

## The Role of Social Skills on Bullying Behavior Tendency with Friendship Quality as Mediator

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**Abstract.** Social skills have been known to predict bullying tendencies in adolescence. However, knowledge about the mechanisms by which social skills are linked to bullying tendency remains limited. The present study investigated whether friendship quality would mediate the link. A sample of 204 adolescents (16-18 years old; 163 girls; 41 boys) studying in Yogyakarta state high schools completed an online self-report of Bullying Tendency Scale, Social Skills Scale, and Friendship Quality Scale. Mediation analysis was conducted using PROCESS macro. Results showed that friendship quality could not mediate social skills with bullying tendency therefore hypothesis of this study was denied. However, by including gender, it was found that friendship quality has a significant role as a mediator for boys. Higher social skills were associated with higher friendship quality, and then higher friendship quality was associated with higher bullying tendency. It can be concluded that social skills are important for boys and girls to exercise positive interaction with peers and to have high friendship quality. However, it is more important for boys to have high friendship quality with positive peers.

**Keywords:** adolescent; bullying tendency; friendship quality; social skills

Bullying has been a challenge experienced by adolescents globally. Data from Global School-Health Survey indicates that 30.4% of adolescents from 48 countries have been found to be a victim of bullying (Koyanagi et al., 2019). Those percentages covered adolescents from Africa, America, South-East Asia, Middle East, and Western Pacific region. In South-East Asia only, according to Sittichai and Smith (2015), there are more than hundreds of high school students who have experienced bullying. Moreover, according to Smith and Robinson (2019), in Asian countries with collectivistic cultures such as Indonesia, more bullying cases are found than in countries with individualistic cultures. The higher prevalence of bullying is likely because more bullies are involved in collectivist countries when bullying does occur. These corresponded with the fact in Indonesia, that since 2015, the percentage of Indonesian adolescents who became victims of bullying has doubled, from 20.6% (2.295 students) to 41% (4.960 students) (Ministry of Education, Culture, Research and Technology, 2018; Organization for Economic Co-operation and Development, 2019; World Health Organization, 2015).

The Special Region of Yogyakarta was recently ranked among ten cities with high violence cases (309 cases) (Ministry Of Women Empowerment and Child Protection, 2020). As many as 91 victims were adolescents aged 13-17 years and were students of high school. Moreover, the violence types that

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often occurred were physical violence (116 cases) followed by psychological violence (109 cases). In a preliminary study conducted by the authors in March 2020, 22 adolescents shared their experience of witnessing bullying in their respective school. All participants were Yogyakarta high school students and the majority (19 adolescents) were from state high school. Participants frequently witnessed verbal bullying in forms of physical insults, harsh words or mockery, followed by social relation bullying such as exclusion, neglect, and spread of gossip. Meanwhile, physical bullying was rarely witnessed. Based on participants' experiences, it is also concluded that adolescents who were perpetrators tended to be less assertive, were difficult to cooperate with, had low concern for friends' feelings, did not build closeness with friends, did not discuss matters fairly with friends, and were difficult to praise friends.

Bullying phenomenon become a problem for adolescents because adolescents' physical, psychological, and social relation state can be badly affected. Participants of the preliminary study shared that there were bullying victims who cried, felt hurt, and felt friendless. Moreover, according to literature, adolescents who become victim tend to consume drugs and alcohol, experience anxiety and loneliness, and are at risk of attempting suicide (Koyanagi et al., 2019; Pengpid & Peltzer, 2019). Meanwhile, adolescents who become bullies tend to communicate less with peers, becoming less prosocial, and are at risk of being bullies after one year (Busch et al., 2015; McVie, 2014; Wolgast & Donat, 2019). Those studies indicate that bullying can badly affect adolescents for quite a long time.

Bullying behavior is influenced by various individual, family, school, and community factors. Among individual factors, there are behavior problems (Álvarez-García et al., 2015; Cook et al., 2010; Kljakovic & Hunt, 2016), school problems (Cook et al., 2010; Kljakovic & Hunt, 2016), and socio-emotional problems (Elliott et al., 2019; Postigo et al., 2012). Among family factors, there are parenting styles and family environment (Álvarez-García et al., 2015; Cook et al., 2010). School factors include school norms (Menesini & Salmivalli, 2017) and school atmosphere (Cook et al., 2010). Meanwhile, community factors include relationship with peers (Álvarez-García et al., 2015), neighborhood characteristics (Cook et al., 2010), and economic status (Álvarez-García et al., 2015).

