



Negative Life Events and Mental Health Problem: The Importance of Coping Strategy

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ABSTRACT

Exposure to negative life events can be extremely stressful for adolescents from divorced families and effective coping strategy can help to alleviate their stress. The current study examined the relationship between negative life events, coping strategy, and mental health problem among adolescents from divorced families. This study also explored the moderating role of coping strategy in the relationship. The sample of this study was 480 adolescents from divorced families, which were identified through multistage cluster sampling. The Malay Version of 12-Items General Health Questionnaire was implemented to measure mental health problem among the adolescents. The Brief Adolescent Life Event Scale was implemented to measure negative life events among adolescents. Brief Coping Orientation for Problem Experiences (COPE) was implemented to measure coping strategy. The current study revealed that mental health problem was significantly correlated with negative life events ($r = 0.498, p < 0.001$), maladaptive coping ($r = 0.537, p < 0.001$), and adaptive coping ($r = -0.417, p < 0.001$). The results found that both maladaptive (interaction effect = 0.158, $p < 0.01$) and adaptive coping (interaction effect = -0.150, $p < 0.001$) as significant moderators in the relationship between negative life events and mental health

problem among adolescents. Specifically, the impact of negative life events is less severe when adolescents reported frequent application of adaptive coping. In contrast, negative life events are most detrimental when adolescents reported high reliance on maladaptive coping. The current study demonstrated that the magnitude of the relationship between negative life events

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and mental health problem is highly depending on the choice of coping strategy. The present study concluded that adaptive coping can effectively mitigate while maladaptive coping exacerbates the adverse impact of negative life events. The findings of this study have practical implications in helping adolescents to bounce back from the negative consequences of parental divorce.

Keywords: Adolescents, divorced families, mental health problems, negative life events

INTRODUCTION

Mental health problem among Malaysian children and adolescents has documented an ascending trend in recent decades. The prevalence rate of depression among 28,738 Malaysian adolescents was 17.7% (Kaur et al., 2014). Similarly, research also found the prevalence rate of mental health problems among children and adolescents to increase from 13.0% in 1996 to 20.0% in 2011 (Ahmad et al., 2015). The elevation of mental health problem during adolescence can have a long-term negative consequence on adolescents, where the effects may persist until adulthood (Egan et al., 2016; Pelkonen et al., 2008). Further, research also shows that mental disorders during adolescence is associated with mental health and psychosocial outcomes in mature adulthood (McLeod et al., 2016).

The high prevalence and detrimental impacts of mental health problems among adolescents have spurred researchers to invest efforts on this issue. Much research has been conducted to examine the psychiatric

epidemiology among adolescents using numerous research designs, including population-based survey (Merikangas et al., 2010; Wille et al., 2008), cross-sectional studies (Low et al., 2012) and longitudinal studies (Bechtold et al., 2015). Of the various research samples, one group of adolescents is of growing concern, which is the offspring of divorced families. Indeed, adolescents of divorced families are frequently being labelled as at-risk group due to their vulnerability towards mental health problems (Amato & Keith, 1991; Pappa, 2013). It is believed that adolescents of divorced families are at greater risk to suffer mental health problem than those from intact families. Thus, the current study focused on adolescents from divorced families in Malaysia.

Negative Life Events and Mental Health Problem

With increasing research efforts invested in this area, numerous factors were identified as contributors for mental health problem among adolescents (Coggan et al., 2003; Noller et al., 2008). One of the critical factors which has been identified is the exposure to negative life events. Past studies consistently show that exposure to negative life events during adolescence can contribute to various developmental problems, such as internalizing and externalizing behaviour (McKnight et al., 2002), self-harm behaviour (Madge et al., 2011), depression (Johnson et al., 2012), and anxiety (Espejo et al., 2012). For example, one recent meta-analysis conducted by Li et al. (2016) involving

71 independent samples provided a strong evidence on the relationship between life events and depression among adolescents.

Despite the general acceptance that exposure to negative life events will steer adolescents towards mental health problems, it is noteworthy that some adolescents are resilience even under these unfavourable circumstances (Lee et al., 2017). Contrary to the general expectation, there are studies which found non-significant or weak relationships between negative life events and adjustment problems (Boardman et al., 2011; Wadsworth et al., 2005). These adolescents may bounce back from negative life events without being psychologically affected. Hence, these findings signal a need for further investigation on the link between negative life events, coping strategy and mental health problems.

