ORIGINAL ARTICLE

VALIDITY AND RELIABILITY OF THE INDONESIAN VERSION OF THE INTERNALIZED STIGMA MENTAL ILLNESS INSTRUMENT: SUBSTANCE ABUSE IN ADOLESCENTS

Dwi Suratmini[1], Novy Helena Catharina Daulima[2]*, Ice Yulia Wardani[3]

1. Department of Psychiatric Nursing, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta, Depok, Indonesia
2. Department of Psychiatric Nursing, Faculty of Nursing, Universitas Indonesia, Depok, Indonesia
3. Department of Psychiatric Nursing, Faculty of Nursing, Universitas Indonesia, Depok, Indonesia

ABSTRACT

The prevalence rate of drug abusers in adolescents in Indonesia is relatively high. There is no valid and reliable instrument in the Indonesian language to measure stigma in drug users in adolescents. Therefore, this study aims to measure the validity and reliability of the self-stigma questionnaire in adolescent drug users. This cross-sectional study involved 59 teenage drug users who, at the time of the study, were in good health and could read and write to answer the questionnaire. Data were collected between March and September 2020 using Internalized Stigma Mental Illness (ISMI): Substance Abuse questionnaire. Pearson's correlation coefficient, r, was used to measure the cross-validity value of the correlation between item scores and total statement scores. Meanwhile, researchers used Cronbach's Alpha to assess the internal consistency of the questionnaire. Pearson's r values for 29 statements showed that 1 statement was invalid. After eliminating the invalid statements, 28 statements with valid results at $r_{count} \geq 0.256$ and Corrected item-total correlation >0.3 with a confidence level of 95% (r_{count} 0.323-0.642) and reliable Cronbach Alpha > 0.700 (Cronbach Alpha If Items Deleted: 0.888-0.895) with a 95% confidence level were used in the instrument. The ISMI is a valid and reliable version of drug abuse that can be used as an assessment and evaluation tool for adolescent drug abusers in clinical, rehabilitation, research, and community settings.

Keywords: *Adolescent; internalized stigma; reliability; substance abuse; validity*

INTRODUCTION

Stigma is one of the social impacts that will be attached to drug abusers (Vally et al., 2018). Stigma is classified into public and internalized stigma (Silke, Swords, & Heary, 2016; Yu et al., 2021). Studies have shown that almost all drug abusers experience internalized stigma (Ardani & Handayani, 2017). Additionally, 26.5% of adolescents will experience internalized stigma after experiencing public stigma (Pantelic et al., 2017). Internalized stigma, also called self-stigma, perceived stigma, or felt stigma, is a form of internalization of stigma that exists in society against the self (Kao, Lien, Chang, & Wang, 2016; Matthews, Dwyer, & Snoek, 2017; Eaton, Stritzke, Corrigan, & Ohan, 2019). It often manifests itself in drug users as feelings of shame, guilt, and despair (Batchelder et al., 2020). This internalized stigma can become an obstacle to achieving individual life goals.

People with internalized stigma experience difficulties in their daily lives. Internalized stigma leads to feelings of inadequacy, prejudice toward oneself (low self-esteem and self-efficacy), and discriminatory behavior (Silke, Swords, & Heary, 2016). Such attitudes reduce the ability of these individuals to make decisions and receive health care (Hammarlund, Crapanzano, Luce, Mulligan, & Ward, 2018; Gupta, Panda, Parmar, & Bhad, 2019). Moreover, self-stigma can reduce individual productivity and quality of life (Cheng

et al., 2019). Therefore, it is essential to have a valid and credible assessment to evaluate internalized stigma, which could help individuals receive treatment.

Many countries have developed instruments in their languages to assess internalized stigma, such as Arabic, Armenia, Bulgaria, Mandarin, Dutch, and English (Boyd, Adler, Otilingam, & Peters, 2014). These instruments include the Self-Stigma of Mental Illness scale (Corrigan et al., 2013) and the Internalized Stigma of Mental Illness scale (Ritsher, Otilingam, & Grajales, 2003), which were developed for various disease conditions, including substance abuse. Generally, the focus of an individual will decrease with time. Therefore, it is not recommended to have several lengthy questionnaire statements. The Internalized Stigma of Mental Illness Questionnaire has only 29 items, but can represent all components of self-stigma. This questionnaire has also been used in several developed and developing countries (Boyd, Adler, Otilingam, & Peters, 2014), but these instruments were generally developed for adults.

