



## The Correlation between Self-Efficacy, Grade, and Sex on the Intention to Participate in Peer-Education Activities in Drug Abuse Prevention

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### Dear Editor-in-Chief

Adolescent is an age group that has great potential as the next generation of the nation, yet due to the development of modernization such as today there are actually various social deviations committed by adolescent, one of which is the increase in problem or case related to drug abuse. One from 20 people aged 15-64 yr has used drugs in 2014 (1). The National Narcotics Agency in Indonesia stated that in 2016 the proportion of abusers who tried to use it in the city (88%) was higher than in the district (83%).

Surabaya City is one of the big metropolitan cities in East Java Province in Indonesia. There was an increase in the number of drug user in Surabaya, specifically to the student group around 16%. Based on the records of the Surabaya City National Narcotics Agency, there were 84 students becoming drug users and underwent rehabilitation (2). Surabaya is very vulnerable to drug abuse since it has technology and infrastructure advancements, hence the majority of its people are more advanced compared to other areas in East Java. Based on regulation by Mayor in Surabaya number 65 in 2014 concerning the Action Plan for

the Implementation of Regional Policy and Strategy for Preventing, Eradicating the Misuse and Illicit the Circulation of Narcotic in the City of Surabaya in 2014-2015. Several drug abuse prevention programs were the priorities of the Surabaya City government. One of the prevention programs is the establishment of anti-drug cadres for middle and high school student (3).

The Initiative programs in school can run well if there are students who are appointed as peer educators equipped with abilities according to their duties. The belief in this ability is an important factor that will determine the individual behavior of the program. Bandura defined that self-efficacy was an individual's belief in his own ability to organize and implement action to produce the desired achievement and result (4). Self-efficacy will determine the intention of the behavior that in this case is the behavior in carrying out the task as a peer educator. Student's intention in participating is also depended on gender and grade level (5,6). Therefore, we conducted the study in Surabaya in 2019 that aimed to analyze the correlation between self-efficacy, grade, and gender on the intention to



participate in peer-education activities in order to prevent drug abuse.

This research was a quantitative research with cross-sectional study. It has considered various aspects related to research ethics and has obtained ethical approval from Ethics Commission in Faculty of Nursing, Universitas Airlangga in Surabaya, Indonesia. The logistic regression models with generalized estimation equation (GEE) to assess the crude and adjusted associations of self-efficacy, grade, and sex with intention to participate in activities held by peer educator.

The results showed that respondents' intention to participate was 87.3% and the multivariate logistic regression model indicated that a higher self-efficacy and female gender were significantly associated with a higher “intention to participate”. However, no significant association was found between grade and “intention to participate”.

Table 1 shows crude and adjusted odds ratios for higher intention to participate in activities held by peer educator in association with self-efficacy, grade, and sex. Students with a higher score of “intention to participate” had a significantly greater mean score of self-efficacy (5.86 *vs* 5.14).

**Table 1:** Crude and adjusted odds ratios for higher intention to participate in Peer Education Activities in association with self-efficacy, grade, and sex

Variable	Intention to Participate in Peer Education Activities		Crude OR (95% C.I.)	Adjusted OR (95% C.I.)
	High (score 9-12)	Low (score 3-8)		
Self-efficacy, Mean (± SD)	5.85(± 0.88)	5.14(± 1.08)	2.161(1.828-2.555)	2.098(1.772-2.484)
Grade, n (%)				
Grade 11	352(70.26)	149(29.74)		Ref.
Grade 12	223(63.17)	130(36.83)	0.726(0.544-0.969)	0.833(0.609-1.139)
Sex, n (%)				
Male	207(57.02)	156(42.98)		Ref.
Female	368(74.95)	123(25.05)	2.254(1.685-3.017)	2.101(1.543-2.863)

Ref: reference group. Adjusted OR was adjusted for self-efficacy, grade, and sex

Additionally, the percentage of higher level of “intention to participate” was significantly lower in Grade 12 students than in Grade 11 ones (63.17% *vs* 70.26%). Compared to male gender, female gender was associated with a significantly greater percentage of “intention to participate” (74.95% *vs* 57.02%). The multivariate logistic regression model that simultaneously takes into account the above three variables indicated significant independent associations of “intention to participate” with both self-efficacy and sex, but not grade. Per 1 unit score increase in self-efficacy was associated with a significantly elevated OR (2.098, 95% CI, 1.772-2.484) for “intention to participate”. The OR for “intention to participate” was also significantly increased for female students than for male

students, with an OR of 2.101 (95% CI, 1.543-2.863).

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### Conflict of interest

The authors declare that there is no conflict of interest.

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