Understanding Disabilities: A Study of Attitudes of Psychology Students toward Disabilities

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Abstract

Gaining insight into the perspective of psychology students regarding disability is crucial due to their anticipated involvement in health services, particularly mental health, which also encompasses individuals with disabilities. The purpose of this study was to examine the attitudes of psychology students towards disability moderated by gender, class, frequency of contact with Persons with Disabilities (PwD) and experiences related to disability. The research method used is correlational quantitative through the distribution of an online self-report scale to 202 psychology students in Indonesia. The results of the analysis show that there is no correlation between attitudes towards PwD and the frequency of contact with PwD among psychology students in Indonesia. There is a noteworthy connection between attitudes towards individuals with disabilities and the availability of disability services on campus. Psychology students who attend campuses that provide disability services tend to exhibit more positive attitudes towards disabilities, as reflected in their higher scores.

Keywords: Attitude toward Disability; Mental Health; Psychology Students

1. Research Background

The World Health Organization (WHO) and the World Bank (World Bank) state that 1 billion individuals, or 15% of the world's population experience some form of disability and 200 millions of them have difficulty functioning. In general, individuals with disabilities have poorer health, lower academic achievement, lower economic participation, and higher levels of poverty when compared to individuals without disabilities. This is because, among other things, individuals with disabilities experience limitations in accessing services that can be accessed by individuals without disabilities, namely health, education, employment, and transportation and information services (WHO, 2011; The World Bank, 2010). The Indonesian government through Law No. 8 of 2016 has made efforts to equalize the rights of PwD. This law is also aligned with the UN's 2015 sustainable development goals (SDGs) which focus on the perspective of PwD (Central Bureau of Statistic, 2019). However, similar to global problems in the world,
people with disabilities in Indonesia experience more discrimination and restrictions on rights.

The rights that should be obtained by PwD are health services, education and employment. Many of these fields are filled by psychology graduates (FISIP UB education guidebook, 2020). As psychology consultants and educators, many Psychology graduates become teachers or therapists for children with special needs and provide disability-related consultations. As a Human Resource in a company, psychology graduates are also very likely to have contact with workers with disabilities. The most important thing, of course, is in providing health services, in this case mental health services, for example counseling or therapy.

Psychology graduates who are considered as mental health workers are certainly expected to be able to provide a more positive attitude regarding disability. Services for PwD in general include special education, medical intervention, vocational assistance, or counseling related to psychological adjustment to disability conditions (Mcdougall, 2008). In providing these services, three main problems related to the approach to PwD are: lack of knowledge about disabilities, uncomfortable working with PwD and wrong attitudes or perceptions about disabilities (Lam et al., 2010; Mcdougall, 2008; Strike et al., 2004). Gaining knowledge and developing a positive mindset regarding disability is crucial for Psychology students, as it equips them with the necessary skills and readiness to pursue their future profession.

Attitudes toward PwD can be influenced by demographic variables such as age, gender, nationality, marital status, education level, socioeconomic status, place of residence (rural vs urban), and experience with disabilities (Tervo et al., 2002). In addition, it is also influenced by a lack of knowledge in carrying out specific assessments of disabilities, lack of skills related to the complex needs of PwD, inconvenience of working with PwD, communication difficulties and negative and inappropriate attitudes towards disabilities (Lam et al., 2010, Kritsotakis, 2017).

Previous studies highlighting students' attitudes toward disability in various countries have stated that cultural background influences attitudes toward disability. For example, American students show more favorable attitudes toward the blind than French students (Tervo et al., 2002). Research on students' attitudes towards disability is also mostly conducted on medical students and other medical personnel such as nurses (Cecchetti et al., 2021; Lam et al., 2010; Tervo et al., 2002). According to Mary Paris (Lynch et al., 2019), attitudes directly affect the opinions, decisions, and behavior of medical staff. Medical students' attitudes toward disability are shaped during their medical training, which will shape their future practice. As doctors of the future, it is imperative that their training is evaluated and perfected to cultivate compassionate and empathetic practitioners who are able to provide high-quality care to people with disabilities. Most medical schools, however, have adopted the "medical model of disability", a model that believes that disability is seen as an individual's failure or inability in terms of social
factors and prejudices that ultimately contribute to the overall disability experience. An inaccurate focus that focuses more on the patient's disability than the actual condition also affects the quality of medical services.

Previous studies have focused more on attitudes toward disability among medical students (Cecchetti et al., 2021; Lam et al., 2010; Tervo et al., 2002). This is because medical students while pursuing their medical education, have direct contact with PwD or those who are undergoing rehabilitation because of their disabilities. Even though Psychology students actually take many courses related to disability, for example abnormal psychology, education for students with special needs, psychology of disability and others, there has been no more in-depth research on the attitudes of Psychology students towards disability.

2. Method

2.1 Design

This study uses a correlational study approach that seeks to see the relationship between the variables of attitudes towards disability, frequency of contact with PwD, socio-demographic (gender, class, university), personal experience related to disability (person with disabilities, having a family with disabilities), as well as the availability of disability units/services that deal with disabilities on campus.

