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The Role of Emotion Regulation, Family Function, and Sex Differences in Early Adulthood Anxiety

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ABSTRACT

Anxiety becomes one of the most common disorders in the world and the early adulthood phase becomes anxiety-prone because of all the demands and stressful conditions. In addition, anxiety also involves complex biological, psychological, and socio-cultural phenomena. This cross-sectional study examined the role of emotion regulation, family function, and sex differences in early adulthood anxiety. The study used convenience sampling technique and involved 222 participants (20.27% of male and 79.73% of female) aged between 18 to 30 years ($M=24.9$, $SD=3$) were assessed with State-Trait Anxiety Inventory (STAI), Emotion Regulation Questionnaire (ERQ), and Family Assessment Device (FAD). Data analysis used ANCOVA and multiple regression. The results suggest that emotion regulation, family functioning, and sex differences simultaneously play a significant role in anxiety ($p=0.000$). Emotion regulation, family function, as well as sex differences, partially indicated a significant role in anxiety ($p=0.018$, $p=0.000$, $p=0.008$). Therefore, enhancing emotion regulation ability and strengthening family function can be one way to prevent or minimize the likelihood of anxiety.

Keywords: *anxiety, emotion regulation, family function, sex differences*

INTRODUCTION

Anxiety disorder is one of the most common mental disorders in the world and causes many disadvantages to health and productivity. The World Health Organization (WHO) (2017) estimates that more than 264 million people or 3.6 percent of the world's total population are suffering from anxiety disorders. Asian countries are reported to have high rates of anxiety disorders. The prevalence of anxiety in South Asia is at 25.8% (Naveed et al., 2020). The study cited that the prevalence of anxiety in Japan and China was 25% and 24.47% (X. Guo et al., 2016; Muramatsu et al., 2021). In the South-East Asia region, anxiety disorders reach 60.05 million, or about 23% of the total case globally (World Health Organization, 2017). Anxiety disorder becomes one of the most common mental disorders in Malaysia, its prevalence ranges from 1% to 67% (Khayiom, Mukhtar, & Oei, 2021). In Indonesia, The Institute for Health Metrics and Evaluation surveys in 2017 show that anxiety disorders are the second-largest mental health problem in Indonesia after depression (Pusat Data dan Informasi Kementerian Kesehatan RI, 2019). The Indonesian 2018 basic health research survey indicates that the prevalence of emotional disorders (including anxiety disorders) in Indonesia is 9.8% (Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI, 2018).

Not only is anxiety disorder the most common disorder, but it is also a global economic burden because of the cost of treatment and potentially resulting in indirect losses like loss of income and reduced productivity. Anxiety disorders rank sixth as the largest contributor to the health of non-fatal

losses, and the top 10 causes of the global Years Lived with Disability (YLD) in 2015 (World Health Organization, 2017). In addition, the symptoms of anxiety disorder indicate strong associations with functional impairment in cognition, mobility, self-care, interpersonal interaction, life activities, and participation in society life domain (Tanner et al., 2019). Anxiety disorder also correlates with poorer quality of life (Cahyani, Tyasati, & Rachmawati, 2016; Özdemir & Sahin, 2019; Resende et al., 2020).

Anxiety disorder is a problem that arises when an individual sees a harmless stimulus as something threatening because of a distress signal. The anxiety which is a relatively stable personal characteristic in the tendency to see things as a threat is later described as Anxiety Trait (A-Trait). The presence of a high anxiety trait is characterized by intense feelings of nervousness, worry, anxiety about the possibility of something bad happening, dissatisfaction with oneself, unhappiness, insecurity, lack of confidence, difficulties to make decisions, disturbed mind, and out of fit body (Spielberger, 1966). Anxiety conditions can be experienced by anyone, but the highest prevalence of anxiety disorders is found in adult groups, especially young adults (Remes, Brayne, van der Linde, & Lafortune, 2016). The rate of anxiety in adults in America is rising from 5.12% in 2008 to 6.68% in 2018, the most significant increase in respondents 18 to 25 year-old, 7.97% from 2008 to 14.66% in 2018 (Goodwin, Weinberger, Kim, Wu, & Galea, 2020). Anxiety disorders also affect 15% of Australia's 16-24 year-old youngsters each year (Orygen Mental Health, 2020). The prevalence of emotional disorders such as anxiety and depression in Indonesia itself, in 2009 reaching 11.6% in the adult population or about 1,740,000, and the number is expected to increase annually (Kementerian Kesehatan Republik Indonesia, 2009).

