Self-esteem, Cognitive Emotion Regulation Strategies and Depression among Adult Males in Kuala Lumpur, Malaysia

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This study aims to examine the significant difference in self-esteem, cognitive emotion regulation strategies and depression between males in early adulthood and middle adulthood. The relationships between self-esteem and cognitive emotion regulation strategies to depression are also examined. This cross-sectional study used convenience sampling technique to collect data from 180 adult male respondents in the Federal Territory of Kuala Lumpur. The inventories used in this study are Rosenberg Self-Esteem Scale (RSE) to measure the self-esteem level, Cognitive Emotion Regulation Questionnaire short version (CERQ-short) to examine the strategy that is used after experiencing negative event and Beck Depression Inventory II (BDI-II) to measure the depression level. Results show that older male adults had a higher level of self-esteem compared to younger male adults, $t(178) = -1.993$, $p < 0.05$. Younger male adults use maladaptive coping styles more often and had a higher level of depression than older male adults. Self-esteem is associated with depression significantly ($r = -0.602$, $p < 0.01$). The results could also provide information for program designed to increase the level of self-esteem and reduce the use of maladaptive coping styles in order to reduce the depression level.

Keywords: self-esteem, coping styles, cognitive emotion regulation strategies, depression, male adult

People nowadays often live in stress and this condition causes mental health problems to be an issue around the world. Based on the National Health & Morbidity Survey 2015, the prevalence of mental health problems among adults aged 16 years old and above in Malaysia is 29.2%. This prevalence shows that a total of 4.2 million Malaysians have mental health problems. These statistics illustrate that in 10 adults in Malaysia, there are 3 adults with mental health problems. The study also shows that Federal Territory of Kuala Lumpur is the area that has the highest prevalence of mental health problems in Peninsular Malaysia (Institute for Public Health (IPH) 2015).

Mental health problems are likely to happen to anyone throughout their lives. In Malaysia, depression is the most commonly heard mental illness and it affects approximately 2.3 million people at some point in their lives, but this health issue is still undetectable and being treated (Mukhtar & Oei, 2011a; 2011b). There are many causes for depression, such as genetic predisposition, serious physical illness, lack

of social support, stressful environment and low self-esteem. People with low self-esteem are more likely to have depression because they consistently see themselves and this world with pessimism. In addition, people who are easy to be overwhelmed by stress are also susceptible to depression (Malaysian Psychiatric Association, 2006).

Emotion regulation is important for those who face emotion problems in life. According to Oschner and Gross (2005), emotion regulation means the ability of an individual to control his emotions in human adaptation. Emotion regulation can be explained in two ways, which are emotion regulation behavior and cognitive emotion regulation strategies. This study will focus on cognitive emotion regulation strategies that refer to the thinking and cognition of an individual after experiencing stressful events and the cognitive way used to change, control or maintain an emotion state (Garnefski & Kraaij 2007).

There are many studies related to depression that have been conducted in Malaysia, such as studies to determine the prevalence, risk factors, treatment options and effects of depression have been conducted in different populations in Malaysia. However, there is a lack of research on depression among subgroups in Malaysia especially among men (Ng, Chong Guan 2014). Therefore, this study focuses on adult males who are rarely the focus of studies.

The purpose of this study is to examine the significant differences in the level of self-esteem, the cognitive emotion regulation strategies used and the level of depression among males in early adulthood and males in middle adulthood as well as the relationship between self-esteem, cognitive emotion regulation strategies with depression among adult males in Federal Territory of Kuala Lumpur.

Literature Review

Self-esteem, cognitive emotion regulation strategies and depression according to age group

A cross-cultural study involving 48 different countries was conducted to identify gender and age differences in self-esteem (Bleidorn et al., 2016). This study shown that for all countries involved, men have a higher level of self-esteem than women. Additionally, men and women showed increased levels of self-esteem from the end of adolescence to middle adulthood. The study of Orth, Maes, and Schmitt (2015), which examines the development of self-esteem throughout life, shown that self-esteem increases from adolescence, early adulthood, middle adulthood and reaches the highest level at the age of 60. After that, the level of self-esteem decreases in old age. The results of this study were also supported by Orth et al. (2012).