Based on preliminary study, adolescents who were perpetrators were indicated to have low assertiveness, cooperation, and concern. Assertiveness, cooperation and concern together with empathy and self-control are forms of social skills (Gresham & Elliott as cited in (Elliott & Busse, 1991)). Social skills are one of individual factors related to socio-emotional problems (Elliott et al., 2019; Postigo et al., 2012). Social skills are defined as skills in the form of behaviors which are shown to complete social tasks (Gresham, 2016; Little et al., 2017). According to several studies, with high social skills, adolescents' tendency to bully tend to be low (Coelho & Sousa, 2018; Elliott et al., 2019; Jenkins et al., 2017; Postigo et al., 2012; Zych et al., 2018).

Mechanism on how social skills are linked with bullying tendency has also been known from several studies (Coelho & Sousa, 2018; Elliott et al., 2019; Jenkins et al., 2017; Postigo et al., 2012; Zych et al., 2018). Most researchers agreed that there is a direct link between the two, but research proved that both have indirect link mechanisms. Postigo et al. (2012) found that social skills' role on bullying tendency is only significant through maladjustment. However, research about other mediator variables than maladjustment is still limited, therefore, exploring other mediator variables can clarify

comprehension about social skills indirect link to bullying.

Based on preliminary study, bullies adolescents were also indicated to be unable to discuss matters fairly with friends, difficult to praise, and unable to build closeness with friends. Those things are included as friendship quality (Parker & Asher, 1993). Friendship quality is assumed to have a positive relationship with social skills. According to Flannery and Smith (2017), social skills are important for friendship quality and friendship quality requires social skills. Moreover, according to Crawford and Manassis (2011), children who are socially skilled tend to have high friendship quality. Those findings support the assumption that there is a positive relationship between friendship quality and social skills.

Several studies in children's peer victimization context have proven that friendship quality is able to play a significant role as a mediator, which is able to explain relationship mechanisms between variables (Crawford & Manassis, 2011; Kawabata & Tseng, 2019; Kim & Kim, 2019). Friendship quality with one close friend is able to mediate relationship between social skills and peer victimization (Crawford & Manassis, 2011), relationship between relational victimization and poor social and school adjustment (Kawabata & Tseng, 2019), and relationship between sibling victimization and peer victimization (Kim & Kim, 2019). However, no research has yet to explore friendship quality mediation in the relationship between social skills and bullying behavior in adolescents, therefore this study tried to explore the mechanism.

Moreover, friendship quality is assumed to have a negative relationship with bullying. Friendship quality is known capable of influencing friends' attitude and behavior (Berndt, 2002) and research from Zych et al. (2019) also from Cillessen et al. (2005) supported the notion. Adolescents who receive support from peers presumably do not bully (Zych et al., 2019). Adolescents with low intimacy friendship and who argue a lot or have high conflict with friends tend to do physical and relational aggression (Cillessen et al., 2005). Support, friendship intimacy, and low conflict are aspects of friendship quality (Parker & Asher, 1993) therefore Zych et al. (2019) and Cillessen et al. (2005) studies reinforce the assumption that high friendship quality has a relationship with low bullying behavior.

When observed from a cultural context, the relationship between social skills, friendship quality, and bullying behavior tendency is not too different from previous studies. Social skills and friendship quality have a positive relationship either on American college students who are individualistic or on Malaysian college students who are collectivist (Demir et al., 2012). Meanwhile, relationship between friendship quality and bullying tendency is found in Korean children who are collectivist and this was because bullies befriend each other (Y. Shin, 2010). However, findings of the relationship between friendship quality and bullying on adolescents who are collectivist and not necessarily befriend bullies is still limited. Moreover, research from Y. Shin (2010) found that more boys have a role as bullies than girls, therefore analysis based on gender also became an additional focus of this study.