Adolescents are at high risk for drug abuse. The 2016 report shows that of 130 countries worldwide, 5.6% of youth have abused drugs such as cannabis. Adolescents aged 12-17 years are in the critical period of initiation of drug abuse, while 18-25 years are the peak ages for drug abuse (UNODC, 2018a). Indonesia, where a quarter of the population is young, is still in a drug emergency (BPS, 2022). The prevalence of drug abuse among 15-24-year-olds increased from 1.30% in 2019 to 1.87% in 2021 (BNN, 2022), whereas in 2019, the prevalence of drug abuse had reached 24-28% of total teenagers (BNN, 2019). Therefore, drug abuse in Indonesia needs to be addresses through various efforts, one of which is to overcome the impact of self-stigma.

Adolescents have different characteristics than adults. Various life changes and job demands can become a "pile of stressors" that make teenagers increasingly vulnerable to drug use (Levin, 2015; Mclaughlin, Garrad, & Somerville, 2015). Internalized stigma will influence the way adolescents evaluate themselves. The self-assessment phase in adolescents is a critical stage that influences their ability to achieve the main task of their development: forming their self-identity (Mak, Ho, Wong, Law, & Chan, 2015). In addition, internalized stigma can also cause psychological distress, decreased social functioning, and reduced quality of life in adolescents (Cheng et al., 2019; Hippel, Brener, & Horwitz, 2018). It also dramatically influences physical health and ongoing drug abuse behavior (Guerri & Pascual, 2019).

Therefore, developing the internalized stigma measurement instrument for adolescents is crucial because of this growing phenomenon. It is expected to be a tool for assessing and evaluating adolescents with drug abuse. This study aims to measure the validity and reliability of the Indonesian version of the internalized stigma instrument, particularly in adolescents with drug abuse.

METHOD
Study design
This study used a cross-sectional approach by distributing descriptive questionnaires among adolescent drug abusers.

Population and sample
This population of this study was 59 teenager drug abusers in rehabilitation institutions at the National Narcotics Agency (BNN) Bogor, the Special Child Development Institute (LPKA) Jakarta of the Ministry of Law and Human Rights, and the private rehabilitation foundation Al-Islamy Yogyakarta. By selecting rehabilitation institutions, researchers can reach teenagers who have been shown to have used drugs.

Rehabilitation institution officials explained that the COVID-19 pandemic reduced the number of drug abusers in the age group of 16 to 19 years of age undergoing rehabilitation. In addition, the lockdown policy resulted in limited access for researchers to collect data in drug rehabilitation institutions. Due to the limited population and research time, the total sampling technique was used and the entire population of 59 adolescents (10-19 years old, in good health, able to read and write to answer questionnaires) was determined to be the research sample.

Instrument
Participants' age, gender, marital status, education, and ethnic group are the demographic data taken from their medical records. The Internalized Stigma of Mental Illness (ISMI): Development of a Substance Abuse Version by Boyd, Adler, Otilingam, & Peters (2013) was the questionnaire used in this study. This instrument is in English and consists of 29 items of statements (24 favorable and 5 unfavorable) to measure 5 subscales: alienation, stereotype, discrimination experience, social withdrawal, and stigma resistance as presented in Table 1. It also uses a Likert scale with 4 answer options: strongly agree (score 4), agree (score 3), disagree (score 2), and strongly disagree (score 1). The interpretation of questionnaire results is classified into 2 (two) parts based on the average score of answers, where low self-stigma is indicated by an average score of 1.00-2.50 and an average score of 2.51-4.00 indicates high self-stigma.