Young adult age groups are more vulnerable to anxiety disorders than they used to be because many changes happened, both physically, psychologically, and socially. New demands are emerging that the individual may never meet. Hurlock (2018) states that in early adulthood, it is expected that individuals will be able to find a job, select marriage mates, learn to form a family with their mates, raise children, manage a household, accept responsibilities as citizens, and join a suitable social group. There have also been lifestyle changes, especially those that have to do with the roles of gender and the patterns of family life. Hurlock (2018) added adaptation to early adulthood is often difficult because of lack of preparation for the types of problems that adults face, attempts to master or adapt to many roles at once, and lack of help to face and solve their problems as in previous phases. When life's major problems are not resolved well, one can be emotionally disturbed. Hence, some studies have found that the prevalence of most anxiety disorders exists in early adulthood (Goodwin et al., 2020; Remes et al., 2016).

Some factors have affected anxiety disorders that arose in early adulthood. Early signs of anxiety, shyness and depressive mood in childhood, then a parenting style marked by restrictions, reproach, inconsistencies, and excessive worrying, consistently influence the relevant clinical manifestations of anxiety in young adults. How does a child recall their perception of parental behavior contributes to the effects (Meyer & Kroner-Herwig, 2017). Other factors such as genetics, neurotransmitters abnormalities, maladaptive and irrational thoughts, having unpleasant or traumatic experiences, chronic illnesses or recent diagnoses of disease, daily stress, consumption of alcohol and illegal drugs, and lack of ability and inexact emotion regulation strategies, contribute to the appearance of anxiety disorders (Foroudifard et al., 2020; Halgin & Whitbourne, 2012; Huffstutler, 2021; Loevaas et al., 2018; Mahardika & Ediati, 2019; Narmandakh, Roest, de Jonge, & Oldehinkel, 2020; Nevid, Rathus, & Greene, 2018; Quiñones-Camacho & Davis, 2019; Sackl-Pammer et al., 2019). Other things such as female, family dysfunction, lack of social support, low economic status, and history of psychopathology in parents indicate links to increased anxiety risk (Mondin et al., 2013; Öztürk, Özyurt, & Akay, 2018; Shao et al., 2020; Wang, Chen, Tan, & Zhao, 2016).

One of the factors that contribute to anxiety disorders is emotion regulation. The term "emotion regulation" is used to describe a people's ability to manage and respond to their emotional experience. Emotion regulation ability is essential for regulating emotions that arise either automatically or spontaneously before taking action in specific situations. Having good emotional management makes it easier for individuals to adapt and make better decisions. Bad emotional regulation can point one toward mental health issues such as anxiety. A lack of emotion regulation ability is closely linked to the development and survival of the symptoms of anxiety disorder (Kusuma, 2020; Loevaas et al., 2018; Wirtz, Hofmann, Riper, & Berking, 2014). Kirwan et al. (2017) through their study found that maladaptive emotional regulation only aggravates the symptoms of anxiety disorders. Gross (2014) says that performing reappraisal by changing viewpoints can relieve bad emotions, changes in consuming stimulus help change the emotions that accompany them. On the other hand, suppression can spare the individual a temporary disagreeable feeling, but if carried out constantly, it can affect physical health and lead to emotional problems. Previous studies found significant negative connections between reappraisal and anxiety, instead, suppression indicate positive relationships with anxiety and are widely applied strategies to people with higher levels of anxiety (Mayangsari & Ranakusuma, 2014).

Another factor that contributes to anxiety disorders is family functioning. Family function refers to the structural and organizational characteristics of family groups and the patterns of transactions between members within them that have been found to distinguish healthy and unhealthy families (Epstein, Baldwin, & Bishop, 1983). The main function of the family unit is to provide a place for social, psychological, and biological development, and the care of family members. During this process of fulfilling this function, the family deals with a variety of problems and assignments. If families cannot handle problems and duties effectively, significant problems or maladaptive behaviors are more likely to develop (Ryan, Epstein, Keitner, Miller, & Bishop, 2009). Dysfunctional families can increase the risk for individuals within to develop maladaptive behavior and mental health problems. Family function reported significantly correlated and could be predictive for individual anxiety disorders (Chapman & Woodruff-Borden, 2009; Shao et al., 2020). Correlation that has family function and anxiety is negative so that the better a family performs, the lower the anxiety level (Mahardika & Ediati, 2019; Öztürk et al., 2018). Some dimension of family function is associated with certain disorders: high affective involvement and problem solving associated with opportunities of severe depression and social phobias, good communication correlates with a low chance of overall anxiety disorders, behavioral controls correlate with social phobias and oppositional defiant disorders (Oltean, Perlman, Meyer, & Ferro, 2020).

