Ups and Downs as Indonesian College Students: Risk and Protective Factors for Psychological Distress

Dra. Sugiarti, Lavenda Geshica, Dito A. Prabowo, Ade Rachmawati, Anindita Alkarisya and Vira A. Mulyaningrum

Abstract The recent study aimed to investigate potential risk and protective factors for psychological distress among Indonesian college students. A total of 1024 students from various colleges in Indonesia completed online and offline self-report questionnaires assessing the variables of interest, such as psychological distress (Hopkins Symptom Checklist-25), family functioning (Family Assessment Device), personality traits (Big Five Inventory-44), optimism (Life Orientation Test-Revised), resilience (Connor-Davidson Resilience Scale), and perceived social support (Social Provisions Scale). The results indicated negative and significant relationship between family functioning (communication and affective involvement dimensions), personality traits (extraversion and conscientiousness), optimism, resilience, perceived social support, and psychological distress. It also indicated positive and significant relationship between neuroticism personality trait and psychological distress. These findings suggested that family functioning (communication and affective involvement dimensions), personality traits (extraversion and conscientiousness), optimism, resilience, and perceived social support can be protective factors for psychological distress, meanwhile neuroticism personality trait can be risk factor for psychological distress.

Dra. Sugiarti (⋈) · L. Geshica · D. A. Prabowo · A. Rachmawati · A. Alkarisya

V. A. Mulvaningrum

Faculty of Psychology, Universitas Indonesia, Depok, Indonesia

e-mail: sugiarti@ui.ac.id; sugiartipsi@gmail.com

URL: http://www.ui.ac.id

L. Geshica

e-mail: lavenda.geshica@ui.ac.id

D. A. Prabowo

e-mail: dito.aryo@ui.ac.id

A. Rachmawati

e-mail: ade.rachmawati@ui.ac.id

A. Alkarisya

e-mail: anindita.keumalahayati@ui.ac.id

V. A. Mulyaningrum

e-mail: vira.andalusita@ui.ac.id

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1 Introduction

It is widely accepted that suicide is a global phenomenon indicating mental health emergency. World Health Organization (2016) estimates over 800,000 people die due to suicide every year. Moreover, suicide is the second leading cause of death among young adults aged 15–29 years old. In Indonesia, the national suicide rate among young adults aged 15–29 is 3.9 per 100,000 people (WHO, 2016). The high rate of suicide impacts on raising awareness on the importance of suicide prevention program. In consequence, today suicide prevention has become an integral part of Mental Health Action Plan of the World Health Organization which aims to reduce the rate of suicide by 10% in 2020 (WHO, 2016).

Before undertaking suicide prevention program, it is important to identify factors that contribute to suicide. Although suicide is a complex phenomenon, the current studies show that suicide is determined by the interaction between several factors inducing psychological distress, such as biological, psychological, environmental, social, and cultural factor. These factors are evidently increasing the risk of death caused by suicide (WHO, 2016) since suicide is the worst form of psychological distress (Eskin et al., 2016).

Lazarus and Folkman (1984, p. 19) defined psychological distress as "A particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being." The demands from the environment are called as stressor. According to Lazarus and Folkman (1984), psychological distress results from people's interpretation and explanations of their circumstances.

Each of the developmental stages has its own risk of psychological distress. However, college students who are in the emerging adult developmental stage, have the highest risk of psychological distress compared to other populations (Curtis, 2010). It transpires because college students experiencing the age of instability due to heterogeneous transitions, such as transition from high school to college and transition from adolescence to early adulthood (Curtis, 2010; Arnett, 2013). These transitions cause college students suffer from loneliness, isolation, and identity loss (Curtis, 2010). In addition, college students nowadays have higher risk of psychological distress compared to college students in 15–20 years ago due to rising college tuition fees that lead to financial problem, raising demand for success, and having difficulty to get a job in highly competitive employment market (Sharkin, 2013).