Table 1. Instructions of the internalized stigma instrument

Subscale	Statement items	Statement items	
		Favorable	Unfavorable
Alienation	1, 5, 8, 16, 17, 21	1, 5, 8, 16, 17, 21	-
Stereotype endorsement	2, 6, 10, 18, 19, 23, 29	2, 6, 10, 18, 19, 23, 29	-
Discrimination experience	3, 15, 22, 25, 28	3, 15, 22, 25, 28	-
Social withdrawal	4, 9, 11, 12, 13, 20	4, 9, 11, 12, 13, 20	-
Stigma resistance	7, 14, 24, 26, 27	-	7, 14, 24, 26, 27

(Source: Boyd, 2013)

To begin the instrument development process, the researcher first obtained permission via email from Jennifer E. Boyd, Ph.D., as the developer of the ISMI: Substance Abuse questionnaire to be translated and used in the population of adolescent drug abusers in Indonesia. The researchers then proceeded to the translation and cultural adaptation process. The instrument was translated according to the WHO Translation and Adaptation of Instrument

Process (2020). The instrument's translation process is described as follows:
1. Forward translation: Includes making a reconciliation version from English to Indonesian by three professional nurses with good English competency. The translation results led to the most relevant concepts. All translators translated all statements, instructions, and answer choices from the questionnaire.

2. Expert panel back-translation: This process was carried out by sworn translators with a background and knowledge appropriate to the research content of CILACS UII certified institutions who are experienced in developing and translating instruments to produce a complete version of the instrument. The instrument was then translated back into English by a competent independent translator to obtain translation results that were equivalent both conceptually and linguistically.
3. Pre-testing and cognitive interviewing: This test was distributed to several teenagers with the same characteristics as the research respondents to determine the level of understanding of the phrases in each statement. At this stage, the teenagers said that the questionnaire was easy to understand.
4. Validity and reliability testing: This test was distributed to 59 adolescents. Researchers and research assistants checked the list of adolescents recommended by the team of caregivers based on inclusion and exclusion criteria and then explained the research objectives and procedures directly by word of mouth.
5. Final version: The final version of the instrument was made in Bahasa Indonesia (Indonesian language). After data were collected from 59 respondents, the next stage is data analysis.

Data collection
Data collection was carried out from March to September 2020. The adolescents approached were chosen based on the recommendations of the institution's medical team and the health records of the adolescents. The research activities were explained by word of mouth to the respondents. Respondents received a questionnaire and asked for their willingness to participate in this research (informed consent). Then, they were asked to fill out the questionnaire. Those willing to become respondents were then asked to agree on a time to complete the questionnaire. In this study, all respondents immediately completed the questionnaire after signing the willingness form. The researcher and research assistant checked and ensured that there were no empty questionnaire answers at the time of collection.

Data analysis
All respondents response items were coded and scored. Items with blank, multiple, or unclear answers were removed from the data set. All data entries were checked and analyzed using IBM SPSS version 25. Next, descriptive statistical methods were used to describe the data. There were no items for which the questionnaire answers were empty, duplicated, or unclear.

A validity test was performed to measure the ISMI: Substance Abuse Version instrument's validity in measuring internalized stigma in adolescents. Pearson's Correlation Coefficient test (Pearson's r) was used to determine the cross-validity value between the item's scores and total scores (Begdache, Marhaba, & Chaar, 2019; Gündüz et al., 2019). The statement is classified as valid if the item's score correlates significantly with the total score ($r_{count} > r_{table}$) (Humphreys et al., 2019), with the value of r_{table} 0.2564 (α: 0.05), and the Corrected item-total correlation >0.3 with a confidence level of 95% (Khilmi et al., 2022).

The reliability test was conducted after all items were categorized as valid to show the consistency of the measurement of internalized stigma in adolescents using the ISMI instrument: Substance Abuse Version. The Cronbach Alpha test was used to assess the level of internal consistency of the scale (Clayson et al., 2021). This instrument is declared reliable if the Cronbach Alpha is ≥ 0.700 (Heale & Twycross, 2015).

