IDENTIFYING BULLYING AND ITS RELATIONSHIP WITH MENTAL HEALTH PROBLEM AMONG ADOLESCENTS: A SCOPING REVIEW

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ABSTRACT
Bullying action was still as trend and current issue, especially among adolescence. This was related to increasing incidence per year and its large impact especially on mental health problems. Where adolescence's mental health was a long-term asset because of its influence on development level and quality of life among adolescents in the future. The study aims was to identify and analysis literature at five years recent (2019-2023) regarding to bullying and its relationship with mental health problem among adolescence. The study design was a scoping review. The searching literature using journal database PubMed (MEDLINE), Proquest, ScienceDirect, and Google Scholar through entering keywords bullying, mental health problem, adolescence. 12 articles selected from 384 articles as met inclusion criteria including original articles, discuss about bullying and mental health problem among adolescence, published at 5 years recent (2019-2023), available free full text, and using english languages. The result reported that bullying incidents among adolescence were associated with gender, age, role in bullying, and type of bullying. Majority adolescence who experience bullying were at high risk of experiencing mental health problem especially depression, anxiety, and even suicidal idea and perpetration. There were correlation between bullying incidence with mental health problem among adolescence. The study result expecting could give an understanding to adolescence regarding to bullying and its huge negative impact on mental health, so that bullying action among adolescence could be stopped.

Keywords: adolescence; bullying; mental health problem

INTRODUCTION
Adolescence is important periods of human life. It regarding to developing social and emotional habits that sustaining for further mental well-being. Unexpected changing including physical, emotional and social conditions in this periods could very vulnerable to experiencing prolonged mental problems (Ringdal et al., 2021). It including poverty, bullying, traumatic events, as well as conflict experiences (García-Carrión et al., 2019).

Bullying is the most current issue experiencing among adolescence (Cosma et al., 2020). Study conducted by World Health Organization (WHO) involving 227.441 students from 45 countries (aged 11, 13, and 15 years old) found that majority students have experiencing bully-victim (10%) and conducting a bully (6%) for twice or three times in two months (Inchley et al., 2020). Meanwhile, in Spain bullying incidence among adolescence reach 3%-5% for traditional bullying and 5.5% to 6.5% for cyberbullying (as victims and perpetrators) (Sánchez et al., 2023). In Indonesia, incidence of bullying among adolescence have been
increasing annually (Krisnana et al., 2019). Studies reported by Protection Commission (KPAI) that incidence of bullying among adolescence in school has increased 50% from 2017 to 2019. Majority of them experiencing bullying classified into verbal (30%), physical (23.3%), sexual (11%), as well as cyberbullying (3.3%) (Kodapally et al., 2021). Bullying is intention and repeated acting of physical aggression (including hitting, stealing), as well as verbal acting (including harassing, threatening, teasing or mocking in mentioning name) (Hellström et al., 2021). Bullying is manifested by various violances including physical direct and indirect, verbal, social exclusion, as well as disruptive behaviour (Mendez et al., 2019).

Bullying among adolescence to be serious problem because it has a negative impact on mental health-problem that manifested with physical and psychological disruption (Ngo et al., 2021). There are differences findings of study result regarding the type and widely of bullying impact on mental health problems among adolescence (Man et al., 2022; Bokhari et al., 2022; Lai et al., 2023). Some studies reported that majority bulli-victim experiencing physical problem including look so tired, loosing appetite, difficult to sleep, headache, as well as dizziness (Moore et al., 2017). Other studies found that majority bulli-victim showing psychological problem including depression, anxiety (Copeland et al., 2013), loneliness, bad of self esteem, and loosing self-concept (Batool, 2023). Other studies also reported that bulli-victim extremely tend to at risk suicides, suicide ideation, and attempts (Bang & Park, 2017; Barzilay et al., 2017). Based on the phenomenon above, the researcher intent to identify bullying and its relationship with mental health problem among adolescence through scoping review. The study aims was to identify and analysis literature related to bullying and its correlation with mental health problem among adolescence.

