

## The Relationship between Mental Health Literacy and Adolescent Resilience in Crime Prone Areas in Indonesia

### Wafiq Aulia Ramadhani

Faculty of Nursing, Hasanuddin University, Indonesia.

### Kadek Ayu Erika

\* Department of Pediatric Nursing, Faculty of Nursing, Hasanuddin University, Indonesia.

(Corresponding author):  
kadek20\_uh@yahoo.com

### Nurlaila Fitriani

Department of Mental Health Nursing, Faculty of Nursing, Hasanuddin University, Indonesia.

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### ABSTRACT

**Background and Objectives:** Living in areas with high crime rates leads adolescents to experience mental health issues and potentially become involved in criminal activities. Mental health literacy (MHL) involves knowledge about identifying, managing, and seeking help for maintaining mental well-being. Resilience is the ability to adapt and withstand pressures, influenced partly by the environment. This study examines the relationship between mental health literacy and resilience among adolescents (10-19 years old) residing in crime-prone areas in Indonesia.

**Materials and Methods:** This research employs a quantitative approach with a cross-sectional design involving a sample of 365 respondents selected through proportionate stratified random sampling. Research instruments, including the MHKQ for mental health literacy and CD-RISC for resilience, are distributed using paper-based questionnaires. The analysis is conducted using Spearman's rho.

**Results:** The results showed that respondents' average MHL and resilience scores were  $10.66 \pm 2.23$  and  $84.60 \pm 16.12$ , respectively. The results showed that adolescents exhibit low mental health literacy but high resilience. There was a significant positive correlation between mental health literacy and resilience ( $P < 0.001$ ,  $r = 0.492$ ) with a moderate correlation.

**Conclusion:** This study highlights the importance of mental health literacy in raising awareness and helping adolescents build resilience to withstand negative peer influences. This study can serve as a benchmark and inform efforts to enhance mental health literacy and resilience among adolescents in schools and communities in crime-prone areas.

**Paper Type:** Research Article

**Keywords:** Adolescents; Crime; Mental Health Literacy; Resilience.

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## Introduction

Adolescents are vulnerable to mental problems due to exposure to poverty, violence, negative family and friend relationships, and influences from vulnerable environments (1). One of the impacts is behavioral disorders that result in delinquency and even criminal behavior (2). Adolescents who behave criminally are often caused by behavioral problems, low self-control, mental disorders, and low knowledge and understanding of mental health (3). Mental health understanding includes recognition, prevention, early help, and access to mental health services. Mental health literacy is a strategy to prevent mental problems, including criminal behavior (4, 5). Low mental health literacy and lack of early defenses in the face of pressures such as risky environments result in adolescents tending to get caught up in maladaptive behavior. Thus, adolescents need the ability to survive in these conditions—resilience is an adaptive coping defense in the face of pressure. Poor resilience can lead to drug or alcohol abuse, mental health problems, and self-harm as maladaptive mechanisms to avoid problems (6). Several factors that can influence resilience include cognitive function and knowledge, locus of control, self-concept, family factors, community factors, and risk factors (such as pressure or stressors) (7). A lack of understanding about mental health can negatively affect the quality of life for adolescents, leading to behavioral problems, such as maladaptive behaviors that can harm them. Resilience is essential as an adaptive coping mechanism when facing challenges and problems in life. A person with good knowledge or literacy about mental health is

more likely to be resilient by using their skills to handle different situations and find ways to adapt (8). Therefore, when knowledge of mental health is limited, it becomes harder for adolescents to develop resilience.

The National Commission on Child Protection noted that in 2015, juvenile crimes reached 2,620 cases (9). Then it increased by 10.7% in 2018-2021 (10). South Sulawesi ranked 4th in Indonesia in 2021 with 14,636 criminal cases (11). Takalar Regency, located in South Sulawesi, Indonesia, is one of the areas with a high crime rate and is categorized as a relatively vulnerable area (12). A survey conducted in 2015 found that crime in North Galesong District ranked 2nd in Takalar Regency. Based on the results of interviews with the North Galesong Police, there were 207 cases of crime during 2022-2023, and it became the year with the highest number of cases. Criminal cases that occur in North Galesong District include assault, group fights, vandalism, theft, drug abuse, robbery, bow-and-arrow attacks, and alcohol-related incidents. Most of these cases, with adolescents involved as victims and offenders, totaled 136 cases. Persecution and beatings were the most dominant cases, with the victims and perpetrators involved being teenagers. Living in an area with high crime is a factor that causes someone with mental health problems to behave violently and even criminally.