Anxiety disorders are also linked to sex differences. American Psychological Association (APA) dictionary (n.d.) describes sex as distinguishing traits between male and female. Sex refers primarily to physical and biological characteristics. The sex differences can be known from the physical differences between males and females, including differences in the structure and characteristics of the primary and secondary sex. Studies have found that anxiety disorders are more common in women, or higher levels of anxiety in women than in men (Narmandakh et al., 2020; Vellyana, Lestari, & Rahmawati, 2017). Women are believed to experience more intense emotional experiences than men (Latifa, 2018). It may relate to different biological systems between males and females. Gender may affect the immune system and brain/mental health, besides changing the relationship between that domain (Holingue et al., 2020). Certain hormones, such as vasopressin and oxytocin, act as a neural mechanism for the neuropeptide system to contribute to a particular sex vulnerability related to social and emotional disorders (Bredewold & Veenema, 2018).

Based on the above explanation, this study examines emotional regulation, family function, and gender contribution to anxiety in early adulthood. The hypotheses presented in this study are as follows: (1) Emotion regulation, family function, and sex differences simultaneously have a significant role in anxiety; (2) There is a negative correlation between emotion regulation and anxiety; (3) There is a negative correlation between family function and anxiety; and (4) There are different levels of anxiety based on sexes.

The variables to focus on in this study were: (1) the dependence variable: anxiety (as trait/A-Trait; the relatively stable personal characteristic in the tendency to treat a situation that is perceived to be threatening, along with an increased intensity of temporary emotional anxiety (A-State); (2) independence variables: family function (the structural and organizational characteristics of family groups and the patterns of transactions between members within them that have been found to distinguish healthy and unhealthy families), emotion regulation (individual processes affect the emotions possessed when they arise, involves how they feel and express those emotions), and sex differences (physical differences between male and female, include differences in primary and secondary sex structures and characteristics).

METHOD

The study used a cross-sectional research design. The target of this study is 18-30-year-old individuals. Sampling is being taken with the convenience sampling technique. There were 222 participants aged 18 to 30 years ($M=24.9$, $SD=3$), 45 male (20.27%), and 177 (79.73%) female from many parts of Indonesia. Measuring is done by using the State-Trait Anxiety Inventory (STAI), the Family Assessment Device (FAD), and the Emotion Regulation Questionnaire (ERQ) scale.

STAI was developed by Spielberger dan Gorsuch (in Spielberger, Gorsuch, & Lushene 1970) as an instrument for measuring the anxiety phenomenon in adults, consisting of 20 statements with 4 responses (almost never, sometimes, often, and almost always). The scoring of the scale is done by summing up the score of each participant's answer. The higher the score, the higher anxiety. This study used the STAI Form Y-2 previously used in Kusuma (2020) research to measure anxiety trait or A-Trait. The STAI form Y-2 is reported to have good validity (Adelina & Savitri, 2015; Ruslan, Satiadarma, & Subroto, 2021), its reliability value ranges from 0.844 to 0.925 to the reliable instrument (Adelina & Savitri, 2015; Kusuma, 2020; Mayangsari & Ranakusuma, 2014). STAI's reliability value in this research is 0.917.

ERQ (Gross & John, 2003) is used to measure emotion regulation. ERQ consists of 10 items and is divided into two dimensions of emotion regulation strategy: *reappraisal* (item 1, 3, 5, 7, 8, 10) and *suppression* (item 2, 4, 6, 9). There are 7 answer alternative points (1 = strongly disagree to 7 = strongly agree). The ERQ scoring is done by adding up the item answer points for each dimension, with no score of total emotion regulation. The ERQ used in this study has been adapted to Indonesian by Suwartono and Bintamur (2019) with a reliability of 0.80 (cognitive reappraisal dimensions) and 0.60 (suppression dimensions). The coefficient stratified alpha ERQ in this study is 0.81 and so it can be said that ERQ is reliable to measure the emotion regulation of this study participants. In addition, ERQ is also reported to have satisfying validity of construct and validity of content (Damariatna, 2020; Suwartono & Bintamur, 2019).

