

The Relationship between Defense Styles and Mental Health in Early Adulthood

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Objective: The present study was designed to study the relationships and conduct a comparison between defense styles and mental health among people in early adulthood who resided in Bangkok. The participants included 400 people aged 20 to 44.

Materials and Methods: Two instruments were used in this study: 1) the Defense Style Questionnaire 60 [DSQ-60] Thai version, DSQ-60 which categorized defenses into 3 styles: Image distorting, Affect regulating and Adaptive, and 2) the Thai Mental Health Questionnaire [TMHQ] which evaluated 5 domains of mental health: Somatization, Depression, Anxiety, Psychotic and Social function.

Results: Two out of the three major defense styles, Image distorting and Affect regulating, were positively correlated with all domains of mental health. The other defense style, Adaptive style, was negatively correlated with anxiety and social function. Participants with mental health problems in all domains tended to use more Image distorting styles; participant style with mental health problems in somatization, depression, and psychotic used more Affect regulating styles than those without any mental health problems. Finally, no differences were found among participants with and without mental health problems regarding the use of the Adaptive style.

Conclusion: Since Image distorting and Affect regulating styles were found to be associated with mental health problems. This information might be useful for the development of a mental health prevention policy. However, there should be further studies regarding other factors that might contribute to these findings.

Keywords: Defense mechanisms, Mental health, Early adulthood

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When individuals were confronted with challenges, it could cause chemical imbalance in the brain. At this point, anxiety developed, and would be resolved only when the problems were solved to regain balance. On the other hand, inability to solve problems created mental conflicts that affected the propagation of negative emotions and developed risks for other psychopathological symptoms⁽¹⁾. Defense mechanisms are the unconscious process developed innately, which played an important role in maintaining psychological balance. It functions as a mechanism of maintenance

for psychological equilibrium that often makes people feel better, yet, it does not entirely solve their problems. Moreover, inappropriate defense mechanisms employed could lead to mental illnesses and personality disorders⁽²⁾. The study found that using Mature defenses can predict a better physical and mental health over time⁽³⁾.

Understanding the process of unconsciousness such as defense mechanisms is important in the determination of individuals' mental health. Nowadays, Thailand has been pushed to be developed in many aspects: economy, society, culture and politics, which stimulated a lot of changes and inevitable stresses for many people. Adjustment problems due to the changes indicated longer confrontation to internal dilemma which in turn increased the risk of developing mental health

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problems. In Thailand, there have been programs operated under Mental Health Policies together with the Strategic Plans of Mental Department during the Eleventh National Economic and Social Development Plan (2012 to 2016) in order to achieve a common goal: people are to be in a healthy mental health and live happily in the society (Policy of Department of Mental health, 2014 to 2015). The survey showed that there were 10 million people who needed access to mental health services but approximately 800,000 patients or only 8% actually got access to the services due to the lack of staff and budget⁽⁴⁾.

Early adulthood (aged 20 to 44)⁽⁵⁾ is important in developing the economy and society of the country and has the role of maintaining supporter for many families. Therefore, it is essential to focus on helping people with mental health problems in this age group because their illness would directly affect not only themselves but also their family members and their community.

To sum up, in everyday life, people use defense mechanisms to cope with stress, which is one of the factors that can affect mental health. Studying the relationship between defense styles and mental health will provide a better understanding on the background of mental health problems.

Objective

The present study was comprised of two objectives. 1) To study the relationship between defense styles and mental health in early adulthood, 2) To compare defense styles of people in early adulthood with and without mental health problems.

Materials and Methods

Participants

The sample size was calculated by the formula from a known population but unknown proportion in the population. Statistical calculation determined that the number of participants was 400 people (aged 20 to 44). The samples of this study were chosen using simple random sampling, a sampling of the subunits of the population with similar characteristics. The opportunity for all subsets of the population was eligible to be selected as well. The Bangkok districts were randomly selected, based on metropolitan development policy, from the economic zone: employment, commerce, office location and compact city⁽⁶⁾. The researcher collected data at the district offices, libraries and parks from early adulthood found during collecting data period and consented to answering the questionnaires.