Ethical consideration
This research has been through ethical approval by the ethics committee of the Faculty of Nursing, Universitas Indonesia, as evidenced by the Certificate of Ethics Review, Number: SK56/UN2.F12.DI.2.I/ETIK 2020. The researcher explained the activities, procedures, objectives, benefits, risks, rights, and obligations of the respondents. The participation of the respondents is voluntary, as evidenced by signing an informed consent form by the adolescent respondents accompanied by their guardians.

RESULTS
Demographic characteristics of the respondents
There were 30 adolescent drug abusers from BNN, 6 adolescents from LPKA, and 23 from Al-Islamy, consisting of 55 men (93.2%) and 4 women (6.8%). The average is 17.59 years (95% CI: 17.24-17.95), with a standard deviation of 1.37 years. The youngest respondent is 14 years old and the oldest is 19 years old. Most of the respondents were unmarried (84.7%), Muslim (83.1%), Javanese (55.9%), and their highest education level was junior high school (66.1%). The distribution of respondents in this study can be seen in Table 2.

Table 2. Distribution of respondents' ages

Variable	Mean	SD	Minimum-maximum	95% CI
Age	17.59	1.37	14-19	17.24-17.95

Validity
The Pearson Correlation test results on the 29 statements from ISMI: Substance Abuse Version in an adolescent with drug abuse (Model 1) shows that there are 28 valid statements and 1 invalid statement. These valid statements consist of five subscales: alienation (6 items), stereotype (6 items), discrimination experience (5 items), social withdrawal (6 items), and stigma resistance (5 items) with r_{count} ≥ 0.256 (r: -0.036-0.641). The invalid item is 1 of 7 statement items that assess the stereotype subvariable with r_{count} < 0.256 (r: -0.036) and a confidence level of 95%, as shown in Table 3.

Based on the results of the Pearson Correlation test, the 1 invalid statement was deleted (Model 2) and the study was continued using 28 statements from the ISMI instrument: Substance Abuse Version in an adolescent with drug abuse has valid results with r_{count} ≥ 0,256 (r: 0.323-0.642) and Corrected item-total correlation >0.3 and a confidence level of 95% as shown in Table 3. All valid 28 items also included five subscales of the ISMI instrument: Substance Abuse Version.

Reliability
The Cronbach Alpha value of 29 statements from the ISMI instrument: Substance Abuse Version for an adolescent with drug abuse (Model 1) is 0.892, with the smallest Cronbach Alpha value if an item is deleted being 0.884 and the highest value being 0.891. After 1 invalid statement was deleted (Model 2), the Cronbach Alpha value increased to 3.895, with the smallest value of Cronbach Alpha If an item is deleted being 0.888 and the highest value being 0.894. Both Cronbach Alpha scores of 29 or 28 statements show high reliability (Cronbach Alpha ≥ 0.700). The detailed value of Cronbach Alpha if an item is deleted can be seen in Table 3.

Table 3. Validity and reliability test results of the Internalized Stigma: Substance Abuse Questionnaire

Subscale	Model 1				Model 2			
	No	Corrected item-total correlation	Cronbach Alpha if an item is deleted	Cron-bach Alpha	No	Corrected item-total correlation	Cronbach Alpha if an item is deleted	Cron-bach Alpha
Alienation	1	0.460	0.888	0.892	1	0.454	0.892	0.895
	5	0.497	0.889		5	0.492	0.893	
	8	0.404	0.889		8	0.393	0.893	
	16	0.512	0.887		16	0.511	0.891	
	17	0.519	0.891		17	0.519	0.891	
	21	0.480	0.892		21	0.480	0.892	
Stereotype	2	0.397	0.889		2	0.400	0.893	
	6	-0.036	0.895					
	10	0.396	0.889		10	0.402	0.894	
	18	0.454	0.888		18	0.460	0.892	
	19	0.373	0.890		19	0.375	0.894	
	23	0.563	0.903		23	0.609	0.889	
	29	0.498	0.887		29	0.507	0.891	
Discrimination experience	3	0.402	0.889		3	0.408	0.893	
	15	0.399	0.889		15	0.405	0.893	
	22	0.691	0.901		22	0.547	0.890	
	25	0.469	0.888		25	0.471	0.892	
	28	0.437	0.888		28	0.444	0.892	
Social with-drawal	4	0.450	0.888		4	0.438	0.892	
	9	0.618	0.884		9	0.617	0.889	
	11	0.316	0.891		11	0.323	0.895	
	12	0.641	0.884		12	0.642	0.888	
	13	0.398	0.889		13	0.389	0.893	
	20	0.638	0.884		20	0.631	0.888	
Stigma resistance	7	0.519	0.887		7	0.513	0.891	
	14	0.383	0.889		14	0.387	0.893	
	24	0.355	0.890		24	0.357	0.894	
	26	0.331	0.890		26	0.339	0.894	
	27	0.373	0.888		27	0.375	0.893	