Adolescent mental health literacy and its impact on behavior and social resilience show that during and after the pandemic, adolescents had low mental health literacy (13). Mental health literacy and adolescent resilience have a role for adolescents in crime-prone areas. However, prior research

has not examined the relationship between mental health literacy and adolescent resilience, especially in the context of crime areas, especially in North Galesong, which is included in crime-prone areas. The study aimed to determine the relationship between mental health literacy and adolescent resilience in crime-prone areas in Indonesia.

## **Materials and Methods**

### **Population and Sample**

This quantitative study, with a cross-sectional design, was conducted at junior and senior high schools in North Galesong District, Takalar Regency, Indonesia, from January 2024. The study population was adolescents living in the North Galesong District, totaling 4171 adolescents. The sample was determined using the Slovin formula and using an error tolerance of 5%. The total sample size was 365 adolescents with inclusion criteria aged 10-19 years and willing to participate as a respondent. The exclusion criteria are living out of the Galesong Utara District, Takalar Regency, South Sulawesi Province, Indonesia, and having physical limitations such as blindness, muteness, or deafness. The sample determination using proportionate stratified random sampling with the strata for this study were defined primarily based on the educational level, dividing the population into two main categories: junior high school and senior high school. Sub-subdivision within these categories was done by class level, and the students were divided into grades 1st, 2nd, and third. Further, to determine the sample in the study from each school class, simple random sampling using a randomizer application.

### **Data Collection Tools**

Data collection for the study used two instruments: the Mental Health Knowledge Questionnaire (MHKQ) and The Connor-Davidson Resilience Scale (CD-RISC).

#### **The Mental Health Knowledge Questionnaire (MHKQ)**

The Mental Health Knowledge Questionnaire (MHKQ) from Wang 2013 and the Indonesian version by Guntur Alfianto in 2023 with validity and reliability tests (14). This questionnaire can be used to measure mental health literacy in adolescents. This questionnaire consists of 20 items with only 2 answer options: "Yes or No". Seven items (2, 4, 6, 9, 10, 13, 14) are unfavorable; namely, the answer "no" will be valued at 1. While 13 items (1,3,5,7,8,11,12,15,16,17,18,19 and 20) are favorable, the answer "Yes" will be given a value of 1. The MHKQ instrument has a Cronbach's alpha value of 0.912. The mental health literacy assessment has a maximum score of 20 and a minimum score of 0. The scores are categorized based on the mean value of the respondents in the study.

#### **The Connor-Davidson Resilience Scale (CD-RISC)**

The Connor-Davidson Resilience Scale (CD-RISC) instrument was developed by Connor and Davidson in 2003. This instrument is used to measure the level of resilience of adolescents. Wahyudi developed the Indonesian version of CD-RISC in 2020 (15). This measuring instrument contains 25 items with a scale of 1-5 consisting of five answer choices (Strongly Unsuitable = 1; Unsuitable = 2; Neutral = 3; Suitable = 4; Very Suitable = 5). This scale has been tested for validity and reliability with a Cronbach alpha value of 0.90. The resilience assessment has a

maximum score of 125 and a minimum score of 25. The scores are categorized based on the mean value of the respondents in the study.

### Data Analysis

Data collection was conducted offline in schools using paper-based questionnaires. Data analysis used descriptive univariate analysis for respondent demographic data and bivariate analysis using Spearman rho tests (for correlating categoric variables with abnormal data distribution) because the data distributions were abnormal. The data was analyzed using the SPSS version 26 application.

### Results

Based on Table 1, the majority of respondents were female (67.7%), the majority of respondents were aged 13-15 years (middle adolescence) (48.2%), and senior high school level (56.4%). Respondents with the highest parental marital status were married (90.4%), with the majority of parental income per month < Rp. 3,384,876 (79.2%), and most lived with both parents (88.5%), with the most extended period of residence in the North Galesong Sub-district being >10 years (87.9%). Respondents who had friends who had been involved in violence or criminality were 51.8%, and 48.2% stated that they had not.

The average adolescent mental health literacy score is 10.66 (SD = 2.23), the lowest score is 4, and the highest score is 17, with a median of 10.00. While the average value of adolescent resilience is 84.60 (SD = 16.12), the lowest value is 38, the highest value is 117, and the median is 88.00. The mental health literacy confidence interval ranges (95% CI) from 10.43 to 10.89, while the

resilience variable ranges from 82.94 to 86.26. The data on mental health literacy and resilience variables are categorized based on the mean scores of respondents.