As such, this study is focused on testing the role of friendship quality in indirect relationship mechanisms between social skills and bullying. Adolescents with high social skills are able to have high friendship quality (Crawford & Manassis, 2011; Flannery & Smith, 2017) and adolescents

with high friendship quality are assumed to not bully (Cillessen et al., 2005; Zych et al., 2019). When described, adolescents who are able to cooperate, assertive, responsible, have empathy and are able to control themselves are assumed capable of having friendship full of support, care, help, companionship, disclosure, and low in conflict. Adolescents with friendship full of support, companionship, and low in conflict are presumably less likely to take physical, verbal, or relational negative action. The hypothesis of this study was friendship quality is able to act as a mediator of relationship between social skills and bullying behavior tendency.

A number of studies have explored how social skills are directly related to bullying tendencies. Jenkins et al. (2017), for example, found that sixth to eight grade students bullying perpetrators have low social skills. Another example is from Zych et al. (2018), who also encountered similar findings in adolescents, where adolescent bullying perpetrators are found to have low social competence. However, only a few have attempted to investigate the indirect mechanism lying in between. Postigo et al. (2012), for example, found that social skills' role on bullying tendency is only significant through maladjustment. Meanwhile, what has been known from friendship quality, a variable closely related to social skills, is limited to the context of peer victimization. Therefore this study aims to fill the gaps by analyzing how friendship quality might explain the link between social skills and bullying tendency, with regards to cultural and gender context surrounding the variables.

## Methods

### *Participants*

Participants' criteria for this study was adolescent boys and girls who were enrolled in Yogyakarta State High Schools. Criteria was chosen based on preliminary study that bullying often occurred among Yogyakarta State High School students. Two hundred and four adolescent boys and girls aged 16 to 18 years (Mean = 16.8 years, *SD* = 0.67 years) participated in this study. All participants were students of Yogyakarta State High School. Based on Table 1, most participants were aged 17 years (50.5%) and most participants were girls (80%).

**Table 1**  
*Participants Detail*

No.	Classification	Total	Percentage
Age:			
1	a. 16 Years	72	35.3%
	b. 17 Years	103	50.5%
	c. 18 Years	29	14.2%
Gender:			
2	a. Girl	163	80%
	b. Boy	41	20%

Participants were recruited using purposive sampling technique. Minimum number of participants were determined using G\*Power (Faul et al., 2009). A minimum number of 68 participants were needed for multiple regression analysis with two predictors and with effect size of 0.15, alpha of 0.05, and power of 0.80. The total number of participants in this study has succeeded the minimum number needed.

#### *Procedures*

This study has been reviewed and approved by the Ethics Committee of Faculty of Psychology Universitas Gadjah Mada. Data collection was done online using Google Form. Google Form was named "Scale of Relationship Between Students" and sequentially consisted of informed consent page, identity filling page, Bullying Behavior Tendency Scale, Social Skills Scale, questions about close friend page, Friendship Quality Scale, initials filling page, and debriefing page. Link to open the form was distributed to adolescents who fit the criteria. Adolescents who were willing to participate could immediately open the link and fill the Google Form independently.

On the identity page, participants were asked to give information about age, gender, grade, major, and school name. The identity of these participants were protected by providing participants with the opportunity to write their initials only. There is an additional page about close friendship in this form, of which names of three closest friends and the rationale of choosing these friends were asked. The Google Form was presented in the same sequence for all participants. Participants were given a reward in the form of electronic funds after Google Form was confirmed to be completely filled.

#### *Bullying Behavior Tendency Scale*

Bullying Behavior Tendency Scale is a modification from Susilowati (2018) scale, by decreasing the number of items presented. Items removed from the scale are items with corrected item-total correlation score below 0.25 based on reliability test. This scale was based on bullying forms from Olweus (1993). Modified scale consists of 19 items with five response options in the forms of "Always", "Often", "Sometimes", "Rarely", and "Never". All items are favorable. Scores for the response options range from five for "Always" to one for "Never". Scale's Aiken's V is 0.73-0.94. Scale's Cronbach's alpha is 0.828 with item-total correlation of 0.272-0.690. Examples of items from this scale are "I push friends whom I don't like", "I call my friend "black" or "fat" because of my friend's physical appearance", and "I threat friends who dare to help other friends whom I don't like".