Coping as Moderator

Coping is the cognitive and behavioural strategies an individual used in response to internal and external stressors (Gupta et al., 2004). Given the function of coping strategy, the choice of coping strategy in response to stressful life events may influence the adjustment outcomes. For instance, Griffith et al. (2000) indicated that adolescents who used approach coping tended to experience positive adjustment, while those who used avoidance coping were more likely to end up in poorer adjustment. Similarly, Rosario et al. (2010) showed that the usage of cigarette smoking in handling stress would increase the risk for psychological distress among adolescents. In light of this consideration,

it is plausible that adolescents with higher usage of maladaptive coping tend to be greatly affected by negative life events, while those who are more inclined to adaptive coping in relation to negative life events tend to adjust better.

Altogether, the main purpose of this study is to examine the relationship between negative life events, coping strategy (maladaptive coping and adaptive coping), and mental health problem among adolescents from divorced families. In addition, the current study further examines the moderating role of coping strategy on the relationship between negative life events and mental health problems.

MATERIALS AND METHODS

Participants and Procedure

Participants of the current study were 480 adolescents from divorced families in Malaysia. Specifically, there were 208 males and 272 females, aged between 13 and 18 years old (mean = 14.94, SD = 1.373). The participants were identified through multistage sampling from four states in Malaysia, which are Johor, Kedah, Selangor, and Pahang. With the permission from relevant authorities, school counsellors from the selected secondary schools were requested to provide a list of students who met the selection criteria, who live in divorced families, stay with divorced mother, and whose mother remains single. All of the listed students were provided a questionnaire and an informed consent form. The participants required approximately 40 minutes to complete the questionnaire.

Measures

The Malay version of 12-items General Health Questionnaire (Malay version GHQ-12). The Malay version of GHQ-12 (Yusoff et al., 2009) was used to measure mental health status among the adolescents. The item response was designed in four-point Likert scale, ranging from 0 (better than usual) to 3 (much less than usual). The binary scoring method (0-0-1-1) was used in the current study. Hence, the total scores range from 0 to 12, with higher score indicating higher mental health problem. The Cronbach's alpha for Malay version of GHQ-12 is 0.819 in this study.

The Brief Adolescent Life Event Scale (BALES). The BALES (Shahar et al., 2003) was used to measure negative life events among adolescents. The BALES consists of 36 items which can be generally categorized into positive life events and negative life events, with 18 items for each subscale. Each of the two subscales consists of six domains of life events, namely family, close friends, peer, school, work and non-school, and health and body events. For the purpose of the current study, only the negative life events scale is of interest. Participants were required to rate how often they experienced the stated life events in the past four weeks. The item response was designed in four-point Likert scale, ranging from 1 (never) to 4 (a lot). The total score ranged from 18 to 72, with higher total score indicates greater exposure to negative life events. The Cronbach's alpha for negative life events scale is 0.913 in this study (Cronbach's alpha = 0.913).

The Malay version of Brief Coping Orientation for Problem Experiences (COPE). The Malay version of Brief COPE (Yusoff et al., 2009) was implemented to measure coping strategy among the adolescents. The brief COPE consists of 28 items which can be categorized into two subscales, which are maladaptive coping (self-distraction, denial, venting, substance use, behavioural disengagement, and self-blame) and adaptive coping (active coping, planning, positive reframing, acceptance, humor, religion, using emotional support, and using instrumental support). The participants were required to rate how frequent they implement the stated coping strategies by using a four-point Likert scale, ranging from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot). Higher total score indicates more frequent usage of the relevant coping strategy. The Cronbach's alpha for adaptive coping scale and maladaptive coping scale is 0.892 and 0.872 respectively in this study.

RESULTS

Means, Standard Deviations, and Correlations of Variables

The means, standard deviations, and correlations among the variables were presented in Table 1. The result revealed significant positive relationship between negative life events and mental health problems ($r = 0.498, p < 0.001$), indicating that exposure to negative life events would increase the risk to develop mental health problems among adolescents from divorced families. The mental health problem of the

Table 1
Means, standard deviations, and correlations among the variables

No.	Variable	Mean	SD.	Correlation		
				1	2	3
1.	Mental Health Problems	5.66	3.496	-		
2.	Negative Life Event	39.16	10.678	0.498***	-	
3.	Maladaptive Coping	26.29	8.079	0.537***	0.709***	-
4.	Adaptive Coping	42.30	9.745	-0.417***	-0.423***	-0.287***

Note. *** $p < 0.001$

adolescents was positively correlated with maladaptive coping ($r = 0.537, p < 0.001$) and negatively correlated with adaptive coping ($r = -0.417, p < 0.001$).