METHOD
The study design was scoping review related to identifying bullying and its relationship with mental health problem among adolescence. The studies using four journal databases resources including PubMed (MEDLINE), Proquest, ScienceDirect, and google scholar to identifying appropriate articles based using keyword “bullying”, “mental health problem”, adolescence”. This study using PRISMA 2020 guidelines through four stepping including identifying, screening, eligibility and included articles as explained on figure 1. Eligibility of study was screening steps of articles based on inclusion and exclusion criteria. The inclusion criteria including 1) original articles, 2) involving adolescence at school, 3) including theme bullying incidence, mental health problem, 4) published at 5 years recent (2019-2023), 5) available free full text, and 6) using English languages. Data extraction and analysis of articles classified based on author, year of study, purpose, study design, and result. The process of identifying and extracting article conducted manually. By which, there were 12 articles selected that met inclusion criteria. As mentioned in table 1 below.
RESULTS

Table 1. The Result of Reviewing articles selection

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<thead>
<tr>
<th>Author</th>
<th>Country</th>
<th>Participants</th>
<th>Result</th>
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<tbody>
<tr>
<td>Luo et al. (2022)</td>
<td>China</td>
<td>Middle and high school students in China (n=5,415).</td>
<td>• Students at school classified into four groups were victims/bullies (2,72%), bullies (1,38%); victims (10,89%), uninvolved (85,01%).</td>
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<td>• Students with school bullying including as bully/victims, bullies, and victims had high risk experiencing mental health problem</td>
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<td>• Mental health problem experiencing among students including anxiety symptoms, non-suicidal self-injury and suicide ideation</td>
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<td>• Boys who had been bullied had high risk anxiety symptoms and non-suicidal self-injury</td>
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<td>• Girls who had been bullied had high risk of anxiety symptoms and suicide ideation</td>
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<td>Källmén et al. (2021)</td>
<td>Sweden</td>
<td>Students in lower secondary school (year 9-compulsory) and upper secondary school (year 11)  (n=32,722)</td>
<td>• Highest bullying incidence found among girls in year 9 (4,9% to 16,9%)</td>
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<td>• Increasing incidence of mental health problems experiencing by the boy in year 9 (+1,2%) and girls in year 11 (+4,6%).</td>
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<td>• There were positive correlation between bullying with mental health problem among adolescents (OR = 2.57 [2.24–2.96]).</td>
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<td>• Boys who had been bullied had high risk experiencing mental health problems four times.Whereas, for girls was about 2.4 times more higher.</td>
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<td>Ringdal et al. (2020)</td>
<td>Norway</td>
<td>Students between 15 to 21 years old from five upper secondary schools in Norway (n=1,814)</td>
<td>• Social support (friends and family), bullying and school-related stress had significant correlation with both anxiety and depression symptoms.</td>
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<td>• Bullying was the strongest variable that had correlation with anxiety and depression symptoms among adolescents.</td>
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<td>Varela et al.</td>
<td>Chile</td>
<td>Adolescent students in 11 public and private urban schools in Santiago de Chile (n=366)</td>
<td>• Stress of interaction with teachers was the least variable that had correlation with anxiety and depression symptoms</td>
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<td>Chudal et al.</td>
<td>Singapore</td>
<td>Adolescents from eight Asian countries and five European countries were countries: China, Finland, Greece, India, Indonesia, Iran, Israel, Japan, Lithuania, Norway, Russia, Singapore and Vietnam (n=28,427)</td>
<td>• There was negative correlation between school climate with victimization  &lt;br&gt; • There was positive correlation between victimization with internalizing behaviors, as well as correlation between bullying aggression and externalizing behaviors  &lt;br&gt; • Majority participants had experienced traditional bullying (28.9%), following cyberbullying (17.7%) and only 6.1% had experiencing both traditional and cybervictimization  &lt;br&gt; • There were psychologic symptoms among victimization (girls, OR 1.25, 95% CI 1.22–1.29; boys, OR 1.29, 95% CI 1.25–1.33).</td>
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<td>Zhang et al.</td>
<td>China</td>
<td>Students in lower secondary school (year 9- compulsory) and upper secondary school (year 11) (n=32,722)</td>
<td>• There were four classes of bullying victimization pattern among boys were high class (0.6%), moderate class (2.8%), verbal class (12.4%), and low class (84.2%).  &lt;br&gt; • There were three classes among girls were high class (0.7%), moderate class (5.6%), and low class (93.7%).  &lt;br&gt; • There were correlation between bullying victimization class and mental health outcomes.  &lt;br&gt; • Students with higher class of bullying victimization had more severe mental health problems</td>