Note:
Model 1: ISMI: Substance Abuse Version with 29 statement items
Model 2: ISMI: Substance Abuse Version with 28 statement items

The respondents took 15-20 minutes to complete the questionnaire. All respondents said that all statements in the questionnaire could be easily understood. No respondents asked for clarification on the statements of the questionnaire. Therefore, they were able to complete the questionnaire independently.

DISCUSSION
This study developed an instrument to assess internalized stigma for a specific population, namely adolescents, by adapting the ISMI: Substance Abuse Version instrument through validity and reliability tests. Researchers did not modify the content of the instrument - the statements were only translated into Indonesian according to WHO procedures to create an instrument that can represent the social and cultural background of adolescents in Indonesia.

Several linguistic aspects were considered to achieve linguistic validity because there are risks with unequal meaning in each statement item displayed when developing cross-cultural instruments (Jang et al., 2020). Such issues may arise from the culture in Indonesia, which is different from other countries. For example, family members are reported to repeatedly put pressure on creating a safe environment for patients with mental health problems (Mubin et al. 2023). Consideration of cultural relevance is expected

to increase adolescents' understanding and ability to answer the instrument. The respondents took approximately 15 minutes to complete the questionnaire and stated that the questions were easy to understand and could be answered by themselves.

Validity and reliability are required for research methodologies. Validity is the extent to which an instrument can be measured accurately and precisely. A valid measure can produce estimates of the construct being measured. This validity can be tested by calculating the corrected total-item correlation score, which determines the correlation between a particular item and all other items. An item is declared valid if the $r_{count} \geq$ is 0.256 for a confidence level of 95% (Khilmi et al., 2022) and if the Corrected item-total correlation is > 0.3 (Raharjanti et al., 2022; Suhartini et al., 2022).

The results of the validity test of the 29 statements (Model 1) showed that 1 of 7 statements is invalid (number 6). The statement assesses the stereotype subscale. Stereotypes are a form of stigma that will pose a threat to a person's self-concept, which can reduce their level of motivation, performance, and self-concept (Desombre, Jury, Bagès, Brasselet, & Desombre, 2019; Voisin, Brick, Vallée, & Pascual, 2019). A study found that age and gender can influence the stereotypical qualities of self-concept

(Klaczynski, Felmban, & Kole, 2020). However, the level of heterogeneity will influence the research results. Factors related to adolescence, such as age and thought or the unequal distribution of demographic characteristics gender, can lead to invalid statements on the stereotype subscale.

The researchers did not make any modifications and retested the invalid statement. The invalid item can be removed if it does not fulfill the correlation value (Boateng, Neilands, & Frongillo, 2018). Therefore, the researchers deleted the 1 invalid item in the stereotype subscale component. The final result of the validity test on 28 statements seen in Model 2 of Table 3 shows that all statements have a value of r ≥ 0.2564. Thus, the instrument with 28 statements (Model 2) is valid for measuring internalized stigma in adolescent drug abusers.

Aside from validity, a good instrument should also be reliable. Reliability measures the consistency of the result with statements or questions. A test is reliable if measurements conducted under the same conditions can give the same results. This reliability test refers to the internal consistency across all parts of the instrument. This consistency analysis is measured through Cronbach's Alpha, as it describes the correlation or degree of covariance in the questionnaire. For example, to what extent the items of a statement are related. The instrument is classified as reliable if it has a value of Cronbach Alpha ≥ 0.700 (Taherdoost, 2018; Tsang et al., 2017).

