

Relation of Alexithymia, Anger and Binge Eating Behavior

Ji Yon Eom¹, Mee-Kyung Shin²

¹*Kyungil University, Department of Nursing*

²*Korea Nazarene University, Department of Nursing*

²*Corresponding author E-mail: splash92@hanmail.net*

Abstract

Purpose: Purpose of this descriptive research is to examine the correlation of alexithymia, anger and binge eating behavior of university students to prepare the basic data to develop nursing intervention which could be helpful to control anger and binge eating behavior. Method: Study subjects were targeting 412 university students and the correlation between alexithymia, anger and binge eating behavior was analyzed using Pearson's Correlation. Results: Alexithymia, anger and binge eating behavior showed significant correlation. Higher the alexithymia is so higher was anger and binge eating behavior. So we must develop nursing intervention for alexithymia.

Keywords: *Alexithymia, Anger, Binge eating behavior*

1. Introduction

Alexithymia means 'not being able to express through language one's emotions' in Greek. The term was first used by Sifneos [1]. Alexithymia is known to have as its cause a defect in the ability to bring mental imaging capabilities [2]. Sifneos, who had defined the characteristics of alexithymia in previous years, inducted this concept as a theoretical model with Nemiah [3,4]. It was generally stated in the theory that people, who carry alexithymic characteristics, have difficulties in understanding and ordering their emotions. These difficulties can be summarized as not being able to name, express and dissociate emotions and living without being aware of them. Especially alexithymic characteristics attract attention as an important risk factor of as psychosomatic disorders and affective disorders [5]. Other than this, alexithymia was seen in much research on specific subjects such as eating disorders, panic disorder, social phobia, conversion and drug addiction [6-10]. One of the most difficult feelings to express in the daily life is anger. Anger can be classified as trait anger or state anger. Trait anger is a usual temperament wherein one experiences anger frequently at different intensities, whereas state anger is the degree of anger a person experiences at a specific time [11]. Anger can be reduced by forgiveness [12], the appropriate expression of anger, and by balanced thought [13]. But if anger is not controlled or not expressed it was notified in the research that is related to many psycho-physiological problems. Some evidence suggests that hostile persons who inhibit their anger expression are more likely to develop significant coronary atherosclerosis than hostile individuals who express their anger [14]. The analyze of the results from a study [15], that investigated the case of 411 adolescents, showed that teenagers high in anger suppression reported consuming alcohol more frequently, spending fewer hours per week in aerobic activity, and being less physically active than their peers. Another study [16] confirm the higher propensity to anger in patients with bulimia nervosa, the more having difficulties in expressing anger and outward-directed aggressiveness. When people try to express their anger, they can prefer to abnegate or repress it, with the fear that they will not be able to control it or they will ruin their relations. As for that the feelings are restricted to be expressed verbally, emotional expressions arise as psychosomatic symptoms and some physiological reactions become a means of dumb communication

[17]. Because the expression of anger is often viewed by families, cultures, and religions as harmful, anger is routinely suppressed or displaced, particularly among girls and women. Thus, although anger is normal and often adaptive, it is routinely conflicted with guilt, shame, and fear, and the resulting suppression of anger appears to contribute to chronic stress and physical symptoms like bulimia. Especially from the Korean cultural perspective, it is similar to placing the group's interest ahead of individual interest and placing more value on the harmony with society and family rather than expressing one's own emotions. In particular, it is similar to the Confucian culture where exposing the family conflict to the outside world is considered embarrassing. This makes Koreans reluctant to express their emotions in words [18]. Previous data indicate a higher prevalence of alexithymic characteristics in patients with eating disorder, such as anorexia [19] or binge-eating disorder [20]. And eating disorder symptoms are more common in alexithymic adolescents [21]. Alexithymia was more highly correlated with binge eating than with either anorexia or bulimia in women [22]. So in many cases alexithymia is suspected to lead to negative emotional states and physiological problems. But studies using university students as subjects on these themes are lacking. As such, this study seeks to analyze the correlation between alexithymia, anger and binge eating behavior that may be caused as a result to provide basic data for the development of intermediary programs for health management in university students.

2. Purpose of this Study

Purpose of this study is to identify the correlation of alexithymia , anger, binge eating behavior to prepare for the basic data to develop nursing intervention which could be helpful to control anger and binge eating behavior in university student.

3. Study Method

3.1. Study Design

This study is a descriptive research to identify the correlation of alexithymia and anger, binge eating behavior in the university student.

3.2. Study Subject

Study subjects were targeting on the university students in Korea and the research subjects were casted by explaining the study purpose to data collection assistant student and 412 students who understood and agreed to the research participated in the experiment.