FAD (Epstein et al., 1983) is used to measure the dimension of family function based on the perceptions of individual family members regarding their family function. This study used FAD that had previously been used in the Rochma and Hartini research (2021). The FAD has reliability coefficients ranging from 0.91 to 0.95 (Maulina & Amalia, 2019; Minasochah, Karmiyati, & Djudiyah, 2020; Rochma & Hartini, 2021), meanwhile, the FAD's reliability values in the study find a 0.952 coefficient stratified alpha, which suggests that FAD has a good consistency and is ready to

measure the emotional regulation of participant in the study. The validity of the FAD itself is good (Jamil, Gunarya, & Kusmarini, 2019; Juliyanti & Siswanti, 2014). The FAD consists of 53 statements with four points of scale as an alternative answer: strongly agree, agree, disagree, and strongly disagree. The dimensions of family function are revealed through the FAD are problem-solving, communication, role, affective responsiveness, affective involvement, behavior control, and general functioning.

Data collection is done with web-based surveys using Google forms. The data gathered is analyzed using analysis of covariance (ANCOVA) and multiple regression techniques. The analysis of covariance is used to know the simultaneous contribution of emotion regulation, family function, and sex differences to anxiety, all at once to know the role of each partial independence variable in anxiety. Meanwhile, multiple regressions are used to identify the direction of emotion regulation correlation with anxiety and the direction of family function correlation with anxiety. Multiple regression is also used to know the correlation of anxiety with each dimension of emotion regulation and family function.

FINDINGS

According to ANCOVA calculations, it has been found that emotion regulation, family function, and sex differences simultaneously play a role in early adult anxiety ($p=0.000, p<0.05$). Partially, emotion regulation ($p=0.018, p<0.05$), family function ($p=0.000, p<0.05$), and sex differences ($p=0.008, p<0.05$) each indicates a significant role in anxiety. There is a different level of anxiety between the male and the female participants ($p=0.008, p<0.05$). The female participants in this study demonstrate a higher level of anxiety trait ($M =44.84$) compared with the male participants ($M =40.62$). Through multiple regression analysis, emotion regulation shows a significant negative correlation with anxiety ($p=0.013, p<0.05, R= -0.094$), the better the emotion regulation capability has, the lower the anxiety felt, and the opposite. It is also known that family dysfunction has a significant negative relationship with anxiety ($p=0.000, p<0.05, R= -0.033$), the more the family performs its function, the less anxiety it has, and the opposite.

Regression analysis on anxiety and emotion regulation dimensions data indicate that reappraisal strategies are not associated with anxiety ($p=0.207, p>0.05$), while the suppression strategy has a significant positive correlation with anxiety ($p=0.045, p<0.05, R=0.496$). While regression analysis on anxiety and the dimension of family function, it is known that the problem-solving dimension ($p=0.520, p>0.05$), role ($p=0.375, p>0.05$), and affective responsiveness ($p=0.803, p>0.05$) does not correlate with anxiety. Nevertheless, a significant association between anxiety with communication ($p=0.044, p<0.05, R= -0.572$), affective involvement ($p=0.011, p<0.05, R= -0.610$), behavior control ($p=0.003, p<0.05, R=0.493$), and general functioning dimension ($p=0.007, p<0.05, R= -0.477$). Table 1 shows contribution of independent variables to anxiety. Meanwhile, table 2 shows correlation between variable dimensions with anxiety.

Table 1: Contribution of independent variables to anxiety

Variable	Value	
	p-value	Correlation or Mean
Emotion regulation, family function, and sex differences simultaneously	0.000	-
Emotion regulation	0.018*; 0.013**	-0.094**
Family function	0.000*; 0.000**	-0.033**
Sex differences	0.008*	43.98*(Male=40.62),(Female=44.84)

*by ANCOVA test

**by multiple regression test

Table 2: Correlation between variable dimensions with anxiety

Dimension Variable	Value	
	p-value	Correlation
Emotion regulation		
Reappraisal	0.207	-0.066
Suppression	0.045	0.496
Family function		
Problem solving	0.520	-0.205
Communication	0.044	-0.572
Role	0.375	-0.153
Affective responsiveness	0.803	-0.056
Affective involvement	0.011	-0.610
Behavior control	0.003	0.493
General functioning	0.007	-0.477

DISCUSSION

This study found that emotion regulation, family function, and sex differences are simultaneously contributing to an early adult subject's anxiety. These results are supported by research Lindblom et al. (2017) that finds internalization (including anxiety) related to the environment and family system, mediated by emotional regulation. There are also other studies by Gardener, Carr, MacGregor, dan Felmingham (2020) who prove that women tend to think more negatively, and then in emotion regulation, women have a greater emotional response to negative stimuli than is prone to anxiety.