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<td>Galán et al.</td>
<td>USA</td>
<td>Students in 9th to 12th grades at 13 public high schools in Pittsburgh, Pennsylvania (n=3,939)</td>
<td>• Bullying that most common experiencing among students were bullying based on race/ ethnicity reached 375 students (9.5%), and bullying perpetration reached 209 students (5.8%)  &lt;br&gt; • Youth with multiple stigmatized identities (diverse black and Hispanic) had high risk experiencing bullying verbalic and perpetration.  &lt;br&gt; • There were correlation between bullying with violence outcomes (delaying proper medical and care, non-suicidal self-injury, suicidal ideation and greater violence involvement.</td>
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<td>Ngo et al.</td>
<td>Vietnam</td>
<td>four secondary schools students in Hanoi, Vietnam (n=712)</td>
<td>• Type of bullying experiencing among students including physical (8.4%), social aggression (31.2%), verbal (11.9%), and sexual bullying (2.7%)  &lt;br&gt; • Bullying were negatively affected by levels of classmates, family support, as well as school security.  &lt;br&gt; • Overweight or obese had more higher risk suffering social aggression compared to normal BMI.  &lt;br&gt; • Bullying had negatively impact on decrement of HRQOL, increasing risk of depression, anxiety, and stress among adolescents.</td>
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<td>Neupane et al.</td>
<td>Nepal</td>
<td>Students in Nepal Global School (n=6529)</td>
<td>• Bullying was dominated by male students (55.67%), whereas female students reach 46.17%  &lt;br&gt; • There were increasing incidence of mental health problems experienced by students with bullying (loneliness, anxiety, suicide attempting, school absenteeism due to fear and school truancy</td>
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<td>Wang et al. (2019)</td>
<td>China</td>
<td>High school students in Taipei City (n=2028)</td>
<td>• There were significant correlation between bullying victimization with negative health behaviour including involvement in physical fights and tobacco use</td>
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<td>• Bullying categories dominated by traditional bullying (13.3%), cyberbullying (9.9%), and combined bullying (9.4%)</td>
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<td>• Students had role as victim of bullying and conducting bullying, or both</td>
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<td>• Bullying had correlation with mental health problem (serious psychological distress, self-harm, or suicidal ideation),</td>
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<td>• Bullying perpetration was affected by school factors including type of school and school climate</td>
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<td>Lucas-Molina et al.</td>
<td>Spain</td>
<td>Students in 31 schools in the region of La Rioja, Spain (n=1,774)</td>
<td>• Bullying incidence including traditional and cyberbullying had positive correlation with mental health problem (suicidal behaviour (p&lt;0.001), and depression (p &lt; .001), but had negatively correlation with self-esteem (p &lt; 0.23).</td>
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<td>(2022)</td>
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<td>• Emotional intelligence had increasing level when experiencing bullying, it including adaptability, stress management, and interpersonal involvement</td>
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<td>Méndez et al. (2019)</td>
<td>Spain</td>
<td>Students in compulsory secondary education (CSE) schools Murcia, Spain (n=309)</td>
<td>• Bullying manifestation including violence conducted teachers to students, physical direct and indirect violence gotten from other students, as well as verbal violence, and social exclusion</td>
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<td>• Emotional intelligence had positive correlation with manifestation of bullying (p&lt;0.001)</td>
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Table 1 shows that bullying experienced by adolescence classified based on five categories including gender, role in bullying, type of bullying, reason for bullied, and factors affecting of. Based on gender, majority bullying experienced by girl in year 9 and boy in year 11 (Kallmen et al., 2021; Luo et al., 2022; Zhang et al., 2020). Majority they role as bulli-victim, bulli-perpetrator, or both (Luo et al., 2022; Wang et al., 2019). Based on type of bullying, majority adolescence gotten traditional-bullying, cyber-bullying, or both (Chudal et al., 2021; Wang et al., 2019; Lucas-Molina et al., 2022), verbal, physical, social aggression, as well as sexual bullying (Ngo et al., 2021). Based on reasons for bullying, majority adolescence gotten bullying because difference type of race (diverse black and hispanic) (Galan et al., 2021), over-weight or obese (Ngo et al., 2021), negative behaviour (physical fight and tobacco user) (Neupane et al., 2020). There are several factors affecting to bullying among adolescence including school climate (Varela et al., 2021; Wang et al., 2019), level of classmate, family support, and school security (Ngo et al., 2021), as well as emotional intelligence (Medez et al., 2019).