3.3. Data Collection Period and Method

In this study, data were collected from 2015 March to 2015 June and questions were asked to study subjects and small gifts were presented for the survey. Followings are the explanation of the study tools of the survey.

Alexithymia

The degree of difficulty one experiences in verifying her emotions and expressing them was measured using the Korean version of the BVAQ questionnaire. This was developed by Vorst and Bermond [23] and the official title is Bermond Vosrt Alexithymia Questionnaire (BVAQ). It was translated by Yunhee Lee [24]. It consists of a total of 40 questions measured on a scale of 0 to 4 points. The sub-categories are difficulty in verbally expressing one's emotional state (difficulty with emotional expression), difficulty in verifying emotional characteristics, difficulty in emotional analysis, difficulty

in experiencing imagination and difficulty in experiencing emotions. In this study, only 16 questions for the difficulty in verifying emotions and difficulty in expressing emotions were used. Scores ranged from 0 to 64, with the higher scores indicating a more severe state of alexithymia.

State Anger

Based on the State-Trait Anger Scale developed by Spielberger et al. [25]. The Korean version was translated and reverse-translated by Chon et al. [26]. This tool consists of a four-point scale. From this scale, the 10 questions on state anger were used for measurement. State anger measures the intensity of angry feelings. Scores ranged from 0 to 30, with higher scores indicating a higher state anger.

Binge Eating Behavior

Binge eating behavior was assessed using the Bulimia Test-Revised (BULIT-R) by Thelen et al. [27]. This test has 28 items and a 5-point Likert scale. Binge eating behavior was operationally defined as a total score ≥ 121 and the tendency for binge eating behavior by a total score ≥ 88 .

3.4 Data Analysis Method

Collected data was analyzed using SPSS 18.0. General characteristics of the subjects were analyzed with average, standard deviation and percentage. Correlation between alexithymia and anger was analyzed using Pearson’s Correlation.

4. Result

4.1 General Characteristics of Study Subjects and Average of Major Variables

Average age of study subjects was 20 years old and mostly (76%) female students.

The grades were distributed in four grades mostly equally. 80% of subject answered to the question of subjective health as moderate to good. Non-smokers were 88% and 67% of subject drink. Average of alexithymia was 46.66(± 7.20) points and average of anger and binge eating behavior was 10.65(± 5.79) points and 116.26(± 159.74) points (Table 1) .

Table 1. General Characteristics of Study Subjects and Average of Major Variables

N=412						
Variable	Category	N	%	M	SD	Min Max
Grade	1 st	107	26.00			
	2 nd	89	24.20			
	3 rd	100	24.20			
	4 th	116	28.20			
Gender	Male	99	24.00			
	Female	313	76.00			
Age				20.80	2.68	
Smoking	Never smoked	359	88.8			
	Have smoked but currently not	13	3.2			

		smoking			
	Sometimes smoking	32	8.5		
	No	110	27.2		
	Yes	272	67.3		
Drinking	Previously drinking, but not currently drinking	22	5.4		
	Good	136	33.7		
Subjective Health state	Moderate	219	54.3		
	Bad	49	12		
Alexithymia				46.7	7.20
Anger				10.5	5.79
Binge eating				116.26	159.74
				0	64
				0	30

4.2 Correlation between Alexithymia, Anger and Binge Eating Behavior

Alexithymia, anger and binge eating behavior showed significant correlation like Table 2.

Table 2. Correlation between Alexithymia, Anger and binge Eating Behavior

	N=412		
	Alexithymia	Anger	Binge eating behavior
Alexithymia	1	.995	.728
Anger		1	.725
Binge eating behavior			1
p-value		p < .01	p < .01

5. Discussion

The term “Alexithymia(a=lack, lexis=word, thymos=emotion)” was synthesized from Greek words to refer to a disorder concerning recognizing or verbally expressing emotions. The concept was first introduced in the 1970s by Nemiah and Sifneos [28] who defined ‘ it as a cognitive-emotional disorder’ that affects the way one experiences and expresses emotions. The characteristics can be summarized as follows. First, difficulty in distinguishing subjective emotions and expressing them; second, difficulty in sensing the different emotions; and third, limited imaginal capacities. Those with severe alexithymia get bored or show simple emotions, tend to obsess over physical symptoms, express

themselves through behavior or non-verbal acts, are prone to collapse in stressful situations and have difficulty in imagining things [29].