A study that examines the types of cognitive emotion regulation strategies used among Malaysian university students has been conducted and the results of this study showed a significant difference in three dimensions in cognitive emotion regulation strategies, which are the dimension of self-blame, others-blame and rumination on different age groups. These three dimensions are categorized as maladaptive coping styles. The use of these three strategies have been reduced by the increase in age (Panahi, Yunus & Roslan, 2013). The results of this study were supported by the study of Schirda et al. (2016) found that older adults use maladaptive strategies less often than younger adults.

Previous studies have shown that the symptom of depression is the highest in early adulthood, decreasing in middle adulthood and continue increasing in late adulthood. When approaching death, the symptoms of depression will increase (Sutin et al., 2013). The results of this study were supported by the study of Akhtar-Danesh and Landeen (2007) which shown that the prevalence of depression increased by age to the highest level at the age of 20 to 24 years old then decreased continuously and reach the lowest level at the age of 75 and above. The study of Street (2004) suggests that younger adults experience more significant depression symptoms than those older than them. Besides that, middle adulthood and older adults have a significantly lower score for depression than college-age adults. From college-age adulthood to middle age adulthood, depression decreases continuously and reaches the lowest level in middle adulthood.

Self-esteem and Depression

Self-esteem is defined by Rosenberg (1965) as a set of people's thoughts and feelings about his own values and interests. According to Rosenberg (1979), individual who has high self-esteem can be characterized as someone who respects himself, sees himself as a worthy person, appreciates his own good, and he will still admit his offense. For individual who has low self-esteem does not respect himself, considers himself to be worthless and has many weaknesses. The characteristics shown by individuals with low self-esteem can be attributed to depressive symptoms. Research of Manna et al. (2016) which involves Italian secondary school students between the ages of 11 and 14 years old shown that self-esteem is negatively associated with depression. The results of the study were also supported by the study of Hwang et al. (2016) involving 1813 Koreans adults aged from 22 to 61 years old who show depression is negatively correlated with self-esteem. The study of self-esteem and its relationship with depression conducted in Malaysia by Abdul Hanid Halit (2014) shown that there is a weak and significant correlation between self-esteem and the level of depression among seniors citizen aged 60 years old and above. His study also shows that self-esteem is not the only factor that contributes to depression among the elderly. Therefore, this study also involves the relationship between cognitive emotion regulation strategies and depression as well as self-esteem.

Cognitive Emotion Regulation Strategies and Depression

Cognitive emotion regulation is a cognitive approach that is used consciously by an individual to handle information that arouses emotions and it is also an important part of the coping styles (Garnefski & Kraaij, 2007). Research of Garnefski et al., (2017) shown that the more frequent maladaptive coping styles such as rumination, catastrophizing and self-blame are used, the more symptoms of depression are shown. The findings of this study are supported by the study of Jacob and Anto (2016) which stated that depression is positively correlated with dimensions of self-blame, rumination, catastrophizing, others-blame, acceptance and putting into perspective. Another study that examines the relationship between cognitive emotion regulation strategies with depression was carried out by Omran (2011) and the result of the study was the dimensions of catastrophizing, self-blame and rumination that have been categorized as maladaptive coping styles are associated with a high level of depression.

Self-esteem, Cognitive Emotion Regulation Strategies and Depression

Studies involving these three variables, which are self-esteem, cognitive emotion regulation strategies and depression are rarely conducted. Yalçınkaya-Alkar (2017) conducted a study involving these three variables on 274 university first year students. The study found that the often use of maladaptive coping styles such as rumination and self-blame is associated with the higher level of depression. Another study conducted on university students in Korea shown that there are significant differences in cognitive emotion regulation strategies based on the level of self-esteem and depression. Self-esteem has a positive correlation with adaptive emotion regulation strategies while depression has a positive correlation with less adaptive emotion regulation strategies. Previous study which involving adults aged 18 to 75 years old was also conducted by Doron et al. (2013). His study shown that human uses several cognitive strategies at the same time to overcome problems when dealing with negative and disliking situations. People with high self-esteem uses adaptive problem solving strategies and rarely avoid the problem and the level of depression is low.