Even though college students face several problems and pressures, in fact not all college students experience high psychological distress. It is because there are a number of internal factors that may contribute to individual differences in experience of psychological distress, such as family functioning, personality traits, optimism, resilience, and perceived social support.

1.1 Family Functioning

Social support from significant other plays an important role in reducing the risk of psychological distress (Mirowsky & Ross, 2003). Beach et al. (in Cumsile & Epstein, 1994) also explained that intimate relationship is adequate to reduce the risk of depression. Furthermore, availability of social support from significant others may help individuals to be more confident and be able to control themselves. According to Mirowsky and Ross (2003), family is the closest significant other whom may be able to give social support during psychological distress period. In other words, a functional family can be a protective factor for psychological distress.

According to McMaster Model of Family Functioning, family functioning was described as structural property and organization from a group of family and interaction pattern between family members so that it can be differentiated between healthy families and unhealthy families (Epstein, Baldwin, & Bishop, 1983). In accordance with McMaster Model of Family functioning, there are several dimensions of family functioning; they are problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control.

1.2 Personality Traits

Personality traits play an important role affecting psychological distress, therefore personality traits have repeatedly been a variable of interest in studies pertaining to mental health problems (Shaheen, Jahan, & Shaheen, 2014). According to Costa, Terracciano, and McCrae (2003, p. 23), personality traits refer to "Dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions." Personality traits predispose individual's perception and interpretation in experience of psychological distress (Wenzel & Beck, 2008). In other words, individual's perception toward stressor is determined by personality traits.

In accordance with Costa, Terracciano, and McCrae (2003) five-factor model (FFM), there are five broad dimensions of psychological distress (i.e., extraversion, openness, agreeableness, conscientiousness, and neuroticism). FFM gives immense information with each dimension characterizing a subset of individual characteristic independently.

Extraversion dimension describes both quantity and quality in interpersonal relationship, need for social stimulation, and capacity to joy and emotional fulfillment. Individuals with high extraversion tend to seek interaction with others. They are also affectionate, delighted, optimistic, and talk active. Unlike individuals with high extraversion, individuals with low extraversion tend to be reserved, independent, and not likely to interact with others. Nevertheless, it does not mean that low extraversion identical with unhappiness and pessimistic. Individuals with low extraversion also experience positive emotion as same as individual with high extraversion do, but they express it in different ways (Costa & McCrae, 1994).

Agreeableness indicates the kind of interpersonal interaction in continuum from compassion to antagonism. Individuals with high agreeableness are willing to help each other, selfless forgiving, friendly, and obedient. Otherwise, individuals with low agreeableness are tough-minded, cynical, manipulative, uncooperative, and spiteful (Costa & McCrae, 1994).

Conscientiousness dimension emphasizes on the level of motivation, control, and self-disciplined. Individuals with high conscientiousness tend to be dutiful, ambitious, and sometimes to the point of being "workaholic." So that individuals scoring high on conscientiousness would be reliable, hard-working, and neat. While individual with low conscientiousness, in comparison, tends to be aimless, having low ambition, unreliable, and more likely to giving up when they are given challenging assignment (Costa & McCrae, 1994).

Neuroticism refers to chronic emotional instability and difficulty in adapting to circumstances. Individuals with high neuroticism tend to be anxious, temperamental, having unrealistic ideas, and having low frustration tolerance. These characteristics make individuals with high neuroticism are more likely to suffer from psychological distress than individuals with low neuroticism. It is caused individuals with low neuroticism have some characteristics that can be protective factors toward psychological distress, such as tend to be patient, satisfied with themselves, and having emotional stability (Costa & McCrae, 1994).

Openness dimension is tendency to be imaginative, unconventional, individualistic, creative, curious, and divergent thinker. In addition, individuals with high openness also feel their emotions deeply and intensely. Otherwise, individuals who score low on openness tend to be more conventional, conservative, dogmatic, and having less ability to understand a complex idea (Costa & McCrae, 1994).