Hierarchical Multiple Regression Analysis

Two parallel hierarchical multiple regressions were performed to test the moderating effects of coping strategy on the relationship between negative life

events and mental health problems, one for maladaptive coping and the other for adaptive coping (Table 2). For each hierarchical regression model, negative life events and the relative coping strategy were entered into the regression simultaneously against mental health problems in Step 1. Then, the interaction effect of negative life events and the relative coping strategy was entered into the regression in Step 2.

Table 2
The moderating role of coping strategy

Variable	B	SEB	β	R ²	R ² change	F
1. Maladaptive coping						
Step 1				0.316	0.316	10.398***
- Negative Life Event	0.077	0.018	0.236***			
- Adaptive Coping	0.160	0.023	0.370***			
Step 2				0.333	0.016	79.113***
- Negative Life Event	0.060	0.018	0.184**			
- Adaptive Coping	0.139	0.024	0.322***			
- Negative Life Event * - Adaptive Coping	0.466	0.137	0.158**			
2. Adaptive coping						
Step 1				0.300	0.300	102.059***
- Negative Life Event	0.128	0.014	0.392***			
- Adaptive Coping	-0.090	0.015	-0.251***			
Step 2				0.318	0.018	73.893***
- Negative Life Event	0.113	0.014	0.344***			
- Adaptive Coping	-0.079	0.015	-0.221***			
- Negative Life Event * - Adaptive Coping	-0.433	0.122	-0.150***			

Note. ** $p < 0.01$; *** $p < .001$

Maladaptive Coping. In Step 1, the results revealed negative life events ($\beta = 0.236, p < 0.001$) and maladaptive coping ($\beta = 0.370, p < 0.001$) as significant predictors of mental health problems. In Step 2, negative life events ($\beta = 0.184, p < 0.01$) and maladaptive coping ($\beta = 0.322, p < 0.001$) remained as significant predictors of mental health problems when the interaction effect was considered. Additionally, the significant interaction effect ($\beta = 0.158, p < 0.01$) indicates that the relationship between negative life events and mental health problems was moderated by maladaptive coping. All the variables explained approximately 33.3% ($R^2 = 0.333$) of the variance in mental health problems.

For a better clarification, a graphical presentation of the relationship between negative life events and mental health problems was plotted in accordance to the levels of maladaptive coping. The result is displayed as Figure 1.

Specifically, referring to Figure 1, it is clear that the relationship between negative life events and mental health problems was relatively weak among adolescents who reported low level of maladaptive coping. In contrast, the magnitude of the relationship was strongest among adolescents who reported high level of maladaptive coping. As such, usage of maladaptive coping might exacerbate the negative impacts of negative life events on adolescents.

Adaptive Coping. Identical to the first model, the Step 1 of this analysis revealed negative life events ($\beta = 0.392, p < 0.001$) and adaptive coping ($\beta = -0.251, p < 0.001$) as significant predictors of mental health problem. In Step 2, negative life events ($\beta = 0.344, p < 0.001$) and adaptive coping ($\beta = 0.221, p < 0.001$) once again significantly predict the mental health problem. With the significant interaction effect ($\beta = -0.150, p < 0.001$), the moderating role of adaptive

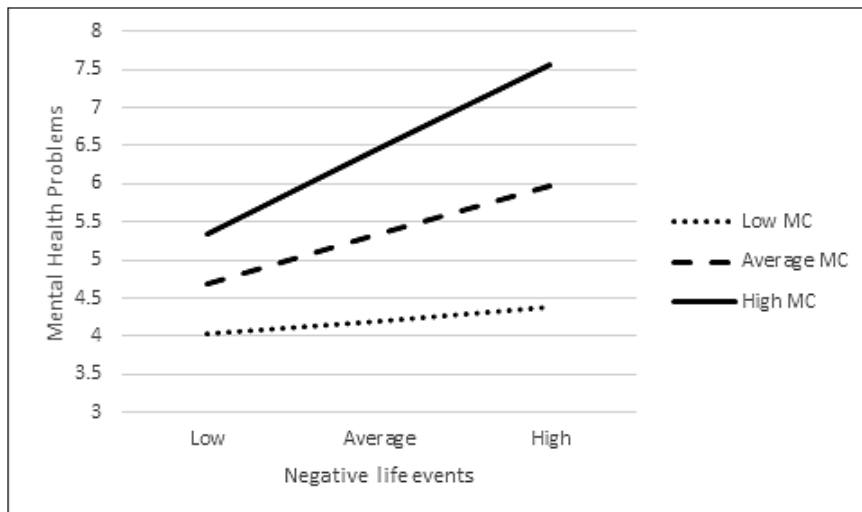


Figure 1. Maladaptive coping as moderator

copied in the relationship between negative life events and mental health problem is evidenced. The results indicated that all the variables accounted for 31.8% ($R^2 = 0.318$) of the variance in mental health problem. Figure 2 was plotted to interpret the interaction between the variables. The impact of negative life events on adolescents more severe when the adolescents reported

low level of adaptive coping. Conversely, the magnitude of the relationship is least when the adolescents reported high level of adaptive coping. Hence, implementation of adaptive coping may help weaken the influence of negative life events on mental health of adolescents from divorced families.