Most studies see it as a risk factor for mental disorders such as depression, physical expression disorder, eating disorders or substance-related disorders [30, 31]. In this study, alexithymia was measured using the Bermond Vosrt Alexithymia Questionnaire for difficulty in verifying emotions and difficulty in expressing emotions. For a full score of 64 points, the average was 46.66 points. This indicates that alexithymia of university students is high. Those with higher degree of alexithymia, according to preceding studies, tend to have negative emotions. It was stated in the research made with the participation of university students by Berenbaum and Irvin [32] that the group with high alexithymic point, experiences more anger, expresses it with less non-verbally than the group with lower alexithymic point and avoid encountering interpersonal coincidences. Polk and Liss [33] reported an association between self-harm by psychology students seeking online help, and components of alexithymia, specifically difficulties in identifying and expressing feelings. This study analyzed the correlation between alexithymia, anger and binge eating behavior and there was a positive correlation ($r=0.995$, $p<.01$ / $r=0.728$, $p<.01$). This means those with high alexithymia have high degree of anger and higher level of binge eating behavior. The state anger average was 10.5(range: 0~30). State anger is considered as an episode of anger occurring at a specified time, and trait anger is considered as an aspect of personality. While anger is a natural emotion, when it is suppressed and not expressed healthily, it turns inwards, leading to negative emotions such as a sense of guilt, depression or despair. Cautin et al. [34] noted that internalized anger leads to depression and despair, while externalized anger is associated with alcoholism. Giegling et al. [35] reported that anger is correlated with suicidal attempts. Anger is the most potential response of emotions that trigger a desire to retaliate and thus is an important factor that mediates tension and crime [36]. As such, anger is a common, complex emotion that may be associated with health and illness. But alexithymia leads to higher anger state if the person can't express his emotions, thinking or negative emotions. Specifically who has difficulty in expressing anger properly, it can go beyond personal issues and become social issues. According to a study by Pennebaker, Kiecolt-Glaser, & Glaser, [37] and Watson & Pennebaker [38] in the suppression of emotional expression and alexithymia, the suppression of such emotions can be a bigger problem than the negative emotions themselves. And suppressed anger can lead somatic problems. A series of studies by Burns and colleagues indicate that purposely inducing anger and then experimentally suppressing it decreases pain tolerance in healthy people and increases pain ratings in people with low back pain [39, 40]. And according to the Gulec et al.'s [41] study correlation between trait anger and severity of illness suggests that anger management is important in the treatment of patients with psoriasis. With a strong Confucianist culture, Koreans still have the idea that saving face and not telling what one really thinks is a virtue, which often leads to improper communication processes [42]. That is, they cannot talk about what they really think unless they seek the help of alcohol. Overcoming such social prejudice and training on self-expression and communication skills are needed. So we must develop nursing management of expressing negative emotions to reduce alexithymia.

In this study the average score of binge eating behavior was 116.26 points(total score ≥ 88), this means the students of this study have the tendency for binge eating behavior. In some previous studies an association between alexithymia and lower educational level was found [43][44]. But this study shows students in high educational level are also in the risk of binge eating. So we must aware of this result and search the factors affecting binge eating behavior. In this study some relating factors of binge eating behavior were anger and alexithymia. Anger and hostility might be personality traits that predate the onset of the disorder and correlate with impulse dyscontrol, a feature of bulimic psychopathology [45][46]. Among adults, alexithymia has been related to lower self-esteem, greater

depressive symptoms, more severe binge eating, presence of binge eating behavior [47], and more frequent emotional eating [48]. Binge eating behavior -subjects show a more negative pattern of everyday emotions, higher alexithymia scores and the strongest desire to eat, especially if emotions are linked to interpersonal aspects. The emotion most often reported preceding a binge was anger. Feelings of loneliness, disgust, exhaustion or shame lead to binge eating behaviour with the highest probability [49]. Like this anger is related with binge eating behavior and not expressed anger is more affective factor to binge eating disorder. Negative mood often precedes binge eating episodes [50], though binge eating seems not to be very effective in reducing it [51]. In conclusion we must develop nursing intervention for alexithymia which can lead to higher anger state and binge eating behavior.

The above results found in this descriptive study related to alexithymia, anger and binge eating behavior need to be further examined in future studies. It is unclear whether the variables studied precede the onset of alexithymia, are maintaining factors, or are consequences of the disorder. Without prospective, longitudinal randomized studies, conclusions about the sequence of the assessed factors cannot be drawn. In addition, future studies should address the limitations such as convenient sample and self-reported diagnosis. A supportive approach to decrease alexithymia such as relaxation training or group intervention to improve one's feeling should be applied. Future research should clarify the factors of alexithymia to develop nursing intervention.

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Authors

Shin Mee-Kyung. Associate professor of Korea Nazarene University, Department of Nursing.

Eom Ji Yon. Assistant professor, Kyungil University, Department of Nursing