Method

Design and Sampling of the Study

The design of this study is quantitative and data was collected using survey method. The selected sampling method is non-probability sampling. Researcher use simple sampling which use existing or readily available respondents. The target population of the study is adult males aged between 20 and 65 years old in the Federal Territory of Kuala Lumpur and the population size is 608,800 persons (Department of Statistics Malaysia, 2017). The researcher uses the Raosoft sample size calculator to determine the appropriate number of samples. By setting the error margin as 5%, the level of confidence as 80%, the size of the population as 608,800 people and the distribution of the response as 50%, then the proposed sample size is 165 people. However, the number of respondents who involved is 180 people.

Instruments

This quantitative study uses questionnaire as the research instrument. Questionnaire used consists of four parts. Part A asks about the respondents' demographic aspects. Part B contains questions related to the level of depression. The respondents' level of depression was measured using the second edition of Beck Depression Inventory (BDI-II) which contains 21 items. Respondents were asked to choose one out of four statements in each group of item that explained their feelings in the last two weeks. Each item is evaluated on a scale of 4 marks from 0 to 3. The score for each item is added to determine the total scores obtained. The range score for this inventory is from 0 (non-depressed) to 63 (severely depressed). This test instrument has high and stable internal reliability, which is $\alpha = .92$ and significant test-retest correlation $r = .93$ ($p < .001$) (Beck, Steer & Brown, 1996).

Part C measures the respondents' self-esteem by using the Rosenberg Self-Esteem Scale (RSE) that contains 10 items. The items are answered on a scale of 4 marks from strongly disagree (1) to strongly agree (4). For items 2, 5, 6, 8 and 9, there are reverse scoring. The scores for all the items are summed up and the higher the score, the higher the level of self-esteem. The range score for this test is from 10 to 40. The

reliability of this test is high, its internal consistency is α = .77 - .88 and the test-retest correlation is r = .82 - .85. The criterion validity is .55 and the construct validity correlates with depression is -.54 (Rosenberg, 1965).

Part D identifies the cognitive emotion regulation strategies used by respondents. The Cognitive Emotion Regulation Questionnaire short version with 18 items has been used to identify the cognitive coping strategies that one person uses after experiencing negative events. There are 9 dimensions in this test, which are self-blame, acceptance, rumination, positive refocusing, refocus on planning, positive reappraisal, putting into perspective, catastrophizing and others-blame. (Garnefski, Kraaij & Spinhoven, 2002). Garnefski et al. (2001) categorizes dimensions acceptance, refocus on planning, positive refocusing, positive reappraisal and putting into perspective as adaptive coping styles while dimensions self-blame, others-blame, rumination and catastrophizing as maladaptive coping styles. This instrument uses five-point scale, which is almost never (1), sometimes (2), regularly (3), often (4) or almost always (5). The dimension score is calculated by adding the item's score of the dimension (between 2 and 10). The higher the score of the dimension, the more the cognitive strategies are used. The reliability of CERQ short-version is considered high. The lowest alpha is the dimension of self-blame (.67) and the other dimensions have alpha within .73 to .81 (Garnefski & Kraaij, 2006).

Procedure

Questionnaires are printed out and distributed for data collection purposes. Hard copies of questionnaires are used but not Google Form is to facilitate respondents who are not familiar with electronic device especially for adults aged between 40 and 65 years old. Data collected in the Federal Territory of Kuala Lumpur area, such as Suria KLCC, Mid Valley, Aeon Metro Prima, Desa Park City, Kenanga Wholesale City, Mytown, Ikea, Sunway Velocity Mall, Berjaya Times Square, Fahrenheit 88 and Brem Mall. The questionnaire was given out face-to-face and there was no time limit for respondents to answer the questionnaire. Respondents were given a consent form and asked to answer all the questions honestly and sincerely. The researcher also informed the respondents that all information provided would be kept confidential and for research purposes only. The questionnaires were recollected after the respondents were done filling up. The data collection was conducted for several weeks to get enough respondents.

Data Analysis Procedure

After data collection, data were analyzed using the Statistical Package for the Social Sciences (SPSS version 22). Descriptive and inferential analyses were carried out. Descriptive statistical analysis was conducted to determine the score, percentage, mean and standard deviation while inferential statistical analysis was used to find out the difference and the relationship between the variables by using t-test and correlation test.