Based on Table 2, Adolescents with higher mental health literacy and resilience tend to be older (late adolescence). Females and senior high school students show higher levels of mental health literacy and resilience. Adolescents from married households and those with a monthly family income above the specified threshold generally exhibit greater resilience. Those living with both parents and not involved in friendships with individuals engaged in crime display higher resilience. More extended residence in North Galesong is also associated with higher resilience.

Table 3 shows that more respondents have low mental health literacy (51.2%) and more have high resilience (58.9%). The results of the Spearman Rho test obtained a p-value <0.001, so it was concluded that there was a relationship between mental health literacy and adolescent resilience in the North Galesong District. The correlation coefficient value  $r = 0.492$ , meaning a moderate correlation exists. The direction of the correlation between mental health literacy and resilience is positive (+), meaning that the correlation is in the same direction: the higher the mental health literacy, the higher the resilience.

## Discussion

### Mental Health Literacy of Adolescents

Mental health literacy in adolescents is categorized as low literacy. These results are in line with research on Nigerian adolescents, and research on Vietnamese adolescents

found low adolescent mental health literacy (16, 17).

Mental health literacy in the general public and adolescents is still low and moderate (18). Efforts to improve mental health literacy in the community, including adolescents, are rare and poorly evaluated (19). At the same time, school-based educational interventions

may improve MHL in adolescents (20). Mental health literacy was higher in older population groups (21).

This study also showed that adolescents at the senior high school level had higher health literacy than adolescents at the junior high school level. Mental health literacy was affected by higher grades (22).

**Table 1. Characteristics of Research Respondents (n=365)**

Characteristics Respondents	M ± SD	
	Frequency (f)	Percentage (%)
Age	14.96 ± 1.67 2.33 ± 0.64	
10-12 years old (early adolescence)	34	9.3
13-15 years old (middle adolescence)	176	48.2
16-19 years old (late adolescence)	155	42.5
Gender	1.67 ± 0.47	
Male	120	32.9
Female	245	67.1
School Level	1.56 ± 0.49	
Junior High School	159	43.6
Senior High School	206	56.4
Marital Status of Parents	1.15 ± 0.48	
Married	330	90.4
Divorced	15	4.1
Widowed	20	5.5
Parents' Monthly Income	1.21 ± 0.40	
< Rp. 3.384.876	289	79.2
≥Rp. 3.384.876	76	20.8
Living Arrangement	1.18 ± 0.50	
Both parents	319	87.4
One parent	26	7.1
Other family	20	5.5
Have Friends Involved in Crime/Violence	1.48 ± 0.50	
Yes	189	51.8
No	176	48.2
Length of Residence in North Galesong	13.68 ± 3.55 2.83 ± 0.49	
< 5 Years	19	5.2
5-10 Years	25	6.8
>10 Years	321	87.9
Mental Health Literacy	10.66 ± 2.23	
Low	187	51.2
High	178	48.8
Resilience	84.60 ± 16.12	
Low	150	41.1
High	215	58.9

**Table 2. The Cross Tabulation between Mental Health Literacy and Resilience Adolescent (n=365)**

Characteristics Respondents	Mental Health Literacy		Resilience	
	Low	High	Low	High
	f (%)	f (%)	f (%)	f (%)
Age				
10-12 years old (early adolescence)	21 (5.8)	13 (3.6)	20 (5.5)	14 (3.8)
13-15 years old (middle adolescence)	100 (27.4)	76 (20.8)	79 (21.6)	97 (26.6)
16-19 years old (late adolescence)	66 (18.1)	89 (24.4)	51 (14.0)	104 (28.5)
Gender				
Male	68 (18.6)	52 (14.2)	59 (16.2)	61 (16.7)
Female	119 (32.6)	126 (34.5)	91 (24.9)	154 (42.2)
School Level				
Junior High School	95 (26.0)	64 (17.5)	71 (19.5)	88 (24.1)
Senior High School	92 (25.2)	114 (31.2)	79 (21.6)	127 (34.8)
Marital Status of Parents				
Married	167 (45.8)	163 (44.7)	10 (2.7)	196 (53.7)
Divorced	11 (3.0)	4 (1.1)	11 (3.0)	5 (1.4)
Widowed	9 (2.5)	11 (3.0)	6 (1.6)	14 (3.8)
Parents' Monthly Income				
< Rp. 3.384.876	151 (41.4)	138 (37.8)	123 (33.7)	166 (45.5)
≥Rp. 3.384.876	36 (9.9)	40 (11.0)	27 (7.4)	49 (13.4)
Living Arrangement				
Both parents	158 (43.3)	161 (44.1)	129 (35.3)	190 (52.1)
One parent	17 (4.7)	9 (2.5)	14 (3.8)	12 (3.3)
Other family	12 (3.3)	8 (2.2)	7 (1.9)	13 (3.6)
Have Friends Involved in Crime/Violence				
Yes	89 (24.4)	100 (27.4)	82 (22.5)	107 (29.3)
No	98 (26.8)	78 (21.4)	68 (18.6)	108 (29.6)
Length of Residence in North Galesong				
< 5 Years	13 (3.6)	6 (1.6)	13 (3.3)	7 (1.9)
5-10 Years	12 (3.3)	13 (3.6)	8 (2.2)	17 (4.7)
>10 Years	162 (44.4)	159 (43.6)	130 (35.6)	191 (52.3)