The Cronbach Alpha value of Model 1 was 0.892 (r ≥ 0.700), and Model 2 was 0.895 (r ≥ 0.700), indicating reliable results. It is consistent with the results of tests on previous instruments with high Cronbach Alpha values, even though they were conducted on different populations and cultural characteristics. Based on the Cronbach Alpha results, the ISMI instrument: Substance Abuse Version is reliable in measuring the level of internalized stigma in adolescent drug abusers in Indonesia.

This valid and reliable instrument can be used for initial screening and periodic evaluation of the level of internalized stigma of drug abusers in adolescents so that caregivers can provide interventions appropriate for the problems experienced. The limitation of this study is the low number and uneven distribution of the demographic characteristics of the respondents. Although the respondents in this study came from various regions, most were male and unmarried. These characteristics can affect the results of the instrument validity test.

CONCLUSION AND RECOMMENDATION

The Internalized Stigma Mental Illness: Substance Abuse instrument can validate and reliably measure internalized stigma in adolescent drug abusers. This instrument can be used to assess and evaluate adolescents who use drugs in clinical, rehabilitation, research, and community settings. Further studies can be conducted on the development of instruments to measure internalized stigma specifically for adolescent drug abusers can be conducted by considering a greater number and wider distribution of demographic characteristics of respondents.

ACKNOWLEDGMENTS

CONFLICT OF INTEREST

The authors have declared that there is no conflict of interest.

REFERENCES

Ardani, I., & Handayani, S. (2017). Stigma terhadap Orang dengan HIV/AIDS (ODHA) sebagai Hambatan Pencarian Pengobatan. *Buletin Penelitian Kesehatan*, *45*(2), 81–88.

Batchelder, A. W., Moskowitz, J. T., Jain, J., Cohn, M., Earle, M. A., & Carrico, A. W. (2020). A Novel Technology-Enhanced Internalized Stigma and Shame Intervention for HIV-Positive Persons With Substance Use Disorders. *Cognitive and Behavioral Practice*, *27*(1), 55–69. https://doi.org/10.1016/j.cbpra.2019.03.001

Begdache, L., Marhaba, R., & Chaar, M. (2019). Validity and reliability of Food – Mood Questionnaire (FMQ). *Nutrition and Health*, *25*(4), 253–264. https://doi.org/10.1177/0260106019870073

BNN. (2019). *Penggunaan Narkotika di Kalangan Remaja Meningkat*. https://bnn.go.id/penggunaan-narkotika-kalangan-remaja-meningkat/

BNN. (2022). *Indonesia Drug Report 2022*. https://puslitdatin.bnn.go.id/konten/unggahan/2022/07/IDR-2022.pdf

BPS. (2022). *Analisis Profil Penduduk Indonesia Mendeskripsikan Peran Penduduk dalam Pembangunan*. https://rotendaokab.bps.go.id/news/2022/03/17/23/survei-sosial-ekonomi-nasional--susenas--maret-2022.html

Boateng, G. O., Neilands, T. B., & Frongillo, E. A. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Frontiers in Public Health*, *6*(June), 1–18. https://doi.org/10.3389/fpubh.2018.00149

Boyd, J. E. (2013). Internalized Stigma of Mental Illness (ISMI) Scale: Currently Available Versions (Supplemental Content). San Francisco.

Boyd, J. E., Adler, E. P., Otilingam, P. G., & Peters, T. (2014). ScienceDirect Internalized Stigma of Mental Illness (ISMI) Scale: A multinational review. *Comprehensive Psychiatry*, *55*(1), 221–231. https://doi.org/10.1016/j.comppsych.2013.06.005

Cheng, C.-M., Chang, C.-C., Wang, J.-D., Kun-Chia, C., Ting, S.-Y., & Lin, C.-Y. (2019). Negative Impacts of Self-Stigma on the Quality of Life of Patients in Methadone Maintenance Treatment: The Mediated Roles of Psychological Distress and Social Functioning. *International Journal of Environmental Research and Public Health*, *16*(1299), 1–16. https://doi.org/10.3390/ijerph16071299