Results

Demographic Data

A total of 180 respondents were involved in this study. Respondents were aged between 20 and 65 years old with mean score of 32.72 years old and standard deviation of 12.18. The number of male respondents in early adulthood, who aged

between 20 and 40 years old, were 134 people (74.4%) while male respondents in middle adulthood, who aged between 40 and 65 years old were 46 people (25.6%). Most of the respondents were Chinese, which were 137 people (76.1%), followed by Malay, 32 people (17.8%), Indian 7 people (3.9%) and 4 others (2.2%). Undergraduate is the highest level of education for most of the respondents, which were 68 people (37.8%), followed by secondary schools (27.2%), STPM / Matriculation / Diploma (21.7%) and postgraduate (11.1%). There was one respondent not attending school and one was at PhD level. There were two respondents who have the highest level of education at primary school level. Most of the respondents involved in the study were private servant, which were 122 people (67.8%), followed by 33 students (18.3%), 16 public servants (8.9%), 5 unemployed (2.8%) and 4 pensioners (2.2%). In addition, most respondents were in single status,

which were 91 people (50.6%), followed by married status, 61 people (33.9%), in relationships status, 27 people (15.0%) and one is widower (0.6%).

Difference between Male in Early Adulthood and Middle Adulthood

Result a

Males in middle adulthood have a higher level of self-esteem compared to males in early adulthood. Independent sample t-test was conducted to compare the mean score of the level of self-esteem between males in early adulthood and middle adulthood. Result of the study was significant t (178) = -1.993, p <0.05. The t-test indicated that there was a difference in the level of self-esteem between males in early adulthood (M = 28.16, SD = 3.58) and males in middle adulthood (M = 29.41, SD = 3.99) as shown in table 1.

Table 1
Difference of the Level of Self-Esteem by Age Group

Age Group	N	*M*	*SD*	df	*t*	Sig.
20 - 40 years old	134	28.16	3.58	178	-1.993*	0.048
40 - 65 years old	46	29.41	3.99			

*Note. * p < .05.*

Result b

Males in early adulthood use maladaptive coping strategies in the cognitive emotion regulation strategies more often compared to males in middle adulthood. The difference in cognitive emotion regulation strategies between males in early adulthood and males in middle adulthood was tested using the independent sample *t*-test. The results of the study were significant for the dimension of positive refocusing [t(62.57) = 2.604, p <0.05],

putting into perspective [t (178) = 3.933, p <0.01], self-blame [t(178) = 3.364 , p < 0.01], others-blame [t(178) = 3.016, p <0.01], rumination [t(178) = 2.918, p <0.01] and catastrophizing [t(178) = 4.696 , p < 0.01]. For these dimensions, males in early adulthood got higher mean scores compared to males in middle adulthood as shown in table 2. Maladaptive coping styles in cognitive emotion regulation strategies, which are self-blame, others-blame, rumination and catastrophizing used more often by males in early adulthood compared to males in middle adulthood.

Table 2
Difference of Each Dimension in Cognitive Emotion Regulation Strategies by Age Group

Dimension	Age Group	*M*	*SD*	df	*t*	Sig.
Acceptance	20 - 40	6.54	1.88	65.67	0.003	0.997
	40 - 65	6.54	2.36			
Refocus on planning	20 - 40	7.43	1.57	58.60	1.862	0.068
	40 - 65	6.72	2.41			
Positive refocusing	20 - 40	5.81	1.70	62.57	2.604*	0.011
	40 - 65	4.85	2.31			
Positive reappraisal	20 - 40	7.28	1.88	65.88	1.519	0.133
	40 - 65	6.70	2.35			
Putting into perspective	20 - 40	6.41	1.77	178	3.933**	0.00
	40 - 65	5.20	1.93			
Self-blame	20 - 40	6.81	1.64	178	3.364**	0.001
	40 - 65	5.83	1.94			
Others-blame	20 - 40	5.52	2.07	178	3.016**	0.003
	40 - 65	4.43	2.22			
Rumination	20 - 40	6.21	1.73	178	2.918**	0.004
	40 - 65	5.30	2.03			
Catastrophizing	20 - 40	5.39	1.82	178	4.696**	0.00
	40 - 65	3.91	1.88			

Notes. ** $p < .01$, * $p < .05$.