1.3 Optimism

Optimism can minimize the negative impacts on psychological distress (Carver & Scheier; Carver, Scheier, & Segerstrom in Besser & Zeigler-Hill, 2014). Individuals with high level of optimism are expected to have lower level of psychological

distress (Besser & Zeigler-Hill, 2014). According to Scheier and Carver (1985), optimism refers to the tendency to believe positive outcome. Scheier, Carver, and Segerstrom (2010) defined optimism as a variable giving individual differences in reflected positive expectations toward future. Srivastava and Angelo (2009) also defined optimism as a tendency to get positive outcomes. Gillham, Shatte, Reivich, and Seligman (2001) described optimism as a tendency to expect the best possible outcomes. Hence, it can be concluded that optimism is a tendency to expect positive outcomes in the future.

Carver and Scheier (2005) explained that individual with high optimism tends to expect positive outcomes; whereas, individual with low optimism tends to believe that negative outcomes will happen in the future. High-level optimism makes individuals tend to believe that positive outcomes will occur in spite of the problems faced nowadays. The doubt toward future makes individuals with low-level optimism are more likely to experience negative feelings, such as anxiety, guilt, anger, sadness, and hopelessness (Carver & Scheier in Scheier, Carver, & Bridges, 2001).

1.4 Resilience

The relevance between psychological distress and resilience begins with its definition. Based on Richardson, Neiger, Jensen, and Kumpfer (1990), resilience defined as "The process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption the result from the event." From the further explanation given in their journal, resilience viewed as process from being challenged in distressful situation, to be able to surpass the adversity, thus resilience exists due to distress. From the process described by Richardson et al. (1990), the outcome from the process involving person and environment qualities divided as four type; where *resilient reintegration* categorized as the type when an individual with adversity recognized his/her strength and surpass it, also manage to prevent prospective distressful situations.

Empirical basis that supported the idea has been developed in many settings throughout the resilience research. Bacchi and Licinio (2016) and McGillivray and Pidgeon (2015) found from studies with student population reveal that there was significant negative correlation between resilience and psychological distress. The same conclusion revealed in a meta-analysis research by Mortazavi and Yarolahi (2015) who studied several Iranian researches involving the variables in the country demographics. Based on the significant conclusion, the existence of high resilience in an individual correlated with low psychological distress.

1.5 Perceived Social Support

One of the biggest challenges that young adults face nowadays is interpersonal relationship problem. It is a result of unfulfilled need for developing intense interpersonal relationship with others. Individuals who have less intense interpersonal relationship tend to suffer from loneliness and isolation. Consequently, social support is exceptionally important especially for young adults. Lee, Detels, Rotheram-Borus, and Duan (2007) defined social support as individuals' perception about the availability of people who can make them feel loved, cared, and respected.

In connection with psychological distress, Waldinger (2015) explained that individuals with proper social relationship with their friend, family, or community tend to have better mental health. Moreover, individuals with proper social support also tend to be happier and having higher life expectancy. In addition, Pervin and Ferdowshi (2016) conducted a survey and found that loneliness (lack of social support) correlated positively with suicidal thoughts. In other words, individuals who feel lonely carry a high risk of suicidal thoughts or even suicidal attempt.

2 Methods

2.1 Respondents

Respondents comprised of 1024 students (297 males, 727 females) from various colleges in Indonesia. The convenience sample technique was used for collecting data. The average age was 20.13 years old, with a range from 18 to 25 years old. Regarding level of education, 41 respondents were pursuing a vocational degree, 967 respondents were pursuing a bachelor's degree, and 16 respondents were pursuing a master's degree. All respondents were Indonesian citizen and be able to use Bahasa Indonesia both verbal and written.

2.2 Measures

Psychological Distress. Psychological distress was measured by Hopkins Symptom Checklist (HSCL-25). It is a screening tool designed to detect symptoms of anxiety and depression. HSCL-25 consisted of 25 items. Each item is rated by 4-point Likert scale on continuum of not at all (1) to extremely (4). The Cronbach's alpha reliability of HSCL-25 was 0.913.