**Table 3. Relationship between Mental Health Literacy and Adolescent Resilience (n=365)**

Mental Health Literacy	Resilience				Total		p-value	r
	High		Low					
	f	(%)	f	(%)	f	(%)		
High	149	40.8	29	7.9	178	48.8	<0.001	0,492
Low	66	18.1	121	33.2	187	51.2		
Total	215	58.9	150	41.1	365	100		

Older adolescents can quickly gain an understanding related to mental health by accessing more information from social media or programs at school (23, 24), so older adolescents predominantly have better mental health literacy than younger adolescents.

Adolescents with a residence period of more than 10 years had a higher level of mental health literacy in the low category. This study was conducted in rural areas, and it was found that the level of mental health literacy was in the low category. Living in rural

areas is a demographic factor that challenges improving health literacy (25).

In the study, it was found that adolescents who had friends who had been involved in crime had more mental health literacy levels in the high category. Not always only negative influence relationships from peers, but positive influences can also be channeled from individuals to their peers, one of which is the dismissal of individual involvement in crime (26). In some cases, having a friend who has been involved in a crime can provide a different experience and perspective.

### **Resilience of adolescents**

Adolescents mostly have resilience, which is in the high category. In this study, female adolescents had higher resilience than male adolescents. Similarly, research from Marta showed that adolescent resilience was in the high category (27). Female adolescents tend to resolve pressure by focusing on emotional coping and emotional impact, while men use logic and focus on problem-focused coping (28). Older adolescents have better psychological challenges and more experiences that help them develop coping skills.

Adolescents who have high resilience are more numerous than adolescents who have no friends who have been involved in crime. Resilience will be lower in adolescents with high risk. In addition, it was also found that adolescents with high resilience were found more in adolescents who lived more than 10 years in North Galesong. Adolescents will more easily adjust to conditions that have been faced for a long time by learning from these experiences. Relationship between Mental Health Literacy and Adolescent Resilience in Crime-Prone Areas

The results showed a relationship between mental health literacy and adolescent resilience in crime-prone areas. These results are in line with a study conducted on Chinese adolescents, which found a significant positive correlation between mental health literacy and resilience (29, 30). Adolescent resilience in crime-prone areas refers to the ability to withstand the pressures of a risky environment. Adequate mental health knowledge and skills provide more psychological resources to help them overcome challenges and maintain good mental health. Having mastered such knowledge and skills, adolescents are more likely to try different kinds of coping when facing psychological difficulties (31). Mental health literacy can influence resilience for the formation of psychological resilience in the face of various stresses (29). Mental health literacy can help reduce crime by addressing underlying mental problems that may contribute to criminal behavior (32, 33).

Mental health literacy and resilience theories assume that adolescents are negatively impacted by risky situations such as bullying, crime, and neighborhood violence. However, many adolescents gain positively from the application of resilience factors, including coping skills, social support, community resources, and access to accurate knowledge to deal with situational risks despite exposure to risky factors (34). Adolescents who have more knowledge about mental health will tend to seek help from trusted sources, thus increasing resilience in dealing with difficult situations.

Study Limitations and Strengths: A limitation of this study is that not all students fully understood the questions, requiring the

researcher to provide additional support and guidance to respondents. This added a layer of effort, necessitating extra time and energy from the researcher to ensure accurate responses and understanding throughout the process.

### Conclusions

This study found a positive significant correlation between mental health literacy and adolescent resilience. Adolescents need to have good mental health literacy so that they can quickly build resilience in dealing with criminal environments. This research highlights the importance of mental health literacy in raising awareness and helping adolescents build resilience to withstand negative peer influences. There is a need for school-based programs such as health promotion and curriculum development to improve mental health literacy and adolescent resilience. Policies are needed to develop programs that provide easily accessible mental health services and other interventions, such as mental health promotion, which should be widely disseminated, especially in rural areas. Further research is needed about intervention studies to increase knowledge and awareness about mental health among adolescents.

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