The study reveals that there are significant differences in anxiety based on sexes, in which women point to higher scores than men. These results are supported by previous studies showing the female participants have a higher incidence of anxiety greater than male participants (Dolz-Del-Castellar & Oliver, 2021; Fernandes, Newton, & Essau, 2021). Women are reported to be three times more likely to experience anxiety disorders (Serpytis et al., 2018; Vasiliadis, Desjardins, Roberge, & Grenier, 2020). Anxiety believed one was influenced by the difference between the sex hormone between a male and a female. The effects of sex hormones on many causes of deep anxiety include biological, behavioral, and cognitive processes. There are times in which estradiol and progesterone increase can serve as protectors and increase vulnerability, depending on certain cognitive or behavioral processes that occur during hormonal changes. It is thought that normal fluctuations in sex hormones (because of menstrual cycles, reproductive status, or age) and changes produced by basal endo anxiolytics (such as serotonin and allopregnanolone activity) may cause periods of increased anxiety disorders, resulting from a reduced ability to regulate emotional anxiety, regardless of the environmental context. Those anxiolytics fluctuations may also periodically exacerbate symptoms of preexisting anxiety, and contributing to instability in emotional regulation, estradiol, and progesterone may affect cognitive processes and behavior to control the effects of life's events. The hormone levels of sex on exposure to trauma may facilitate anxiety development and PTSD (Li & Graham, 2017).

This study also suggests that emotional regulation is partially related to anxiety, the better the emotion regulation, the lower the anxiety level. The findings confirm a significant link between emotion regulation and anxiety, where the better emotion regulation ability, the lower the level of anxiety felt, and the opposite (Aprisandityas & Elfida, 2012; Kusuma, 2020). Dryman and Heimberg (2018) explain certain types of anxiety, characterized by difficulty identifying, accepting, understanding, and tolerating

emotions. Inability to process these emotions contributes to the problem by responding and regulating emotions, and thus maladaptive patterns of negative emotions and low positive emotions are formed and are amplified. Anxiety disorders usually lead to a lack of cognitive reappraisal ability but not with higher-tend expressive suppression. That opinion agrees with this result that there are strong connections between suppression strategies and anxiety, and reappraisal strategies do not show a correlation with anxiety. Furthermore, reappraisal shows negative connections with anxiety, while suppression has a positive headway with anxiety. These results are supported by Mayangsari and Ranakusuma (2014), Peh et al. (2017), as well as Fernandes, Newton, and Essau (2021) who find a significant negative connection between the score of anxiety and reappraisal strategies. Another study conducted by Ranakusuma (2015) shows that groups with anxious trait also have a tendency to suppress their feelings, which results in a lower quality of life than others with distinct characteristics. High state and trait anxiety scores are associated with increased suppression and decreased use of reappraisal (Fernandes et al., 2021). The frequency of the use of rumination and expressive suppression in participants with clinical disorders such as social anxiety and major depression is reported to be even more frequent than the frequency of using reappraisal strategies (D'Avanzato, Joormann, Siemer, & Gotlib, 2013).

This study also proved that family function is partially correlated to anxiety. This result is similar to previous studies showing a strong correlation between family function and anxiety (L. Guo, Tian, & Scott Huebner, 2018; Mahardika & Ediati, 2019; Shao et al., 2020; Van Oort, Verhulst, Ormel, & Huizink, 2010; Yang, Wu, Wang, & Peng, 2020). The family function is associated negatively with anxiety, the lower family function the higher the level of anxiety on the individual (Mahardika & Ediati, 2019; Wang et al., 2016; Zhou, Yi, Zhang, & Wang, 2014). The family function can be a predictive factor of anxiety (Dolz-Del-Castellar & Oliver, 2021). A healthy family generally encourages and protects the emotional, physical, and social welfare of each member. Unlike other social groups, families can provide the close emotional support needed to produce well-adjusted, confident children and adults. Well-functioning families are prepared for the changes and crises that confront them throughout their lifetime. Therefore, the primary function of the family is to create a wholesome environment in which family members can grow and develop successfully. Yet there are families where conflict, bad behavior, and even abuse of family members occurs constantly, encouraging others to accommodate such actions. Sometimes individuals grow in families that are dysfunctional with the understanding that what happens in their families is normal. Family members with dysfunction usually have the same symptoms and behavior patterns as a result of their experience in the family (Senthil, Vidyarthi, & Kiran, 2014).