Table 1 shows that mental health problem experienced by adolescence classified based on three categories including gender, type of mental health problems, and factors affecting of. Based on gender, girl tend to be more experiencing anxiety symptoms and suicide ideation, meanwhile boy more likely tend to be anxiety symptoms and non-suicidal self injury (Luo et al., 2022; Kallmen et al., 2021; Chudal et al., 2021). Type of mental health problem experienced by adolescence including psychologic symptoms (anxiety, depression, stress)(Luo et al., 2022; Ringdal et al., 2020; Ngo et al., 2021), negative violence outcomes (suicide ideation or attempting, delaying proper medical and care, non-suicidal self-injury, greater violence involvement) (Galan et al., 2021; Neupane et al., 2020; Wang et al., 2019), as well as studying process disruption (school absenteeism due to fear, and school truancy) (Neupane et al., 2020). There are factors affecting to mental health problem experiencing
among adolescence including social support (family and friend) and school related stress (Ringdal et al., 2020).

Table 1 shows that there are correlation between bullying with mental health problem among adolescence (Kallmen et al. 2021; Ringdal et al. 2020; Zang et al. 2020; Galan et al. 2021; Ngo et al. 2021; Wang et al. 2019; Lucas-Molina et al 2022). Some studies report that there are positive correlation between bullying with mental health among adolescence (Kallmen et al., 2021; Zhang et al., 2021). Majority adolescents who are bullied at school are more likely experiencing mental health problems four-times in boys, and two-times in girls (Kallmen et al., 2021). The studies report that Bullying has a correlation with anxiety and depression symptoms among adolescence (Ringdal et al., 2020; Lucas-Molina et al., 2022). Whereas other studies report that bullying among adolescence has strong correlation with psychological distress, self-harm, and suicidal ideation (Wang et al., 2020; Mendez et al., 2019).

DISCUSSION
Bullying experiencing among adolescence

Based on the gender, some studies shows that majority bullying experienced by girls in year 9 (Luo et al., 2022; Kallmen et al., 2021), whereas other studies report that bullying experienced by the boy in year 11 (Neupane et al., 2020; Zhang et al., 2020). Based on role in bullying, Majority girls as bulli-victim from traditional and cyberbullying (Luo et al., 2022; Kallmen et al., 2021; Chudal et al., 2021), whereas the boy role as bulli-victim and bulli-perpetrator (Neupane et al., 2020; Zhang et al., 2020; Wang et al., 2019). The reason why the girl in year 9 more high rish in bulli-victim because of the physical factors (girl look so weak, short, inferior, feel different), as well as contributing of other factors (disadvantaged economic condition) (Saptono, 2022). Whereas, the boy have high risk to conduct bullying or bulli-perpetrator because of emotional immaturity or called lowing emotional intelligence that consists of intrapersonal (self-awareness and self-expression), interpersonal (social awareness and interpersonal relationship), stress management (emotional management and regulation), adaptability (change management), and general mood (self-motivation) (Peres et al., 2019; Mendez et al., 2019). It also suported by previous studies that increasing level of bulli-victim are associated with low management and emotional control, as well as inability to understand the emotions other (Kokkinos et al., 2012).

Stress management is self ability to manage problem, minimizing negative impact of the problem, optimizing coping strategy to reduce stress, as well as using ability to seeking solution of conflict (Mendez et al., 2019; Garcia et al., 2014). Based on emotional intelligence, incidence of bullying can be reduced through giving education and training about optimizing intrapersonal factors, interpersonal factors, and stress management. beside that, giving awareness about important the others in relationship as same students or with the teachers. Based on type of bullying, bullying experienced by adolescence students are traditional bullying, cyberbullying, and both (Chudal et al., 2021; Wang et al., 2019). It consistent with other studies that majority type of bullying experiencing among adolescence are traditional bullying (Wang et al., 2019; Chu et al., 2018; Yun & Kim, 2016). Traditional bullying including directly violence through verbal, perpetration, sexual, or social exclusion (Mendez et al., 2019). Whereas, cyberbullying is caused by negative impact of enhancing technology. It regarding to closery adolescence using social media as primary communication tool indirectly (Smith et al., 2013). The results are contradicted with other studies that majority students experincing both traditional and cyber-bullying (Sampasa et al., 2014; Kim et al., 2018), the students who involved in traditional bullying as also as experienced cyberbullying (Messias et al., 2014). It indicated that bullying have spread among
adolescence are in both types including traditional and cyber-bullying (Haltigan & Vaillancourt, 2014).