#### *Social Skills Scale*

Social Skills Scale is also a modified scale by decreasing items number and changing scale's responses. Items removed from the scale are items with corrected item-total correlation score below 0.3 based on reliability test, and scale responses were matched to range between one to five. The original scale was arranged by Wahyuni (2018) based on social skills aspects from (Gresham and Elliott as cited in (Elliott & Busse, 1991)). The modified scale consists of 24 items with five response options in the forms of "Very

Compatible", "Compatible", "Neutral", "Incompatible", and "Very Incompatible". Response options scoring on favorable items are ranged from five for "Very Compatible" to one for "Very Incompatible". Response options scoring on unfavorable items are ranged from one for "Very Compatible" to five for "Very Incompatible". Scale's Aiken's V is 0.76-0.98. Scale's Cronbach's alpha is 0.892 with item-total correlation of 0.308-0.634. Examples of items from this scale are "I am able to work better when in a team/group", "I express my will clearly, and give reason for action I take", and "I try to be someone who is kind and caring".

#### *Friendship Quality Scale*

Friendship Quality Scale was arranged by Yuliawanti (2017) based on friendship quality aspects from Parker and Asher (1993). However, researchers also did a bit of modification by changing response scores where a "Neutral" response was added. Modified scale consists of 35 items with five response options in the forms of "Very Compatible", "Compatible", "Neutral", "Incompatible", and "Very Incompatible". All items are favorable. Response options scoring are ranged from five for "Very Compatible" to one for "Very Incompatible". Scale's Aiken's V is 0.73-0.98. Scale's Cronbach's alpha is 0.940 with item-total correlation of 0.312-0.727. This scale scores friendship quality with one friend considered the closest. Examples of items from this scale are "Our friendship made us feel important and special to each other", "We help each other to finish school tasks", and "We are open to each other about our own secrets".

#### *Analysis*

Descriptive and correlation analysis were done to all variables in this study. To test the hypothesis, statistical analysis based on the mediation model was done using macro PROCESS model 4 from Hayes (2018).

## Results

Descriptive and correlation analysis results are available on Table 2.

**Table 2**  
*Variable Correlation*

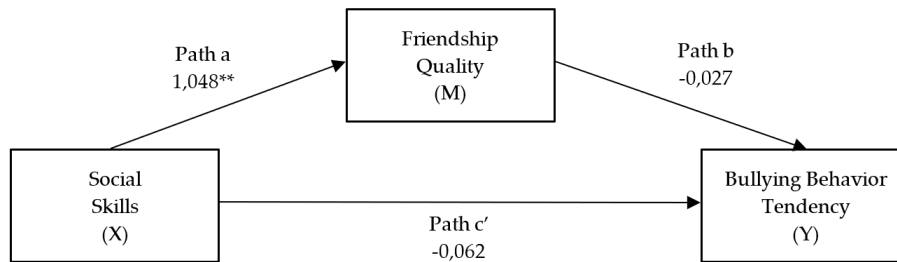
No.	Variable	Mean	SD	1	2	3
1	Bullying Tendency	25.74	5.40	-	-0.156*	-0.147*
2	Social Skills	92.54	9.30		-	0.596**
3	Friendship Quality	141.26	16.35			-

\* $p < 0.05$ , \*\* $p < 0.01$

Bullying tendency's empirical mean was lower than the hypothetical mean, indicating that participants have a relatively low bullying tendency. Meanwhile, social skills' and friendship quality's empirical mean were higher than the hypothetical mean, showing that participants have relatively high social skills and friendship quality. Moreover, bullying behavior tendency was found correlated negatively

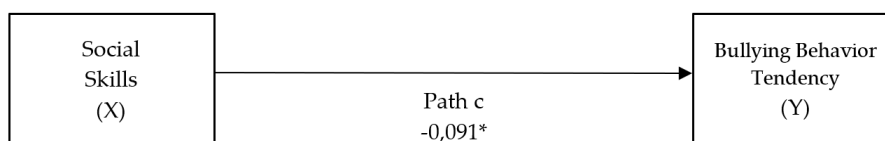
with social skills and friendship quality, meanwhile social skills were found correlated positively with friendship quality. Next, researchers did mediation analysis. Mediation analysis results scheme can be seen on Figure 1.