Family Functioning. Family functioning was measured by Family Assessment Device (FAD). It is abbreviated from 53-item to 44-item version. FAD measures seven dimensions of family functioning. Six dimensions of FAD measure

dimensions in McMaster Model of Family Functioning (i.e., problem solving, communication, roles, behavior control, affective involvement, and affective responsiveness) and another measures general functioning. Each item is rated by 4-point Likert scale on continuum of strongly disagree (1) to strongly agree (5). The Cronbach's alpha reliability was ranged from 0.331 (roles), 0.589 (behavior control), 0.623 (problem solving), 0.623 (communication), 0.639 (affective involvement), 0.675 (affective responsiveness), 0.639 (affective involvement), and 0.863 (general functioning).

Personality Traits. Personality traits were measured by Big Five Inventory-44 (BFI-44). It measures five dimensions of personality, namely extraversion, agreeableness, conscientiousness, neuroticism, and openness. This inventory consists of 44 items. Each item is rated by 5-point Likert scale on the continuum of strongly disagree (1) to strongly agree (5). The Cronbach's alpha reliability of BFI-44 scales was ranged from 0.614 (agreeableness), 0.723 (openness), 0.773 (conscientiousness), 0.810 (extraversion), and 0.815 (neuroticism).

Optimism. Optimism was measured by Life Orientation Test-Revised (LOT-R) developed by Scheier, Carver, and Bridges (1994). It is unidimensional inventory consisted of 10 items, 3 items measure optimism (favorable items), 3 items measure pessimism (unfavorable items), and 4 items served as fillers. Each item is rated by 6-point Likert scale on the continuum of strongly disagree (1) to strongly agree (6). The Cronbach's alpha reliability of LOT-R was 0.622.

Resilience. Resilience was measured by Connor-Davidson Resilience Scale (CD-RISC 10). It is abbreviated from 25-item to 10-item version by Campbell-Sills dan Stein (2007). CD-RISC 10 measured five dimensions of resiliency, namely hardiness, support/purpose, faith, persistence, and cross-loading (Campbell-Sills & Stein, 2007). Each item is rated by 5-point Likert scale on continuum of not true at all (1) to true nearly all the time (5). The Cronbach's alpha reliability of CD-RISC 10 was 0.853.

Perceived Social Support. Perceived social support was measured by Social Provisions Scale (SPS). It measures six aspects of family functioning, namely guidance, reliable alliance, reassurance of worth, attachment, social integration, and opportunity if nurturance. This inventory consists of 24 items. Each item is rated by 4-point Likert scale on continuum of strongly disagree (1) to strongly agree (4). The Cronbach's alpha reliability of PSP scales was ranged from 0.530 to 0.775 and the overall reliability was 0.91.

2.3 Procedure

Respondents were recruited using online questionnaire (Google form) and conventional questionnaire booklet (using paper and pencil). This questionnaire included some background information about the aims of the study, informed consent, respondents' demographic profile, and six inventories measured variables of interest, such as psychological distress, family functioning, personality traits,

optimism, resilience, and perceived social support. All respondents participated in conventional questionnaire were rewarded a pen and a notebook. Whereas respondents participated in online questionnaire were rewarded a chance to get IDR 100,000 mobile recharge (7.5 US\$) for the five luckiest respondents.

3 Results

3.1 Respondents Characteristics

According to Table 1, respondents in the recent study were 1024 college students from various colleges in Indonesia. A total of 553 conventional questionnaires were given to respondents, but 186 questionnaires were not be filled completely. Meanwhile, 5 of 662 data from online questionnaire could not be used due to discrepancy between respondents and characteristics required in the recent study.