Clayson, P. E., Baldwin, S. A., & Larson, M. J. (2021). Evaluating the internal consistency of subtraction-based and residualized difference scores: Considerations for psychometric reliability analyses of event-related potentials. Psychophysiology, 58(4), 1–15. https://doi.org/10.1111/psyp.13762

Corrigan, P. W., Michaels, P. J., Vega, E., Gause, M., C., A., Watson, & Rüsch, N. (2013). Self-Stigma of Mental Illness Scale – Short Form: Reliability and Validity. *Psychiatry Research*, *199*(1), 65–69.

https://doi.org/10.1016/j.psychres.2012.04.009.Self-Stigma

Desombre, C., Jury, M., Bagès, C., Brasselet, C., & Desombre, C. (2019). The distinct effect of multiple sources of stereotype threat The distinct effect of multiple sources of stereotype threat. *The Journal of Social Psychology*, *159*(5), 628–641. https://doi.org/10.1080/00224545.2018.1544540

Eaton, K., Stritzke, W. G., Corrigan, P. W., & Ohan, J. L. (2019). Pathways to Self-Stigma in Parents of Children with a Mental Health Disorder. *Journal of Child and Family Studies.* https://doi.org/10.1007/s10826-019-01579-2

Guerri, C., & Pascual, M. (2019). International Journal of Developmental Neuroscience Impact of neuroimmune activation induced by alcohol or drug abuse on adolescent brain development. *International Journal of Developmental Neuroscience*, *77*(August 2018), 89–98. https://doi.org/10.1016/j.ijdevneu.2018.11.006

Gündüz, A., Bayazit, R. K., Gündoğmuş, İ., Sertçelik, S., Gönül, H., Yaşar, A. B., … Sungur, M. Z. (2019). Turkish validity and reliability of the Sexual Complaints Screener for Women Turkish validity and reliability of the Sexual Complaints Screener for Women. *Psychiatry and Clinical Psychopharmacology*, *29*(4), 632–639. https://doi.org/10.1080/24750573.2018.1525811

Gupta, P., Panda, U., Parmar, A., & Bhad, R. (2019). Internalized stigma and its correlates among treatment seeking opium users in India: A cross-sectional observational study. *Asian Journal of Psychiatry*, *39*(4096), 86–90. https://doi.org/10.1016/j.ajp.2018.12.004

Hammarlund, R., Crapanzano, K., Luce, L., Mulligan, L., & Ward, K. (2018). Review of the effects of self-stigma and perceived social stigma on the treatment-seeking decisions of individuals with drug- and alcohol-use disorders. *Substance Abuse and Rehabilitation*, *9*, 115–136. https://doi.org/http://dx.doi.org/10.2147/SAR.S183256

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative research Validity and reliability in quantitative studies. *Evid Based Nurs*, *18*(3), 66–67. https://doi.org/10.1136/eb-2015-102129

Hippel, C. Von, Brener, L., & Horwitz, R. (2018). Addictive Behaviors Implicit and explicit internalized stigma: Relationship with risky behaviors, psychosocial functioning and healthcare access among people who inject drugs. *Addictive Behaviors*, *76*(August 2017), 305–311. https://doi.org/10.1016/j.addbeh.2017.08.036

Humphreys, R. K., Puth, M. T., Neuhäuser, M., & Ruxton, G. D. (2019). Underestimation of Pearson's product moment correlation statistic. Oecologia, 189(1), 1–7. https://doi.org/10.1007/s00442-018-4233-0

Jang, M. K., Kim, S., Collins, E. G., Quinn, L. T., Park, C. G., & Ferrans, C. E. (2020). Enriching the quality of cross-cultural instrument development through cognitive interviewing: Implications for nursing research. *Jpn J Nurs Sci*, *17*(e12301), 1–10. https://doi.org/10.1111/jjns.12301

