

Juvenile Delinquency Measurement in Indonesian High Schools

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ABSTRACT

Juvenile delinquency is a phenomenon that can pose a variety of risks, both in the condition of the perpetrators now and in the future. This study aims to analyze the validity and reliability of juvenile delinquency scales. The subjects of this study are 70 "X" high school students in South Jakarta selected using purposive sampling technique. The instrument used in this study is the scale of juvenile delinquency consisting of four aspects, namely isolated delinquency, neurotic delinquency, psychopathic delinquency and moral defect delinquency. Data analysis technique in this research is structural equation model (SEM) 2nd order confirmatory factor analysis with partial least square (PLS) program. The results of this study indicate that the scale of juvenile delinquency is valid and reliable so that it can be used to measure the construct of juvenile delinquency.

Keywords: Juvenile delinquency, isolated delinquency, neurotic delinquency, psychopathic delinquency, delinquency of moral defects

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INTRODUCTION

One psychological problem that is often found in adolescents is juvenile delinquency (Ryan, Williams, & Courtney, 2013). Delinquency has become a universal problem that occurs in various cultures (Zafar, 2012). It includes various negative behaviors such as killing, raping, robbing, attacking, stealing, pickpocketing, snatching, burning, using weapons, sexual violations, drug use and distribution (DeLisi, Angton, Behnken, & Kusow, 2015) and destruction of goods (Semenza, 2018). Besides juvenile delinquency is also associated with harassment, low academic achievement, increased alcohol abuse and suicide rates (Laub, & Vaillant, 2000). The high level of juvenile delinquency can also have an impact on learning environment that is not conducive (National Dropout Prevention Center, 2013), adolescent failures in academic field (Jamily, 2015), and increasing crimes (Davydov, 2020).

Juvenile delinquency is defined as unapproved adolescent behavior so that it is justified to be given a ban, warning, punishment or other corrective action (Chingtham, 2015). Then according to Jin, Cheng, Liu, Zhou, and Wang (2016), juvenile delinquency is a variety of illegal behavior committed by adolescents under 17 years. For adolescents, delinquency is a way to show power and courage (Sanders, 2011). It is a proof of solidarity with friends (Patacchini, & Zenou, 2012). By participating in misbehavior, they feel valued because they get good judgment from their friends who also do delinquency (Semenza, 2018). Delinquency is also a way that is considered effective for revenge against other people or groups (Kivivuori, Savolainen, & Aaltonen, 2016), as well as a pitas way to meet their needs, both primary needs and secondary needs (Zafar, 2012).

Juvenile delinquency occurs due to various factors (Wong, Slotboom, & Bijleveld, 2010), namely 1) individual factors including negative life events (Wong, Slotboom, & Bijleveld, 2010) such as being victims of violence committed by adults (Ryan, & Testa, 2005; Garbarino, & Plantz, 2017), impulsive personalities (Veltri, et al, 2014; Jin, Cheng, Liu, Zhou, & Wang, 2016; Yan, 2017; Gungea, Jaunky, & Ramesh, 2017), and development of morals and

attitudes towards delinquency (Beerthuizen, Brugman, & Basinger, 2013; Nisar, Ullah, Ali, & Nature, S. 2015), 2) family factors including lack of parental control and supervision (Schroeder, Osgood, & Oghia, 2010), parents who neglect their children (Garbarino, & Plantz, 2017), lack of father's role (Khurana, & Gavazzi, 2011), low family religiosity (Garurino, & Plantz, 2017; Li, 2014), as well as family poverty (Zafar, 2012), 3) school factors, namely poor discipline in schools (Aizer, & Currie, 2019), poor quality and school climate (Bao, Li, Zhang, & Wang, 2015), and low commitment and attachments to go to school (Wu, Lake, & Cao, 2015; Baz, & Fernández-Molina, 2018), 4) friendship factors including naughty friends (Thornberry, Lizotte, Krohn, Smith, & Porter, 2003; Nisar, Ullah, Ali, & Nature, 2015), as well as membership in troubled gangs (Wong, Slotboom, & Bijleveld, 2010).