Table 1 Respondents' characteristic in the recent study (n = 1024)

Characteristics	F	%	Characteristics	F	%
Sex			Age		
1. Male	297	29.00	1. 18 years old	123	12.00
2. Female	727	71.00	2. 19 years old	210	20.50
			3. 20 years old	294	28.70
			4. 21 years old	266	26.00
			5. 22 years old	100	9.80
			6. 23 years old	12	1.20
			7. 24 years old	11	1.10
			8. 25 years old	8	0.80
Marital status		Ethnicity	Ethnicity		
1. Single	1015	99.10	1. Bataknese	72	7.03
2. Married	9	0.90	2. Minangese	77	7.52
			3. Bantenese	23	2.25
			4. Betawinese	39	3.81
			5. Sundanese	177	17.29
			6. Javanese	463	45.21
			7. Chinese-Indonesian	35	3.42
			8. Others	138	13.48
Education level			Socioeconomic status		
1. Vocational	41	4.00	1. Low	224	21.90
2. Bachelor	967	94.40	2. Middle	416	40.60
3. Master	16	1.67	3. High	384	37.50
Parents' marital status		Birth order			
1. Married	892	87.10	1. First-born	187	18.30
2. Divorced	53	5.20	2. Middle child	334	32.60
3. Widowed	79	7.70	3. Last-born	284	27.70
			4. Only child	219	21.40

Respondents' age ranged from 19 to 25 years old, with a mean age of 20.13 years old (SD = 1.34). Respondents consisted of 297 males (29%) and 727 females (71%). The majority of respondents reported being single (99.10%). In regard to ethnicity, the majority of respondents identified themselves as Javanese (45.21%). In terms of education level, the majority of respondents were pursuing a bachelor's degree (94.40%). Regarding socioeconomic status, majority of respondents identified themselves as middle class (40.60%). The majority of respondents' parents' current marital status were married (81.7%). In terms of birth order, the majority of respondents were middle children.

3.2 Correlational Analyses of Psychological Distress on the Variables of Interest

Partial correlation was used to examine correlation between family functioning and psychological distress. Table 2 shows significant negative correlation between communication and psychological distress (r = -0.114, n = 1024, p < 0.01, two tailed), and significant negative correlation between affective involvement and psychological distress (r = -0.074, n = 1024, p < 0.01, two tailed).

Partial correlation was used to examine correlation between personality traits and psychological distress. Table 3 shows significant negative correlation between extraversion personality trait and psychological distress (r = -0.086, n = 1024, p < 0.01, two tailed), and significant negative correlation between conscientiousness personality trait and psychological distress (r = -0.107, n = 1024, p < 0.01,

Table 2 Partial correlation of psychological distress on family functioning

Family functioning	Psychological distress (r)	Sig.
Problem solving	0.049	0.120
Communication	-0.114	0.000**
Roles	-0.023	0.470
Affective responsiveness	-0.023	0.465
Affective involvement	-0.074	0.018**
Behavior control	-0.040	0.205

Table 3 Partial correlation of psychological distress on personality traits

Personality traits	Psychological distress (r)	Sig.
Extraversion	-0.086	0.006**
Agreeableness	0.024	0.448
Conscientiousness	-0.107	0.001**
Neuroticism	0.437	0.000**
Openness	0.057	0.068

Table 4 Pearson correlation of psychological distress on optimism

Variable	Psychological distress (r)	Sig.
Optimism	-0.303	0.000**

Table 5 Pearson correlation of psychological distress on resilience

Variable	Psychological distress (r)	Sig.
Resilience	-0.244	0.000**

Table 6 Pearson correlation of psychological distress on perceived social support

Variable	Psychological distress (r)	Sig.
Perceived social support	-0.270	0.000**

two tailed). Significant positive correlation was shown in correlation between neuroticism personality trait and psychological distress (r = 0.437, n = 1024, p < 0.01, two tailed).

Pearson correlation was used to examine correlation between optimism and psychological distress. Table 4 shows significant negative correlation between optimism and psychological distress (r = -0.303, n = 1024, p < 0.01, two tailed).

Pearson correlation was used to examine correlation between resilience and psychological distress. Table 5 shows significant negative correlation between resilience and psychological distress (r = -0.244, n = 1024, p < 0.01, two tailed).