From few dimensions of family function that affect the development of disorders in individuals, this study found that communication, affective involvement, behavioral control, and general functioning are significantly associated dimensions with anxiety. The findings of Wang et al. (2016) in their research support those results. Communication, affective responsiveness, affective involvement, behavior control, general functioning, social support, quality of life, family incomes, and living situations (with parents) are statistically significant variables that affect anxiety. Based on the results of this research, the communication dimension shows negative connections with anxiety scores. This result is supported by Oltean et al. (2020) that marks higher communication dimension scores have negative associations with a tendency to experience general anxiety. How parents communicate with children is so important for individuals to develop problem-solving and adaptive capacities to cope effectively with new experiences (Ioffe, Pittman, Kochanova, & Pabis, 2020). Family communication patterns, therefore, are reported to have a strong correlation with mental health (Zarnaghash, Zarnaghash, & Zarnaghash, 2013).

Another dimension of family function closely related to anxiety in this study is affective involvement. Wang et al. (2016) supported this outcome with research that found affective involvement

to be identified as a risk factor for anxiety disorders. Senthil et al. (2014) adding, both the overzealous pattern of affective involvement and the lack of affective involvement of those who are supposed to, can encourage problems in the family. In this study affective involvement shows a negative correlation with anxiety. The findings differ from studies of Settapani, O'Neil, Podell, Beidas, and Kendall (2014) on patients who develop lower levels of anxiety during treatment tend to have lower affective involvement in the family; and with the results of Oltean et al. research (2020), where it states that the score of dimensions of affective involvement and higher problem solving are associated with social anxiety.

The next dimension of family function associated with anxiety in this study is behavior control. Behavior controls dimensional scores indicate a significant positive association with anxiety. This result is supported by findings in previous studies that prove high and persistent anxiety related to overprotective behavior and the application of strict discipline, high-dimensional behavioral control, excessive control, and parental concern for children (Abali et al., 2014; Borelli, Margolin, & Rasmussen, 2015; Gilbert, Perino, Myers, & Sylvester, 2020; Oltean et al., 2020; Settapani et al., 2014; Van Zalk, Tillfors, & Trost, 2018). Some families have flexible patterns of behavior control, while others adopt more rigid patterns. Families who have flexible patterns of behavior are better able to adapt and cope with changing family circumstances (Senthil et al., 2014).

Based on the result, data analysis, and previous discussion, it could be concluded that emotion regulation, family function, and sex differences both simultaneously play a significant role in anxiety in early adult subjects. Partially, emotion regulation and family function each have a significant negative correlation with anxiety. Trait anxiety also demonstrates sex difference, in which the anxiety trait of women is superior in comparison with men. Analysis of the family function's and emotion regulation's dimensions measures reveals that reappraisal's emotion regulation strategies do not correlate with anxiety while the suppression indicates a significant negative correlation with anxiety; family function dimension of communication, affective involvement, and general functioning reflects a significant negative correlation with trait anxiety, while the behavior control dimension demonstrates a significant positive relationship with anxiety; and the rate of anxiety scores on the female subject is higher than the male subject. The study found significant contributions of emotion regulation, family function, and sex differences together on anxiety; also, there is a negative link between the affective involvement dimension of the family function with anxiety, a result that differs from previous studies in suggesting that the affective involvement has a positive correlation with anxiety.

The limitation of this study is: (1) analyzing only the role of biological factor (sex) and the protective factors (emotion regulation and family function) of anxiety without involving another factors, (2) using non-probability sampling techniques, and (3) not testing the validity of measuring instruments. Further research was suggested to involve psychological or socio-cultural variables, test validity on measuring instruments, and use probability sampling techniques so that the data obtained is more accurate and can represent the population. For clinical and society in general, improving your ability to regulate emotions and to strengthen family functions can be one way to prevent or minimize the possibility of anxiety.

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