**Figure 1**  
*X, Y and M Variable Estimated Relationship Scheme*



Path a was significant ( $B = 1.048$ ) showed that social skills have a role on friendship quality. This means that adolescents with high social skills have high friendship quality. Path b as the next path was not significant ( $p > 0.05$ ), showed that friendship quality has no role on bullying tendency. This means that friendship quality has no role in adolescents' bullying behavior tendency. Moreover, path c' or direct effect path of social skills with bullying behavior tendency was not significant ( $p > 0.05$ ), showed that social skills have no role on bullying tendency with friendship quality. This means that social skills have no role on adolescents' bullying behavior tendency, when friendship quality is controlled. Path c scheme or total effect path of social skills on bullying behavior tendency can be seen on Figure 2.

**Figure 2**  
*X and Y Variable Estimated Relationship Scheme*



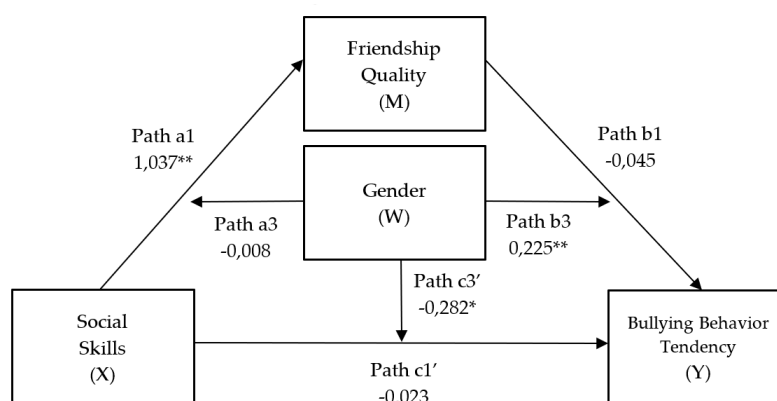
This path was significant ( $B = -0.091$ ) showed that social skills have a role in bullying tendency without friendship quality. This means that adolescents who are socially skilled tend to not do bullying. Furthermore, there was also an indirect effect coefficient analysis result or coefficient that represents relationship between social skills and bullying behavior tendency through friendship quality. Indirect effect coefficient was negative with  $B = -0.029$  and 95% CI  $[-0.081, 0.030]$ . Zero was in the confidence interval limit therefore mediation is not significant. Friendship quality is therefore concluded unable to mediate the relationship between social skills and bullying behavior hence the hypothesis of this study was denied.

#### Additional Analysis

Researchers did additional analysis to test whether gender is able to moderate friendship quality mediation in the relationship between social skills and bullying tendency. Moderated mediation model analysis used is the macro PROCESS model 59 from Hayes (2018). Participants with gender girls were given code "0" and participants with gender boys were given code "1". Moderated mediation analysis result scheme can be seen in Figure 3.

**Figure 3**

*X, Y, M and W Variable Estimated Relationship Scheme*

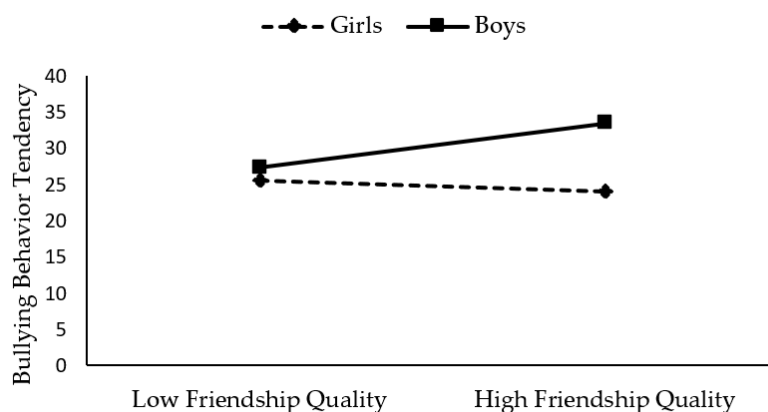


Social skills interaction path with gender or path  $a_3$  was not significant ( $p = 0.974$ ) proved that gender does not moderate the relationship between social skills and friendship quality. This means that the relationship between social skills and friendship quality is not dependent on adolescents' gender. The next path is friendship quality interaction path with gender or path  $b_3$ . This path was significant ( $B = 0.225$ ) showed that gender moderates the relationship between friendship quality and bullying tendency. This means that the relationship between friendship quality and bullying behavior tendency is dependent on adolescents' gender.