Table 3 compares the coping styles between males in early adulthood and males in middle adulthood by categorizing dimensions in cognitive emotion regulation strategies to adaptive and maladaptive coping styles. Results of the study were significant for adaptive coping style, t (58.16) = 2.376, $p < 0.05$. The t-test also shown males in early adulthood use maladaptive coping style ($M = 23.93$, $SD = 5.17$) more often compared to males in middle adulthood ($M = 19.48$, $SD = 6.14$) with t (68.17) = 4.415, $p < 0.01$.

Table 3
Difference of Coping Styles in Cognitive Emotion Regulation Strategies by Age Group

Coping Styles	Age Group	*M*	*SD*	df	*t*	Sig.
Adaptive	20 - 40	33.47	5.94	58.16	2.376*	0.021
	40 - 65	30.00	9.27			
Maladaptive	20 - 40	23.93	5.17	68.17	4.415**	0.00
	40 - 65	19.48	6.14			

Notes. ** $p < .01$, * $p < .05$.

Result c

Males in early adulthood have a higher level of depression compared to males in middle adulthood. Independent sample t-test was conducted to compare the mean score of depression level between males in early adulthood and males in middle adulthood. Results of the study were significant t (113.77) = 3.58, p <0.01 and there was differences between the level of depression for males in early adulthood (M = 13.61, SD = 11.45) and males in middle adulthood (M = 8.15, SD = 7.87) as shown in table 4. Table 4 also shown that the level of depression for males in early adulthood is at mild level while for males in middle adulthood is at a minimal level. It also explains that males in early adulthood have a higher level of depression compared to males in middle adulthood.

Table 4
Difference in the Level of Depression by Age Group

Age Group	N	M	SD	df	t	Sig.
20 - 40	134	13.61	11.45	113.77	3.580**	0.001
40 - 65	46	8.15	7.87			

Note. ** p < .01.

Table 5 shows the comparison in the level of depression by age groups. Males in early adulthood have a higher percentage of respondents having mild, moderate and severely depressed compared to males in middle adulthood. This shows that nearly 40% of the total number of males' respondents in early adulthood and about 20% of males in middle adulthood had overall depression scores exceeding 13. There were 10.45% males in early adulthood and 2.17% males in middle adulthood were severely depressed.

Table 5
Difference in the Level of Depression by Age Group

		Age Group		Total
		20 - 40 years old	40 - 65 years old	
Total Scores	0 - 13 (Minimal)	81 60.45 %	37 80.43 %	118 65.56 %
	14 - 19 (Mild)	21 15.67 %	3 6.52 %	24 13.33 %
	20 - 28 (Moderate)	18 13.43 %	5 10.87 %	23 12.78 %
	29 - 63 (Severe)	14 10.45 %	1 2.17 %	15 8.33 %
Total		134 100 %	46 100 %	180 100 %

Correlation between variables

Result a

There was a negative and significant correlation between the level of self-esteem and depression among adult males in the Federal Territory of Kuala Lumpur. The relationship between these two variables

was tested using Pearson product-moment correlation coefficient. Based on table 6, there is a strong, negative and significant correlation between these two variables, $r =$ -0.602, n = 180, p <0.01. This means that the higher the level of self-esteem, the lower the level of depression.

Table 6
Correlation between Self-Esteem and Depression

Variables	Depression
Self-esteem	-0.602**

Note. ** $p < .01$

Result b

There was a positive and significant correlation between depression and dimensions categorized as maladaptive coping styles in cognitive emotion regulation strategies among adult males in the Federal Territory of Kuala Lumpur. The Pearson product-moment correlation coefficient is used to test the relationship between these two variables. Based on table 7, there is a weak, positive and significant correlation between depression and dimension others-blame ($r = 0.314$), rumination $(r = 0.193)$, and catastrophizing ($r = 0.323$) in cognitive emotion regulation strategies (n = 180, p <0.01). This means that the more people use these cognitive strategies, the higher the level of depression.