2.2 Population and Samples

The survey and distribution of scales/measuring instruments in this study were carried out to 202 undergraduate psychology students from various universities in Indonesia using the simple random sampling method. Based on the calculation of G*Power v. 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007), the minimum sample size for the independent sample t-test is $N \geq 102$ (medium effect: $d = 0.50$) to 620 (small effect: $d = 0.20$) with alpha level 0.05 and power 0.80. In this experiment, with a medium effect, the minimum sample size is 196 respondents.

2.3 Instruments

To measure attitudes towards PwD, this study used the Attitude toward Disabled Persons (ATDP) scale developed by Harold E. Yuker (1970). The ATDP scale aims to measure attitudes of non-disabled people towards PwD. Yuker developed three versions of this scale, namely Form O (Original-20 item), Form A (30 item), and Form B (30 item) with six answer response options, namely +3 (strongly agree), +2 (agree), +1 (somewhat agree), -1 (somewhat disagree), -2 (disagree), and -3 (strongly disagree). This scale can also be used to measure the attitude of PwD towards other PwD. However, this research focuses on knowing non-disabled attitudes towards PwD by using Form A which contains 30 item statements. The higher the score indicates a good or positive attitude towards PwD. Conversely, a lower score indicates a worse attitude towards PwD.

The scale used to measure the frequency of contact with PwD is Contact with Disabled Persons (CDP) developed by Yuker & Hurley (1987). This scale aims to measure
the frequency of contact or interaction between participants and PwD. This scale consists of 20 items and is a unidimensional scale, which measures how often participants make contact with PwD in various situations and conditions with 5 response options using a Likert scale in the range of 1 to 5 to indicate: 1 (never); 2 (once or twice); 3 (several times); 4 (often); 5 (very often). The higher the score indicates the frequency of intensive contact and interaction with PwD.

3. Result

The main hypothesis that we want to know from the quantitative stage in this study is to determine the correlation between attitudes towards PwD and the frequency of contact with PwD. The ATDP scale (Yuker, 1970) is used to measure attitudes towards PwD, while the CDP scale (Yuker & Hurley, 1987) is used to measure the frequency of contact with PwD. Correlational analysis (bivariate correlation) with Pearson Correlation was carried out to determine the closeness of the relationship and the direction of the relationship between the two variables. The results of the correlational analysis showed that there was no relationship between attitudes towards PwD and the frequency of contact with PwD (p>0.05).

Furthermore, to find out the relationship between each variable and demographic data as another supporting variable, a partial analysis test was carried out.

3.1 ATDP Partial Analysis

In order to be able to interpret the ATDP score, it is necessary to compare the empirical score with the hypothetical score as set out in the following table.

<table>
<thead>
<tr>
<th>ATDP</th>
<th>Hypothetic Score</th>
<th>Empiric Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>Maximum</td>
<td>150</td>
<td>125</td>
</tr>
</tbody>
</table>

Based on Table 1, the participant scores in this study showed the lowest score was 56 and the highest score was 125 (M=100). This shows that the average participant has a fairly good attitude towards PwD.

Furthermore, the existence of a disability service center on campus was positively correlated with attitudes towards PwD (r=0.187, p<0.05), which meant that there was a significant relationship between the presence or absence of services for PwD on campus and attitudes towards PwD.

In addition, there is a significant relationship between attitudes towards PwD and experience of interacting with PwD (r=0.147, p=0.037). Specifically, participants who have friends with disabilities have a relatively better attitude towards people with disabilities in general, as can be seen in the following graph.
In the process of compiling the scale, Yuker (1970) stated that women's scores were relatively higher than men, assuming that women tend to have greater empathy than men ($t=4.84, p<.001, N=316$ college students). However, in this study there was no significant difference between male and female ATDP scores.

To find out how much influence other variables have on attitudes in PwD, a multiple linear regression test was carried out. The calculated F-value is 2.896 with a significant level of 0.015. This significant value is below 0.05 which indicates that Semester, Disability Services, Gender, Interaction Experience, and Age simultaneously have a significant effect on the dependent variable at a significant level of 5%. The regression values as listed in the following table.

**Table 2. Linear Regression of ATDP**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.262*</td>
<td>.069</td>
<td>.045</td>
<td>10.63932</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Semester, disability service, sex, interaction, age

b. Dependent Variable: ATDP_SKOR

### 3.2. CDP Partial Analysis

In order to be able to interpret the CDP score, it is necessary to compare the empirical score with the hypothetical score as set out in the following table.

**Table 3. Hypothetic and Empiric Scores of CDP**

<table>
<thead>
<tr>
<th>CDP</th>
<th>Hypothetic Score</th>
<th>Empiric Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Maximum</td>
<td>95</td>
<td>77</td>
</tr>
</tbody>
</table>
Based on Table 3, the participant scores in this study showed the lowest score was 19 and the lowest score was 77 (M=37.4). The average value is quite low, indicating that the average participant has a relatively low frequency of contact with PwD. The existence of disability services on campus has no significant relationship with the frequency of contact with PwD (p>0.05).