Kao, Y., Lien, Y., Chang, H., & Wang, S. (2016). Evidence for the indirect effects of perceived public stigma on

psychosocial outcomes: The mediating role of self-stigma. *Psychiatry Research*, *240*, 187–195. https://doi.org/10.1016/j.psychres.2016.04.030

Khilmi, D., Firdausi, A., Eka, M., Simbolon, M., Khadavi, M. R., Walton, E. P., & Ulfah, W. A. (2022). ACSI-28 Indonesian Version Validity and Reliability. *International Journal of Human Movemnet and Sport Sciences*, *10*(2), 309–315. https://doi.org/10.13189/saj.2022.100222

Klaczynski, P. A., Felmban, W. S., & Kole, J. (2020). Gender Intensification and Gender Generalization Biases in Pre-adolescents, Adolescents, and Emerging Adults. *British Journal of Developmental Psychology*. https://doi.org/10.1111/bjdp.12326

Levin, P. (2015). Ego States and Emotional Development in Adolescence. *Transactional Analysis Journal*, *45*(3), 228–237. https://doi.org/10.1177/0362153715599990

Mak, W. W. S., Ho, C. Y. Y., Wong, V. U. T., Law, R. W., & Chan, R. C. H. (2015). Cultural model of self-stigma among Chinese with substance use problems. *Drug and Alcohol Dependence*, *155*, 83–89. https://doi.org/10.1016/j.drugalcdep.2015.08.011

Matthews, S., Dwyer, R., & Snoek, A. (2017). Stigma and Self-Stigma in Addiction. *Bioethical Inquiry*, *14*, 275–286. https://doi.org/10.1007/s11673-017-9784-y

Mubin, M. F, Rahayu, D.A, Hsieh, C.J, Basuki, R. The Experience of Families who Care for Relatives with Mental Disorders Post Arbitrary Coercion: A Qualitative Study. Jurnal Keperawatan Soedirman, [S.l.], v. 18, n. 2, p. 76-81, july 2023. ISSN 2579-9320. Available at: <https://jos.unsoed.ac.id/index.php/jks/article/view/8079>. Date accessed: 15 may 2024. doi: https://doi.org/10.20884/1.jks.2023.18.2.8079.

Pantelic, M., Boyes, M., Cluver, L., & Meinck, F. (2017). HIV, violence, blame and shame: Pathways of risk to internalized HIV stigma among South African adolescents living with HIV: Pathways. *Journal of the International AIDS Society*, *20*(1), 1–9. https://doi.org/10.7448/IAS.20.1.21771

Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: psychometric properties of a new measure. *Psychiatry Research*, *121*, 31–49. https://doi.org/10.1016/j.psychres.2003.08.008

Silke, C., Swords, L., & Heary, C. (2016). The Development of an Empirical Model of Mental Health Stigma in Adolescents. *Psychiatry Research*, *242*(2016), 262–270. https://doi.org/10.1016/j.psychres.2016.05.033

UNODC. (2018). *Excecutive Summary Conclusions and Policy Implications.*

Vally, Z., Cody, B. L., Albloshi, M. A., & Alsheraifi, S. N. M. (2018). Public stigma and attitudes toward psychological help-seeking in the United Arab Emirates: The mediational role of self-stigma. *Perspectives in Psychiatric Care*, *54*(4), 571–579. https://doi.org/10.1111/ppc.12282

Voisin, D., Brick, C., Vallée, B., & Pascual, A. (2019). Self and Identity When stereotype threat does not impair performance, self-affirmation can be harmful. *Self and Identity*, *18*(3), 331–348. https://doi.org/10.1080/15298868.2018.1454339

Yu, B. C. L., Chio, F. H. N., Mak, W. W. S., Corrigan, P. W., & Chan, K. K. Y. (2021). Internalization process of stigma of people with mental illness across cultures: A meta-analytic structural equation modeling approach. *Clinical Psychology Review*, *87*(March), 102029. https://doi.org/10.1016/j.cpr.2021.102029

WHO. (2020). *Process of translation and adaptation of instruments.* Retrieved February 27, 2020, from https://www.who.int/substance_abuse/research_tools/translation/en/