Instruments

Three instruments used for data collection were: 1) The general information questionnaire which inquired about gender, age, marital status, education, occupation and income from the samples, 2) The Defense Style Questionnaire 60 [DSQ-60] Thai version is a self-reporting questionnaire which evaluated defense styles covered The Defensive Functioning Scale by APA⁽⁷⁾. DSQ-60 consisted of 60 items and evaluated 30 defense mechanisms which can be categorized into 3 domains: Image distorting, Affect regulating and Adaptive. Also, the Cronbach's alpha coefficient of DSQ-60 Thai version is 0.86⁽⁸⁾. Image distorting consisted of 10 defenses: Acting-out, Displacement, Help-rejecting complaining, Idealization, Passive aggression, Projection, Projective identification, Splitting others, Splitting self and Undoing. Affect regulating consisted of 11 defenses: Affiliation, Denial, Devaluation other, Devaluation self, Dissociation, Fantasy, Intellectualization, Isolation, Repression, Suppression and Withdrawal. Adaptive consisted of 9 defenses: Altruism, Anticipation, Humor, Omnipotence, Rationalization, Reaction formation, Self-assertion, Self-observation and Sublimation. The score of each defense style is obtained from the mean of all items that belong to that particular style. If participants have the highest scores on which style means they tend to use that style more often than other styles. 3) Thai Mental Health Questionnaire [TMHQ] is a 70-item self-report screening scale. TMHQ evaluated mental health based on DSM-IV into 5 domains: Somatization, Depression, Anxiety, Psychotic and Social function. The Cronbach's alpha coefficient of TMHQ is 0.87. The mean of total score in each domain is compared to the T-score of each scale. If the T-score is 65 or lower, it indicated normal range, whereas the T-score above 65 referred to the tendency to develop mental health problem in that particular domain. However, the results of TMHQ are only a preliminary screening for the possible risks of mental health problems, and not a psychiatric diagnosis⁽⁹⁾.

Analysis

The data were analyzed using SPSS software v 18.0 (SPSS Inc., Chicago, Illinois, US) as followed: 1) Analyze the general information using descriptive statistics to show frequency, mean, percentage and standard deviation. 2) Analyze the correlation between defense styles and mental health scores using Pearson's product moment correlation coefficient. 3) Compare defense styles and mental health scores in

early adults with and without mental health problem (TMHQ cut off t-score >65) using t-test.

Results

Demographic data

The data were collected from 400 recruited participants. The average age of the samples is 29.12. There were 147 male (36.8%) and 253 females (63.2%). Most of the samples are single (76.8%). More than half of the samples graduated with bachelor's degree (67.8%). Almost half of participants work in the private sector (40.8%) and received an average monthly salary of 10,001 to 20,000 baht (41.5%).

In consideration of the average score of defense styles, the Adaptive style is found to be the most frequently used (mean = 5.84, SD = 0.92), followed by Affect regulating (mean = 4.74, SD = 0.87) and image distorting (mean = 4.37, SD = 1.04), respectively.

The domain that found the most mental health problems was somatization (32.5%), followed by anxiety (23.0%), depression (13.0%), psychotic (9.0%) and social function (1.0%), respectively.

The correlation between defense styles and mental health were found to have a statistical significance at the level of $p < 0.01$, image distorting and affect regulating styles had positively correlated with all of the domains of mental health while Adaptive style negatively correlated with anxiety and social function (Table 1).

The comparison of defense styles of early adults with and without mental health problems were found as followed:

First, the result showed that the samples with and without Somatization are different in using Image distorting and Affect regulating styles with significant differences at $p < 0.01$. Considering the average score, the samples with Somatization used Image distorting and Affect regulating more than those without Somatization (Table 2).

Second, the samples with and without Depression are different in using Image distorting and Affect regulating styles with significant different at $p < 0.01$. Considering the average score, the samples with depression used image distorting and affect regulating more than those without depression (Table 2).

Third, the samples with and without anxiety are different in using Image distorting with significant different at $p < 0.01$. Considering the average score, the samples with Anxiety used Image distorting more than those without anxiety (Table 2).

