads to anti-society and aggressive behaviors. It is correlated with severity of depression, cocaine/alcohol abuse, drug abuse, and attempting suicide, all of which mean notable financial burden for the society [21-23]. In a review study, Archer et al. reported that anger was not significantly related to gender [34]. Atkinson and Hilgard showed that anger emotion is different between men and women and it is more common in men; which is inconsistent with the findings in this study [25]. Authors in [26] reported that women had more tendency to anger rumination than men. There might be several reasons for the difference in anger rumination based on gender. For instance, we know that women feel a higher level of stress than men for, such as, low income level and dissatisfaction with marriage. Gender-based differences in the chronic stress experience might have a role to play in demonstration of gender-based differences in anger rumination. Moreover, women are at higher risk of traumatic incidents such as sexual abuse [27].

Among the variables under study, smoking, average work hours per day, and economic condition had a significant relationship with anger rumination. In the case of age, gender, educational program, and marital status, the relationship was not significant. Students are a valuable social capital and they are generally at the age range where anger and similar

emotions are more common [28]. Anger control skills in students can be translated into higher educational achievements and better relationship with family and society. With such skills, students have more chance to find a more constructive path in their lives [29].

Some people rely on smoking as way to handle their negative feelings and moods such as anger, anxiety, depression, and encountering stressors [30]. Smokers tend to smoke more in the face of stress, anger, anxiety, or sadness [31] and hope that smoking may attenuate such negative emotions. Many smokers state that smoking decreases stresses and pacifies them so that without it they experience stress and anxiety. They believe that smoking calms them when they are angry or sad and it is considered as a joyful activity; of course, such claims are not supported by scientific facts. Authors argue that smokers might naturally be neurotic and the stress they feel can be due to nicotine dependency [32]. Studies have also confirmed that smoking cannot reduce stress and anger and what is experienced by smokers should be due to their dependence on nicotine rather than actual life stresses and tensions. Thereby and despite the belief that smoking controls one's mood, it increases stress, restlessness, and depression through creating nicotine dependency. Mood change happens while smoking or when the body is deprived from nicotine for a while so that smokers need nicotine to have normal feeling [33]. Thereby, smokers need to be educated to rely on actually effective solutions, rather than smoking, to avoid stress of anger. Several studies have indicated an association between smoking and different stresses such as child abuse, negative childhood experiences, divorced parents, life events, and acute and chronic stresses [34, 35]. There are evidences suggesting that people who experience a variety of stresses are at higher risk of developing smoking habits. Moreover, studies have indicated that stress proceeds smoking not the other way around [36]. Loyd and Lucas studied school students in the UK and reported that the lowest level of stress was in the non-smokers followed by occasional smokers and heavy smokers; the latter had the highest level of stress [37]. If smoking increases stress, quitting it should decrease stress; this is supported by many studies [38-40]; Cary et al. found a significant decrease of stress in the individuals who had successfully quitted smoking [41].

CONCLUSION

The results showed that anger rumination was significantly related to smoking, average work hours per day, and economic condition. Mean score of anger rumination in the subject was 40.93 ± 9.36 , which was high. Students are the future of a society and such problems that negatively affect one' life balance and educational performance should be properly managed

for students. Paying more attention to such problems in students by holding educational classes and workshops can be helpful for attenuating the problems.

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CONFLICT OF INTEREST

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