The concept of juvenile delinquency theory has been developed since 1922 which found that juvenile delinquency is correlated to geographical, ecological, sociological conditions and social disorganization in a society (Shaw, & McKay, 1942). Then in 1949, research was developed in the realm of defining sociological and legal juvenile delinquency (Tappan, 1949), and only around the 1950s research on juvenile delinquency focused on aspects of human behavior (Glueck, & Glueck, 1950). In the 1960s, research led to the values underlying juvenile delinquency (Matza, & Sykes, 1961), further research on adolescent acquaintance continued to develop and several experts wrote it in various books on juvenile delinquency. At present, research on juvenile delinquency has evolved towards the role of parents for the emergence of juvenile delinquency (Liu, De Li, Zhang, & Xia, 2020), factors that can reduce juvenile delinquency (Liu, & Miller, 2020), and the development of a program to overcome juvenile delinquency (van der Put, Boekhout van Solinge, Stams, Hoeve, & Assink, 2020).

This study aims to analyze the validity and reliability on the scale of juvenile delinquency. It is necessary to find a valid scale to measure juvenile delinquency. By this scale, measuring juvenile delinquency can be carried out whose results can be a reference for taking various preventive or

curative actions for juvenile delinquency. Predicting juvenile delinquency from the start is a central element that can be done to overcome juvenile delinquency as well as a key to taking a variety of other actions (Schwalbe, Fraser, Day, & Arnold, 2004).

METHOD

The participants involved in this study were 70 "X" high school students in South Jakarta who were selected using a purposive sampling technique. This technique allows the researcher to get subjects that fit the established criteria, namely those who are considered to have been involved in juvenile delinquency at school.

The instrument used in this study is the scale of juvenile delinquency, which was divided into four parts, namely

isolation delinquency, neurotic delinquency, psychopathic delinquency and delinquency of moral defects. The scaling model used is a Likert scaling model with very appropriate (SS), appropriate (S), inappropriate (TS), and very inappropriate (STS) answer choices. Data analysis technique in this research is structural equation model (SEM) 2nd order confirmatory factor analysis with partial least square (PLS) program. PLS was used because it can be used well to carry out analysis of measurement models (Hair, Hult, Ringle, & Sarstedt, 2016).

RESULT

Based on the analysis of the outer model on the scale of juvenile delinquency, the following results are obtained:

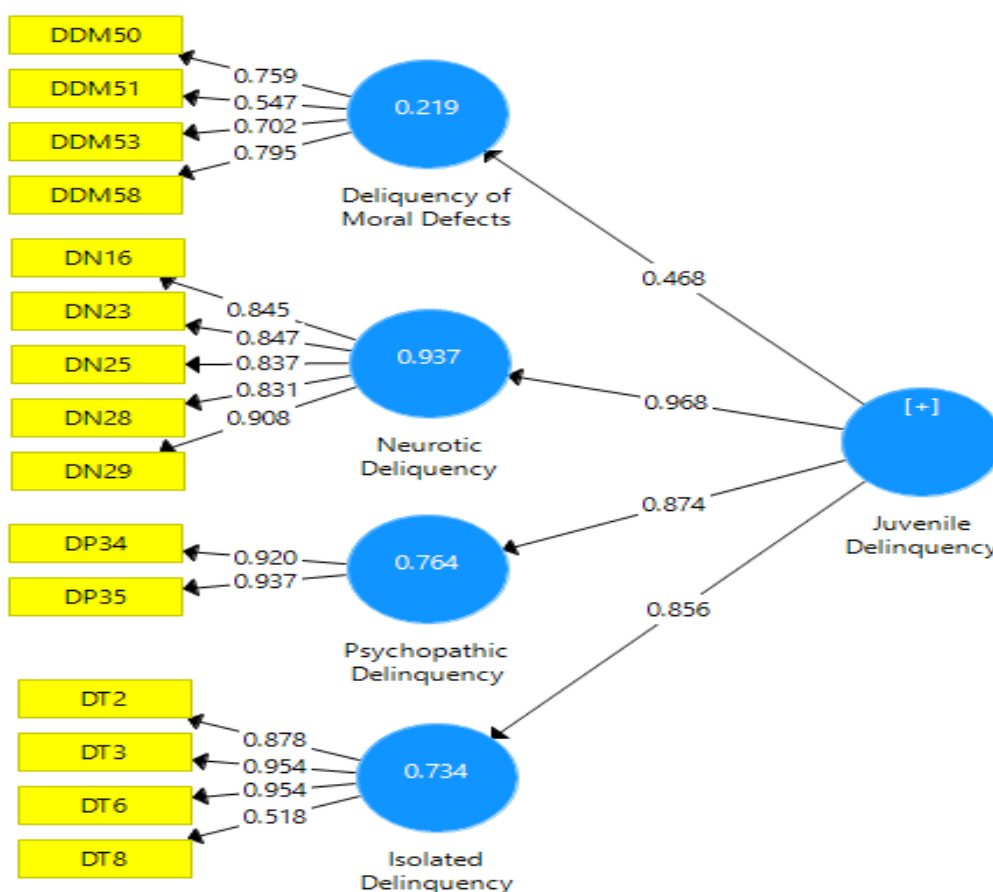


Figure 2. Results of the outer output of juvenile delinquency models

Convergent Validity

Convergent validity can be seen from the loading factor value and the Average Variance Extracted (AVE) value. According to Hair *et al.*, (2010) convergent validity can be used to show the ability of items/indicators and

dimensions to measure a latent variable. In this study, the value of loading factor meets the criteria of loading factor > 0.4. The loading factor value of the aspect variable can be seen in table 3 and the loading factor value of the indicator/item aspect can be seen in table 4.

Table 3. Loading Factor Value (Aspect -Variable)

Aspect	Loading factor	Annotation
Delinquency of Moral Defects	0.468	Valid
Neurotic Delinquency	0.968	Valid
Psychopathic Delinquency	0.874	Valid
Isolated Delinquency	0.856	Valid

Table 4. Loading Factor Value (Aspect-Indicator)

Indicator	Loading factor	Annotation
DDM50	0.759	Valid
DDM51	0.574	valid
DDM53	0.702	valid
DDM58	0.795	valid
DN16	0.845	valid
DN23	0.847	valid
DN25	0.837	valid
DN28	0.831	valid
DN29	0.908	valid
DP34	0.920	valid
DP35	0.937	valid
DT2	0.878	valid
DT3	0.954	valid
DT6	0.954	valid
DT8	0.518	valid

The results of the validity test on the juvenile delinquency scale show the value of Average Variance Extracted (AVE)>0.5 with the value of Average Variance Extracted

(AVE) on juvenile delinquency variables of 0.506 and the value of Average Variance Extracted (AVE) in each source can be seen in table 5.

Table 5. Average Variance Extracted (AVE) value for juvenile delinquency

Aspect	AVE	Annotation
Delinquency of Moral Defects	0.500	Valid
Neurotic Delinquency	0.729	Valid
Psychopathic Delinquency	0.862	Valid
Isolated Delinquency	0.715	Valid

Discriminant validity

Discriminant validity can be seen from the value of the Average Variance Extracted (AVE) square of each aspect which must be higher than the correlation of the Average

Variance Extracted (AVE) square value with other aspects. The average Variance Extracted (AVE) squared root value can be seen in table 6.

Table 6. The square root value of the Average Variance Extracted (AVE) juvenile delinquency variable

	Delinquency of Moral Defects	Neurotic Delinquency	Psychopathic Delinquency	Isolated Delinquency
Delinquency of Moral Defects	0.707			
Neurotic Delinquency	0.366	0.854		
Psychopathic Delinquency	0.268	0.850	0.929	
Isolated Delinquency	0.243	0.790	0.705	0.846

Reliability

Scale reliability in this study can be seen from the alpha cronbach value and composite reliability. The cronbach

alpha value and composite reliability>0.6 are declared reliable. The reliability obtained in this study can be seen in table 7.