Fourth, the subjects with and without

psychotic are different in using image distorting and Affect regulating styles with significant difference at $p < 0.01$. Considering the average score, the samples with psychotic used image distorting and affect regulating more than those without psychotic (Table 2).

Last, the samples with and without social function problem are different in using image distorting with significant difference at $p < 0.05$. Considering the average score, the samples with social function problem used image distorting more than those without social function problem (Table 2).

Discussion

1) The scores of image distorting and affect regulating styles had a positive relationship with the scores of mental health of early adulthood in Bangkok. This inferred that if an individual used high levels of image distorting or affect regulating styles, the risks for mental health problems will also increase. This is because these 2 styles of defense mechanisms consisted of immature defenses which might lead to improper behaviors and adjustment problems that could lead to other mental problems. This result was consistent with cramer who described the 7 pillars of defense mechanisms. One of them suggested that using immature defenses might cause difficulties in living; also excessive use of defense mechanism, especially immature defenses, could cause psychopathology in both patients and non-patients⁽¹⁰⁾.

When considered the correlation from the result of this study, it was found that the use of image distorting style had a higher correlation with mental health than affect regulating style. When compared to defense mechanisms according to 7-level hierarchy categorized by the APA, a tool ranking from the highest level of optimal adaption in handling stressors to the lowest levels of failing to control the use of defense mechanisms in responding to stressors and leading to impaired reality testing, it was found that the image distorting style had a lower ranking than affect regulating style. This indicated that the image distorting style was more immature which could lead to having a higher correlation with mental health than affect regulating style⁽⁷⁾.

Adaptive style consisted of mature defenses which is the best way to reduce anxiety and enabled individuals to cope with problems properly. However, they only have a relationship with mental health in 2 domains and only at a low to relatively low negative relationship.

Table 1. The correlation between defense styles and mental health (n = 400)

Mental health defense styles	Somatization	Depression	Anxiety	Psychotic	Social function
Image distorting	0.37**	0.47**	0.39**	0.41**	0.26**
Affect regulating	0.18**	0.28**	0.15**	0.28**	0.12**
Adaptive	-0.04	-0.07	-0.13**	0.01	-0.33**

** $p < 0.01$ **Table 2.** The comparison of defense styles of the samples with and without mental health problems (n = 400)

Mental health problem	n	Defense style: mean \pm SD		
		Image distorting	Affect regulating	Adaptive
Somatization				
Normal	270	4.11 \pm 0.96	4.63 \pm 0.84	5.86 \pm 0.93
Problem	130	4.91 \pm 0.98	4.98 \pm 0.88	5.81 \pm 0.91
p-value		-7.69**	-3.84**	0.45
Depression				
Normal	348	4.22 \pm 0.96	4.67 \pm 0.84	5.85 \pm 0.91
Problem	52	5.36 \pm 0.98	5.23 \pm 0.92	5.79 \pm 1.02
p-value		-7.92**	-4.36**	0.44
Anxiety				
Normal	308	4.19 \pm 0.98	4.79 \pm 0.88	5.88 \pm 0.93
Problem	92	4.97 \pm 1.00	4.87 \pm 0.82	5.74 \pm 0.88
p-value		-6.61**	-1.63	1.25
Psychotic				
Normal	364	4.28 \pm 1.00	4.69 \pm 0.86	5.85 \pm 0.93
Problem	36	5.22 \pm 1.01	5.23 \pm 0.84	5.78 \pm 0.90
p-value		-5.31**	-3.58**	0.43
Social function				
Normal	396	4.35 \pm 1.03	4.74 \pm 0.87	5.85 \pm 0.93
Problem	4	5.50 \pm 1.15	5.28 \pm 0.98	5.55 \pm 0.48
p-value		-2.18*	-1.23	0.63

* $p < 0.05$, ** $p < 0.01$

Ruangtrakool S. stated that using defense mechanisms only reduced anxiety from the conscious mind to the point that people could resist. The problems, therefore, are not entirely solved. If individuals were inflexible and used age-inappropriate defenses repeatedly, they were likely to face failure and disappointments which could subsequently lead to the development of psychopathology⁽²⁾. Moreover, Anna Freud stated that individuals do not employ only one particular defense mechanism but multiple defense mechanisms simultaneously⁽¹¹⁾. The results also revealed that the mature defenses were used; however, if an individual used mature defenses without solving

the problems, the residual internal conflicts could have negative effects on mental health. Moreover, although some of the participants used mature defenses, they might also develop other immature defenses. Therefore, the relationship with other mental health aspects might not be found or it might be related to other factors that required further study.