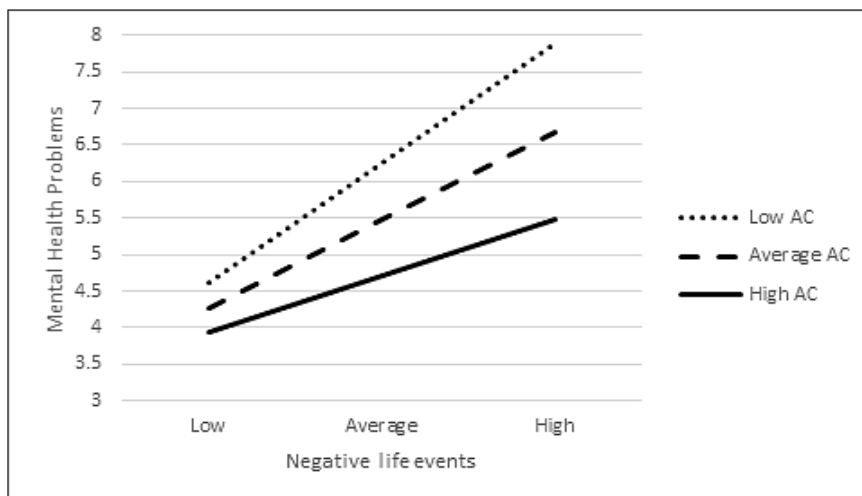


Figure 2. Adaptive coping as moderator

DISCUSSION

The current study aimed to examine the relationship between negative life events, coping strategy, and mental health problem among adolescents from divorced families. As hypothesized, significant positive relationship was found between negative life events and mental health problem, evidencing the negative impacts of negative life events on the well-being of adolescents in divorced families (Low et al., 2012; Nishikawa et al., 2018). The current findings also reinforce previous studies which found significant relationships between coping

strategy and mental health problem (Griffith et al., 2000; Mohammandy Far et al., 2012; Stikkelbroek et al., 2016; Vélez et al., 2016). Specifically, adolescents who reported high usage of maladaptive coping were at higher risk to experience greater mental health problem than their counterparts who utilized adaptive coping.

Given the significant relationship between the main variables, the study examined the moderating role of coping strategy on the relationship between negative life events and mental health problem. Consistent with past research (Hardesty, 2006; Rosario et al., 2010; Thorsteinsson

et al., 2013), the results indicated that both maladaptive and adaptive coping moderated the link between negative life events and mental health problem. More precisely, the impact of negative life events on adolescents is less severe when adolescents reported high usage of adaptive coping. In contrast, the magnitude of the relationship between negative life events and mental health problem tend to be stronger when adolescents use more maladaptive coping strategy. Evidently, the current study supports previous findings regarding the effectiveness of adaptive coping in handling negative life events (Hirsch et al., 2009) and the potential problematic outcomes of maladaptive coping (Rosario et al., 2010).

Rather than taking a vulnerability-based perspective to understand the relationship between negative life events and mental health problems, the current study examined the strengths and resilience among adolescents who succeed in shielding themselves from the catastrophe, particularly on the way they cope with stress. In other words, adolescents from divorced families should be educated on the proper use of coping strategies in handling stress. Focus should be placed on promoting adaptive coping and preventing maladaptive coping among them.

The cross-sectional research design of this study should be considered when interpreting the findings. Thus, the current study provides limited meaning on the direction of causality. For this reason, longitudinal studies on this issue are highly encouraged. Moreover, the participants

of the current study were recruited from four states in Malaysia only, and were filtered by several selection criteria. Hence, interpretations of the present findings should not go beyond this scope. Future research may replicate the current study into other geographical areas and involve adolescents from multiple ethnics into the sample. This will help to fortify the model and allow for better generalizability.

CONCLUSION

The current study revealed that exposure to negative life experiences may be precarious to the mental health of adolescents from divorced families. Those who experienced more negative life events tend to have poorer mental health. However, the study also highlighted that the consequences of negative events in life on mental health can be mitigated with the right choice of coping strategy. The mental health outcomes in relation to negative life events are not inevitable. Adolescents from divorced families can bounce back from the consequences of negative life experiences. With appropriate coping skills, adolescents from divorced families can confront the stressful situation and developed into a healthy individual.

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