**Mental health problem experiencing among adolescence students**

Based on gender, majority of boys have a high risk to experiencing anxiety symptoms, as well as non-suicidal ideation, whereas girls who had been bullied have a high risk to experiencing both anxiety symptoms and suicide ideation (Luo et al., 2022; Ngo et al., 2021). Other studies also report that boy in year 9 have potentially (+1.2%) more higher experiencing mental health problem, meanwhile the girls in year 11 have potentially (+4.6%) more higher experiencing mental health problem (Kallmen et al., 2021; Neupane et al., 2021; Wang et al., 2019). The results are consistent with previous studies that girls are more likely experiencing mental health issue including social disorders, depression, and anxiety (Meng, 2023; Jones et al., 2022; Zhao & Yao, 2022). Adolescence is a period of developing mental health where various disorders could be assessed and evaluating longitudinally. During this period, they experiencing puberty and new stressor including educational stress, sexual exploration, and peer conflict (Berg et al., 2017; Schafhuser et al., 2017). The different types of mental health problem manifestation between boy and girl based on managing and coping with stressors (Yoon et al., 2023; Lai et al., 2023). Coping style is kind of behavioral approach in which individu use their cognitive regulatory and strategy to fight with stressful events (Lai et al., 2023).

When they facing with the stressful events like bullying, the adolescents (boy and girl) have a different response of coping style, it manifested with different types of mental health (Chang et al., 2023; Lin et al., 2020). Coping styles may classified into positive (confronting, asking for help), and negative (avoiding problems like retreating, and enduring) (Xiong et al., 2019). A previous study showed there are negative correlation between coping style with mental health problem, that mean majority adolescence with positive coping style have minor mental health problems, whereas they have negative coping style have high risk experiencing mental health problems (Li et al., 2021). Other studies also report that adolescence as bulli-victim who have negative coping style are associated with higher risk of anxiety symptoms (Garnefski & Kraaij, 2014). Therefore, incidence of mental health problem among adolescence as bulli-victim are affected by coping style and problem-solving management.

**The correlation between bullying with mental health problem**

Some studies reported that there were positive correlation between bullying with mental health problem (Kallmen et al., 2021; Ringdal et al., 2020; Zang et al., 2020; Galan et al., 2021; Ngo et al., 2021; Wang et al., 2019; Lucas- Molina et al., 2022). Majority adolescents who are bullied at school are more likely experiencing mental health problems (Arseneault, 2017; Hysing et al., 2021). There were contributd factors that supported to greatly impact of bullying on mental health problem including age (Kallmen et al., 2021), social support (Ringdal et al. 2020), self-esteem (Lucas-Molina et al., 2022). The boys who had been bullied at school had four-times higher prevalence of mental health problems. While, girls had 2.5 times more higher experiencing mental health problem. It indicated that boys were more vulnerable to experiencing mental health problem than girls (Kallmen et al., 2021; Neupane et al. 2020).

Social support also had contributed to play a role in bullying incidence. Adolescent girls who had higher social networks could be more inclined to voice concerns about bullying to significant others. Other studies also mentioned that self-esteem also contributed with bullying, the study showed that there were associated between self-esteem with bully-victim (Lucas-Molina et al., 2022). The studies also showed a negative correlation between bullying
with self esteem, Majority students who experiencing bullying in their school had negative self-esteem.

CONCLUSION
Increasing bullying among adolescents dominantly experienced by girls in year 9, and boys in 11 year. They role as bully-victim, conducting bully, or both. Majority type of bullying including traditional bullying, and cyberbullying. There were correlation between bullying with mental health problem. Mental health problem including anxiety symptoms, depression, non-suicidal self-injury, as well as suicide ideation and perpetration. Need to reducing incidence of bullying and minimizing impact of bullying on mental health problem through giving education about the harmful of bullying and its potential impact on mental health problem, as well as enhancing emotional intelligence that consists of intrapersonal (self-awareness and self-expression), as well as interpersonal (social awareness and interpersonal relationship)

REFERENCES