The friendship quality role was not significant on adolescent girls ( $B = -0.045, p = 0.137$ ) and only significant on adolescent boys ( $B = 0.181, p = 0.005$ ) indicates that adolescent boys with high friendship quality tend to do bullying. Moderation visualization of path  $b_3$  can be seen on Figure 4.

**Figure 4**  
Path  $b_3$



Moreover, the direct effect of interaction path with gender or path  $c_3'$  was significant ( $B = -0.282$ ) showed that gender moderates the direct effect of social skills to bullying behavior tendency. This means that social skills and friendship quality play a role in bullying behavior, which is dependent on adolescents' gender. The role was not significant on adolescent girls ( $B = -0.023, p = 0.661$ ) and only significant on adolescent boys ( $B = -0.306, p = 0.003$ ). This means that adolescent boys with high social skills tend to not do bullying. Moderation visualization of path  $c_3'$  can be seen in Figure 5.

**Figure 5**  
Path  $c_3'$  Moderation Visualization



Moderated mediation index also appeared on analysis results. This index was significant with  $B = 0.232$  and 95% CI [0.076, 0.406] proved that mediation between variables is moderated by gender. This means that adolescents gender moderates friendship quality mediation in the relationship between social skills and bullying behavior tendency. However, based on indirect effect interaction path with gender, moderated mediation is not significant on adolescent girls with  $B = -0.046$  and 95% CI [-0.098, 0.012] and only significant on adolescent boys with  $B = 0.186$  and 95% CI [0.042, 0.348]. This means that for adolescent boys, friendship quality mediates the relationship between social skills and bullying behavior tendency. Adolescent boys with high social skills are able to have high friendship quality and tend to do bullying.

## Discussion

This study is aimed to investigate whether friendship quality is able to mediate the relationship between social skills and bullying behavior tendency. Results showed that friendship quality is unable to mediate social skills with bullying behavior tendency therefore the hypothesis of this study was denied. However, additional analysis done in this study found that friendship quality is able to mediate social skills with bullying tendency if gender is included as a moderator. Mediation was proved significant only for adolescent boys. Social skills have a positive role on friendship quality and, contrary to researcher's assumption, friendship quality turns out to have a positive role on bullying tendency. This shows a moderated mediation model.

Friendship quality was found unable to mediate social skills with bullying behavior tendency. This might be caused by other factors outside adolescents' self that can have more role on bullying compared to friendship quality. Although friendship quality is known to influence peers' attitude and behavior (Berndt, 2002; Bollmer et al., 2005; Cillessen et al., 2005; Zych et al., 2019), peer influence itself might have more of a role on bullying. According to Cook et al. (2010), negative peer influences such as deviant peer affiliation or reinforcement of negative behavior by peers are able to encourage the emergence of bullying behavior. Previous studies have proven that being friends with bullies and the presence of peers as bystander are able to raise adolescents' risk of bullying (Álvarez-García et al., 2015; Cho et al., 2019; Hong & Espelage, 2012; Salmivalli, 2014; Salmivalli et al., 1998; Salmivalli et al., 2011).

Furthermore, friendship quality might have more of a role in mediating social skills with bullying tendencies in adolescents who become victims. Crawford and Manassis (2011) found that friendship quality is able to mediate social skills with peer victimization, indicating that children with high social skills are able to have high friendship quality therefore their tendency to become physical and relational aggression victim is lessened. That might happen because social skills and friendship quality correlated negatively with adolescents' tendency to become bullying victims (Jenkins et al., 2014; Kendrick et al., 2012). Assertive adolescents are able to defend themselves from bullying perpetrators and adolescents who are able to control themselves well when treated badly will not be considered as bullying targets (Jenkins et al., 2014). Moreover, adolescents with high quality friendship

are able to adjust themselves more therefore they are not vulnerable to becoming victims and they are able to receive emotional and instrumental support from friends hence they are defended against bullying perpetrator (Kendrick et al., 2012).