2) The results of the comparison of the differences in the use of defense styles of early adults with and without mental health problems found that those with 5 mental health problems used Image distorting style more and those with Somatization, Depression and Psychotic used Affect regulating style

more than those without mental health problems.

Most of the Image distorting and Affect regulating styles consisted of incomplete development of defense mechanisms, dissociation and emotional expression control that caused an accumulation of internal conflicts⁽¹²⁾. The result of this study was consistent with the study of emotional conflicts by King and Emmons who found that internal conflicts is associated with anxiety, depression and physical symptoms at a high level⁽¹³⁾. Furthermore, the result from this study showed that psychotic symptoms which referred to abnormality of thought, behavior and personality, were found to be associated with Image distorting and Affect regulating styles. This can be described by Bowin's approach which suggested that all defense mechanisms are mostly organized into 2 overlapping spectrums of dissociation and cognitive distortions. A reverse correlation exists between the level of defense maturity and degree of cognitive distortions. Immature defenses have higher levels of distortion than mature defenses and the higher the distorting level is, the more it involves psychotic thought content⁽¹⁴⁾.

Furthermore, Image distorting and Affect regulating styles consisted of immature defenses which can lead to improper adjustment. People with mental health problems used defense mechanisms more frequently compared to the general population. This was consistent with the study that suggested people with mental health problems or psychiatric patients tended to use more immature defenses^(15,16).

However, the result of this study showed that there was no difference in the use of Adaptive style, which consisted of mature defenses, among people with and without mental health problems. The result was similar to the study by Nanchaya Jiraaroon who found no difference in the use of Mature defenses of the unemployed population with normal and abnormal mental health, due to related other factors such as a short unemployment period (less than one month). However, the samples who resigned from their jobs were slightly affected⁽¹⁷⁾.

As illustrated in table, the result of the use of Adaptive style could not be used to describe mental health although this style mostly consists of mature defenses as previously stated that individuals use different defense mechanisms at the same time. Even though mature defenses were used, it did not stop the development of immature defenses that would also protect an individual from emotional discomfort. However, the use of immature defenses like Image

distorting and Affect regulating in high level were found to be associated with mental health problems. Those who used a high level of these defense styles also had a high tendency to develop mental health problems.

The present study has several limitations. First, this study aimed to examine early adulthood in Bangkok area only. Hence, the results did not cover other groups of population. Second, the survey results of mental health were the interpretation of a T-score higher than 65 in TMHQ. This was only a preliminary screening for the possible presence of psychopathology in Thai population and not a psychiatric diagnosis. Therefore, the results from this study should be applied to only people possibly having psychopathology. Implication for patients with psychiatric disorders requires further study.

Conclusion

People use defense mechanisms to cope with stress which influences their mental health. Image distorting and Affect regulating styles which mostly consisted of immature defenses and were found to be associated with mental health problems; those who used a high level of these defense styles might be more prone to develop mental health disorders. This information might be useful for the development of a mental health prevention policy. However, there should be further studies regarding other factors that might contribute to these findings.

What is already known on this topic?

Defense mechanisms are parts of normal day to day functioning. They exist to help people cope with problems and maintenance of psychological equilibrium but excessive and inflexible use of defenses is also associated with psychopathology.

Previous studies reported people with mental health problems or psychiatric patients tended to use more immature defenses more than mature defenses.

What this study adds?

Results showed that adaptive defense styles mostly consisted of mature defenses, and could not be used to describe mental health due to other related factors. While, image distorting and affect regulating, consisted of immature defenses, they were associated with mental health problems in early adulthood residing in Bangkok.

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Potential conflicts of interest

None.

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