Table 7. Cronbach alpha and composite reliability scale of juvenile delinquency

No.	Aspect	Cronbach Alpha	Composite Reliability	Annotation
1	Delinquency of Moral Defects	0.707	0.797	Reliable
2	Neurotic Delinquency	0.907	0.931	Reliable
3	Psychopathic Delinquency	0.841	0.926	Reliable
4	Isolated Delinquency	0.851	0.906	Reliable

The results of data analysis from this study indicate that the construct of juvenile delinquency has good validity and reliability. This means that every aspect in this study has been able to measure the construct of juvenile delinquency.

This is shown by the Cronbach alpha obtained of 0.936 and composite reliability of 0.945, so it can be concluded that the model in this study can be accepted because all aspects are able to describe juvenile delinquency variable.

DISCUSSION

The results of data analysis showed that the scale of juvenile delinquency has met the validity and reliability requirements. These results indicate that all aspects that form the construct of juvenile delinquency tested in this study are valid and reliable so that it can be used as a valid and reliable scale to measure juvenile delinquency.

The most dominant aspect describing juvenile delinquency is psychopathic delinquency with a loading factor value of 0.862. Individuals with psychopathic delinquency are manipulative, emotional and impulsive and irresponsible individuals (Cooke & Michie, 2001). In addition to the individual himself who has a psychopathic delinquency character, individuals who are close to friends who have a psychopathic delinquency character can also cause him/her to engage in juvenile delinquency (Kerr, Van Zalk, & Stattin, 2012). The inability to undergo emotional relations with others, not feeling guilty, often being aggressive and impulsive, and not caring about social norms makes it easier for adolescents to commit delinquency so that psychotic traits are consistently related to juvenile delinquency (Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009).

The lowest aspect that depicts juvenile delinquency is the delinquency of moral defects which is shown by the inability to understand that juvenile delinquency is wrong, and a low level of empathy. Individuals with moral delinquency are also more likely to commit acts of theft, truant, and lying so that individuals who have moral character delinquency also have the opportunity to commit juvenile delinquency (Na-ta'ala, 2015).

The results of previous studies that are relevant to this study include the result of research by Church, Wharton, and Taylor (2009) who examined juvenile delinquency using NYS scale by looking at the frequency of juvenile delinquency such as damaging goods, stealing, consuming alcohol, engaging in sexual activity and showing disturbing behavior. The result of his study shows that the scale of juvenile delinquency is reliable with a Cronbach alpha value of 0.770. Then Miller, and Matthews (2001) research that examines juvenile delinquency using the general juvenile delinquency measure scale adapted from Mazerolle (1998) shows that juvenile delinquency scale is measured by the involvement of respondents on naughty behavior including various behaviors such as good destruction, drug use and committing violence. The juvenile delinquency scale is reliable with Cronbach alpha 0.817. Furthermore, the result of Peach and Gaultney's (2013) research that measured juvenile delinquency using additive index showed that from four tests, the juvenile delinquency scale is valid and reliable with a Cronbach alpha value of 0.680 to 0.810.

Other research conducted by Harden, Quinn, and Tucker-Drob (2012) who measured juvenile delinquency using SRD showed that the juvenile delinquency scale is valid and reliable with Cronbach alpha 0.640 to 0.680. Junger-Tas, Ribeaud, and Cruyff (2004) research results show that the scale of juvenile delinquency in their research is valid and reliable with a Cronbach alpha value of 0.682. The results of this study indicate that the juvenile delinquency scale is valid and reliable with a higher reliability score than previous studies conducted with a Cronbach alpha value of 0.936.

The result of this study is expected to increase the treasury of science, especially in studying juvenile delinquency. The scale of juvenile delinquency in this study can also be used as a media assessment for juvenile delinquency behavior.

So that further interventions can be given to overcome and prevent juvenile delinquency.

CONCLUSION

The results of this study indicate that the scale of juvenile delinquency is valid and reliable. The most dominant aspect reflecting juvenile delinquency is psychopathic delinquency while the weakest aspect of reflecting juvenile delinquency is delinquency of moral defects. The scale in this study has better reliability than previous studies so it can be used as a reliable instrument in measuring juvenile delinquency.

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