#### *Social Skills Role on Boys' and Girls' Friendship Quality*

Social skills were proven to have a positive role on friendship quality whether on adolescent boys or girls. This finding proved that adolescents who are socially skilled tend to have high quality friendships. Consistent with Crawford and Manassis (2011) finding on children, ability to make friends, assertiveness, and skills to resolve conflict tend to create close and supportive friendship. Moreover, the finding of this study supports Flannery and Smith (2017) notion that social skills are important for friendship quality and friendship quality requires social skills. This finding also supports Demir et al. (2012) finding that social skills are found to have a positive relationship with friendship quality in collectivistic culture.

The positive relationship between the two might happen because social skills help adolescents to do a positive interaction (Gresham et al., 2011). Social skills enable adolescents to be relied on by friends, cooperate well in a group, state an opinion without argument, show concern to troubled friends, and be responsible to friends. Those behaviors create a positive interaction with friends therefore a close and supportive relationship is finally formed (Flannery & Smith, 2017; Smart & Sanson, 2003). Close and supportive relationships are parts of friendship quality (Parker & Asher, 1993) therefore it can be said that social skills enable adolescents to form friendships with high quality.

#### *Friendship Quality Role on Bullying Behavior Tendency on Boys*

This study then found that friendship quality has a positive role on bullying behavior tendency, but this only happens on adolescent boys. This means that adolescent boys' friendships which are full of support, help, companionship, and low in conflict have a role in their tendency to bully. Adolescent boys with high quality friendship in this study are found to have low or medium bullying tendency. This finding is different from the previous finding that stated friendship quality role on bullying is negative (Bollmer et al., 2005; Cillessen et al., 2005; Kendrick et al., 2012). However, this finding is consistent with Y. Shin (2010) finding that bullies children in collectivistic culture do not have low friendship quality. This finding is also a bit consistent with Barboza et al. (2008) finding that adolescents who receive emotional support from peers tend to be involved in bullying. The forms of those emotional support adolescents are not neglected by peers and adolescents are easy to tell their problems to peers (Barboza et al., 2008).

According to Barboza et al. (2008), positive relationships between peer support and bullying can happen because adolescents might be friends with bullies. The notion is consistent with Y. Shin (2010) finding that bullies children befriend other bullies. Studies have proven that being friends with bullies can raise adolescents' risk of bullying (Álvarez-García et al., 2015; Cho et al., 2019; Cook et al., 2010; Hong & Espelage, 2012). This is because being friends with bullies can encourage the assumption that bullying is a behavior that is allowed to be done (H. Shin, 2019). Moreover, Berndt (2002) stated that

adolescents can be more influenced to behave badly if they have high quality friendships with bad friends. This means that adolescent boys can be more influenced to do bullying when they have high quality friendship with bullies. However, this study did not identify whether adolescent boys' close friends are bullying perpetrators, therefore it cannot be confirmed that those are the underlying thing of positive relationship between friendship quality and bullying.

Positive relationships between friendship quality and bullying on adolescent boys can also be caused by cultural context. Smith and Robinson (2019) found that Indonesia has a high collectivist value and more individuals in collectivistic culture are involved in bullying when bullying occurred compared to individuals in individualistic culture. That might be because individuals in collectivistic culture are integrated into the group and group norm (Smith & Robinson, 2019) therefore the decision to bully is taken collectively (Koo et al., 2008). This can explain preliminary study finding that bullying sometimes is done together by adolescents in the same classroom or school. Moreover, according to Andayani (2018), Javanese adolescent boys tend to need close friends who function as playmates. Andayani (2018) found that as friends, adolescent boys turn out to mock a close friend's parent's name and often do physical attacks on close friends. Those behaviors are included as bullying forms in this study therefore adolescent boys can be perpetrating bullying but in a friendship context with their close friend.

This study found that friendship quality is able to mediate the relationship between social skills and bullying behavior in adolescent boys. This means that adolescent boys who are able to cooperate, assertive, be responsible, have empathy, and are able to control themselves are able to have friendships full of support, care, help, companionship, disclosure, and low conflict. However, this full of support, companionship, and low in conflict friendship is able to raise the tendency to do bullying. This finding supports Postigo et al. (2012) studies that there is an indirect relationship mechanism between social skills and bullying behavior tendency. This finding also supports other studies that boys tend to do bullying compared to girls (Álvarez-García et al., 2015; Cho et al., 2019; Cook et al., 2010; Salmivalli et al., 2011; H. Shin, 2019; Sittichai & Smith, 2015), although there is other finding that proved gender cannot predict bullying (Kljakovic & Hunt, 2016).