Pearson correlation was used to examine correlation between perceived social support and psychological distress. Table 6 shows significant negative correlation between perceived social support and psychological distress (r = -0.270, n = 1024, p < 0.01, two tailed).

4 Discussion

The objective of the recent study was to investigate potential risk and protective factors for psychological distress among Indonesian college students. The result indicated negative and significant relationship between family functioning (communication and affective involvement dimensions), personality traits (extraversion and conscientiousness), optimism, resilience, perceived social support, and psychological distress. It also indicated positive and significant relationship between neuroticism personality trait and psychological distress. These findings are supported by previous study.

Hovey and Seligman (2007) found that individuals who have proper family support experience less anxiety and depression as compared to those who lack of family support. Moreover, Taylor (2008) explained that individuals will feel loved, respected, and cared if they have proper family support. Therefore, family support plays an important role as protective factor for psychological distress.

Earlier study conducted by Shaheen, Jahan, and Shaheen (2014) also showed that extraversion and conscientiousness had significant negative correlation toward psychological distress; meanwhile, neuroticism had significant positive correlation. However, in openness and agreeableness personality traits, the recent study showed different results. Shaheen, Jahan, and Shaheen (2014) found that openness and agreeableness correlated negatively toward psychological distress, whereas the recent study proves that openness and agreeableness did not correlate significantly toward psychological distress. These findings were supported by numerous previous studies which proved that these traits did not correlate significantly toward psychological distress if they were not mediated by other variables (Bekker, Zee, Lewig, & Dollard, 2006; Karsten et al., 2012).

Individuals with high extraversion tend to use rational problem-solving strategy and seek social support. These characteristics make individuals with high extraversion have lower risk of psychological distress (Shaheen, Jahan, & Shaheen, 2014). High-conscientiousness individuals are characterized by hard-working, well-organized, and self-discipline (Costa & McCrae, 1994). These characteristics make individuals with high conscientiousness more adaptive in their daily life, so that individuals with high conscientiousness tend to have lower level of psychological distress. Neurotic individuals are more prone to negative emotions, such as anger, sadness, anxiety, and self-doubt (Shaheen, Jahan, & Shaheen, 2014). It means that those individuals who scored high on neuroticism significantly have higher risk of psychological distress.

It was also clear from the results that there was significant negative correlation between optimism and psychological distress. It means that those individuals who scored high on optimism significantly experience less psychological distress. It is supported by previous study conducted by Besser and Zeigler-Hill (2014) proved optimism helps individuals to reappraise negative situations and makes them more positive than before (Carver, Scheier, & Weintraub; Scheier & Carver in Besser & Zeigler-Hill, 2014). Individuals with high-level optimism believe that they are able to get positive outcomes (Scheier & Carver, 1985). Scheier, Carver, and Segerstorm (2010) also found that individuals with high-level optimism tend to find the best way to cope with stressful situation, therefore optimism can be protective factor toward psychological distress.

The significant result of the study shared typical conclusion from previous studies with student population, such as Bacchi and Licinio (2016) and McGillivray and Pidgeon (2015). It is assumed that individuals with high resilience have the qualities to minimize the distress impact. However, the low relationship coefficient does not imply the cohesive and essential relationship between psychological distress and resilience in the resilience theory by Richardson et al. (1990). This result raised assumptions that although individuals have the qualities to prevent upcoming adversity, distress may experience by him/her. The coefficient also shows that resilience process is not instant, and individuals can have both distress and resilience while prevent the impact.

Earlier studies conducted by Vungkhanching et al. (2016) and Friedlander (2007) also showed that there was significant negative correlation between

perceived social support and psychological distress. It is assumed that individuals with high social support believe that they have people who can help them when they are experiencing psychological distress. Otherwise, individuals with low social support tend to perceive that they are unable to overcome psychological distress because they are lack of proper resources. In consequence, perceived social support can be a protective factor toward psychological distress.

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