Table 7
Correlation between Cognitive Emotion Regulation Strategies and Depression

Variables	Depression
Acceptance	-0.117
Refocus on planning	-0.043
Positive refocusing	0.120
Positive reappraisal	-0.248**
Putting into perspective	0.020
Self-blame	0.085
Others-blame	0.314**
Rumination	0.193**
Catastrophizing	0.323**

Note. ** $p < .01$

Discussion

This study aims to examine the differences of the level of self-esteem, cognitive emotion regulation strategies and the level of depression between males in early adulthood and males in middle adulthood. The findings showed that there was a significant difference in the level of self-esteem between males in early adulthood and males in middle adulthood. Males in middle adulthood have a higher level of self-esteem compared to males in early adulthood. This result is consistent with the results of previous studies showing an increase in self-esteem levels from the end of adolescence to middle adulthood (Orth et al., 2012; 2015; Bleidorn et al., 2016). This study also shown a significant difference between males in early adulthood and males in middle adulthood for

dimensions positive refocusing, putting into perspective, self-blame, others-blame, rumination and catastrophizing. For these dimensions, males in early adulthood get a higher mean score than males in middle adulthood. The findings of this study are supported by the study of Panahi, Yunus, and Roslan (2013) which show significant differences in dimensions of self-blame, others-blame and rumination of different age groups and the use of these strategies decreases as age increases. The study of Street (2004), Akhtar-Danesh and Landeen (2007) and Sutin et al. (2013) show that younger adults experience more significant depressive symptoms than people older than them. The results of this study were consistent with their studies because of the significant differences in the level of depression among males in early adulthood and males in middle adulthood, which is males in early adulthood have a higher level of depression compared to males in middle adulthood.

Besides that, this study was also conducted to examine the relationship between self-esteem and depression. The results shown that there is a strong, negative and significant correlation between self-esteem and depression and this is consistent with the results of the previous studies (Abdul Hanid Halit, 2014; Manna et al., 2016; Hwang et al., 2016). According to Siti Taniza (1992), there are various causes of depression and one of them that listed in her study is low self-esteem. This view is consistent with the results obtained in this study. The next objective is to identify the relationship between cognitive emotion regulation strategies with depression. The findings shown that there is a weak, positive and significant correlation between depression and dimensions of others-blame, rumination and catastrophizing in cognitive emotion regulation strategies. The

dimensions of rumination and catastrophizing are dimensions that are often positively correlated with depression in the past studies (Omran, 2011; Jacob & Anto, 2016; Garnefski et al., 2017). Therefore, this study shows that the higher the level of self-esteem, the lower the level of depression. In addition, the more often the use of dimensions of others-blame, rumination, and catastrophizing in the cognitive emotion regulation strategies, the higher the level of depression a person is.

Conclusion

This study was conducted to identify the differences in self-esteem, cognitive emotion regulation strategies and depression according to the age group. Besides that, the relationship between self-esteem and cognitive emotion regulation strategies with depression among adult males in the Federal Territory of Kuala Lumpur was also examined.

The results of the study have shown that there are significant differences in self-esteem, cognitive emotion regulation strategies and depression according to the age group among adult males in the Federal Territory of Kuala Lumpur. This means that males in early adulthood have lower self-esteem, are more likely to use maladaptive coping styles and have a higher level of depression than males in middle adulthood. This result may be because someone has to face with various new roles such as just graduating, seeking a job, becoming a husband or father during early adulthood. They face a lot of stress and negative life situation that may lower their self-esteem and increase their level of depression. According to the findings of this study, it is found that there is a negative and significant correlation between self-esteem and depression. This is because self-esteem is indeed an important element related to

depression. A person with low self-esteem is less self-respecting and thinks of himself as a worthless person, in this case, they are inclined to face a depression problem as opposed to someone who has high self-esteem. In addition, dimensions of others-blame, catastrophizing and rumination have a positive and significant correlation with depression. These results illustrate that someone who puts the blame for what he or she experienced on others, gives an explicitly emphasizing on the terror of the experience or thinking all the time about the feelings and thoughts associated with the negative event can lead to depression.

There are some limitations in this study that need to be focused on. Firstly, this study uses a non-probability sampling method, which is a simple sampling that involving 180 adult males who volunteered in this study. The second limitation is the imbalance ratio of the male respondents in early adulthood and middle adulthood in this research. These issues limit the generalization of the results of this study. Thus, future research in this area is strongly encouraged to use a balanced comparison sample. Besides that, the self-report method used in this study may involve bias elements and affect the validity of the findings of this study. Therefore, future studies can use different data collection methods such as interviews. Other limitation in this study is that the results of this study are depends on cross-sectional data. This result should be measured by using longitudinal analysis so that the relationship between self-esteem, cognitive emotion regulation strategies and depression can be fully understood.

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