#### *Social Skills Role on Bullying Behavior Tendency on Boys*

This study also proved that social skills have a negative role on adolescent boys' bullying tendency, controlling friendship quality. This means that social skills are found to have a role in adolescent boys' low bullying tendency. Moreover, social skills are also found to have a negative role directly on bullying on adolescent boys and girls. This finding is consistent with previous studies that social skills negatively correlate with bullying (Coelho & Sousa, 2018; Elliott et al., 2019; Jenkins et al., 2017; Zych et al., 2018). This finding also supports previous studies that the relationship between social skills and bullying can also happen directly (Coelho & Sousa, 2018; Elliott et al., 2019; Jenkins et al., 2017; Zych et al., 2018). This might be because social skills encourage adolescents to do a positive interaction (Gresham et al., 2011) meanwhile bullying behavior is included as a negative action (Olweus, 1993).

Social skilled means showing cooperating behavior, assertiveness, being responsible, having

empathy, and controlling one self (Gresham & Elliott as cited in (Elliott & Busse, 1991)) and adolescents who are able to cooperate, assertive, and be responsible are able to not bully (Jenkins et al., 2017). Meanwhile, adolescents with high empathy tend to comfort and forgive others, feel bad when others are sad, and show concern to others (Elliott et al., 2019) therefore adolescents with high empathy also tend to not bully. Furthermore, adolescents who are able to control themselves tend to not do bullying (Coelho & Sousa, 2018). Those findings are supported by Zych et al. (2018) finding that bullies adolescents tend to have low social skills.

Results from this study need to be interpreted with caution because this study did not use experimental design, therefore causality between social skills, friendship quality, and bullying behavior tendency cannot be seen. Moreover, this study only measured traditional bullying, there might be other bullying types that happen to adolescents, such as cyberbullying (Lazuras et al., 2017). Some limitations of this study are that this study did not identify whether adolescent boys' close friends in this study plays a role as bullying perpetrator therefore it cannot be confirmed how friendship quality and bullying tendency have mutually positive relationship in this study. This study also did not apply random order on presenting the scale therefore response bias is possible in the form of participants only choosing lowest, highest, middle, agree or not agree option for every item (Shaughnessy et al., 2015). Response bias can be minimized by randomizing the item order or scale option order (Gosling & Johnson, 2010).

## Conclusion

The finding of this study was friendship quality is unable to mediate social skills with friendship quality therefore the hypothesis was denied. However, this study found that gender moderates friendship quality's mediation in the relationship between social skills and bullying behavior tendency. Friendship quality was found capable of mediating social skills with bullying tendencies in adolescent boys. High social skills are correlated with high friendship quality. Furthermore, this high friendship quality is found correlated with a high bullying behavior tendency.

Based on the results and discussion of this study, researchers proposed a few suggestions as intervention to adolescents and future researchers. For adolescent boys and girls, they are expected to realize the importance of having social skills in interacting with peers therefore adolescents' friendship can have more quality. Moreover, social skills can help adolescents to do a positive interaction therefore adolescents' tendency to do bullying can be lessened. Especially for adolescent boys, they are expected to choose positive peers so that the friendship quality formed and the influence given by friends are positive.

### *Recommendation*

For the next researchers, on presenting the scale, they are expected to randomize items or response options order so that participants' response bias can be minimalized. Future researchers are also expected to explore friendship quality role mechanisms on bullying tendency on adolescent boys and

identify adolescent boys' close friend role in bullying, so that relationship between friendship quality and bullying can be more comprehended. Moreover, future researchers are expected to explore other bullying types that might occur on adolescents other than traditional bullying, such as cyberbullying.

## Declarations

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### *Authors Contribution*

AK and AF designed the study. AK collected and analyzed the data. All authors wrote and approved the final version of the manuscript.

### *Conflic of Interest*

The authors declares no conflict of interest in this study.

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