Table 4. Relationship between frequency of contact and disability service on campus

<table>
<thead>
<tr>
<th>ANOVA Table</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of contact (CDP) * disability service</td>
<td>Between Groups (Combined)</td>
<td>226.951</td>
<td>1</td>
<td>226.951</td>
<td>1.588</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>28592.118</td>
<td>200</td>
<td>142.961</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>28819.069</td>
<td>201</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The interaction experience has a significant relationship (r=0.254, p<0.001) with the frequency of contact with PwD. Specifically, participants who have friends with disabilities have a higher frequency of contact than others, as illustrated in the following graph.

Graph 2. Experience of Interaction and Contact with PwD

To find out how much influence other variables have on contact with PwD, a multiple linear regression test was carried out. The calculated F-value is 3.66 with a significant level of 0.003. This significant value is below 0.05 which indicates that Semester, Disability Services, Gender, Interaction Experience, and Age variables simultaneously have a significant effect on the variable frequency of contact with PwD at a significant level of 5%. The regression values as listed in the following table.
In addition, the presence of disability services on campus has a significant correlation with the experience of interacting with PwD \( (r=0.157, p<0.05) \).

### 4. Discussion

Attitudes towards PwD are influenced by various factors. One of them is the frequency of contact with PwD which is the hypothesis of this study which is based on several previous studies which state that the frequency of contact with PwD is directly proportional to attitudes towards disabilities (Gething, 1993; Rathbone, 2013; Barr & Brachitta, 2012). However, in contrast to previous studies, this study did not find a correlation between attitudes towards PwD and the frequency of contact with PwD, especially among students majoring in psychology in Indonesia. There are several factors that influence this, including the condition of the pandemic, the level of awareness of psychology students on disability issues, and the paradigm shift in the disability model over the last few decades.

In this study, the frequency of contact with PwD was measured by the CDP (Contact with Disabled Persons) scale developed by Yuker & Hurley (1987), where participants were asked to rate how often they had contact with PwD based on prior activities. Some of the question items on the CDP scale read “How often do you have long conversations with people with physical disabilities?”, “How often do you eat meals with people with physical disabilities?”, and “How often do you visit friends with disabilities at their homes?”. However, this pandemic condition requires students to stay at home to minimize the spread of the Covid-19 virus. This condition directly minimizes all forms of social interaction, one of which is interaction with PwD. Therefore, prior contact with PwD also occurs minimally. This is evidenced by the low mean CDP score of the psychology students in this study. Whether or not there are services for PwD on campus does not correlate with the frequency of contact with PwD, because even though the campus has disability services, the pandemic situation does not allow for direct interaction with PwD. In a review of the effects of the Covid-19 pandemic on people with physical disabilities, one of the most felt negative impacts of the pandemic is changing patterns of social interaction and lifestyle, limiting contact with other people (Lebrasseur, et al., 2020).

In addition, it is believed that awareness of disability issues is directly proportional to attitudes towards disability. The higher the individual’s awareness of fulfilling the rights of PwD, the more positive the attitude they have towards PwD. In this study, attitudes and contact with PwD did not have a significant relationship. It can be assumed that

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### Table 5. Multiple Linear Regression of CDP

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.292(^a)</td>
<td>0.085</td>
<td>0.062</td>
<td>11.59654</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Semester, disability service, sex, interaction, age*

*b. Dependent Variable: SKOR_CDP*
psychology students already have a high awareness of disability issues so that attitudes towards PwD are good even though there is minimal contact with PwD. Currently, there is a lot of education regarding disability issues on social media and the internet. The government is also actively promoting disability awareness programs for youth. An instance of this is the disability awareness campaign carried out by the Coordinating Ministry for Human Development and Cultural Affairs, emphasizing the significance of creating environments that are accommodating for PwD (Firlyani, 2022). There are also various youth forums and youth organizations concerned with disability issues. One example is KOPINUS (Nusantara Inclusion Caring Community), primarily consisting of young individuals, who regularly organize campaigns advocating for equal rights for individuals with disabilities. One of their recurrent programs is the Child Literacy Movement (GLA), which focuses on promoting literacy among children with disabilities (Nasution & Setianingrum, 2022). Apart from that, in the class, psychology students have also learned about various disabilities, developmental deviations, abnormal psychology, and so on, so that the issue of disability is no stranger. However, further research is needed to empirically determine the relationship between these variables.

One of the interesting findings is that the experience of interacting with friends with disabilities is a contributing factor to the high score of attitudes and contact with PwD as a whole. Even participants who have families with disabilities have relatively lower attitude and contact scores than participants who have friends with disabilities. This shows that participants feel more connected if their experience of interacting with PwD is of a similar age to theirs. So that they can better understand, imagine, and empathize with the obstacles experienced by friends who have disabilities.

5. Conclusion

Despite the absence of a discernible relationship between psychology students' attitudes towards people with disabilities (PwD) and their frequency of contact with PwD, the presence of a disability service center on campus demonstrated a positive correlation with favorable attitudes towards PwD. Furthermore, psychology students who maintain friendships with individuals with disabilities exhibit higher levels of positive attitudes towards disabilities. This observation underscores the significance of investigating the awareness levels of psychology students regarding disability issues, thereby warranting further research in this domain.

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