

Exploratory Factor Analysis for Indonesian Version of PID-5

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Personality Inventory for DSM-5 (PID-5) is an instrument aimed for measuring pathological personality trait based on DSM-5's Personality Disorders model which contains five pathological personality domains and divided into 25 pathological personality facets. The form of this instrument is a self-report consisting 220 items. The development of Indonesian Version of PID-5 is considered important because the existence of this instrument will assist the clinicians to identify the personality disorders based on DSM-5. This study performs the exploratory factor analysis (EFA) technique for all PID-5 facets to test the construct validity and to acknowledge the structure of factor in this Indonesian version of PID-5. This test was carried out by involving samples from 245 normal individual population (male = 88, female = 157) with an average of 23.31 years old. The result of EFA test showed that the amount of factors generated by the Indonesian version of PID-5 facets were six factors, which differs from the amount of factors generated by the original version of PID-5. This finding has similarities with other studies about personality instruments using the basic theory of Big-5 in Asia.

Keywords: PID-5, DSM-5, personality disorders, exploratory factor analysis (EFA)

Personality Inventory for DSM-5 (PID-5) merupakan alat ukur yang ditujukan untuk mengukur *personality trait* patologis berdasarkan model *Personality Disorders* DSM-5, yaitu dalam model ini terdapat lima *domain personality* patologis yang membawahkan 25 *facet personality* patologis. Alat ukur ini berupa *self-report* yang terdiri atas 220 butir. Pengembangan PID-5 di Indonesia menjadi penting karena adanya alat ukur ini akan membantu para praktisi kesehatan jiwa dalam mengidentifikasi gangguan kepribadian berdasarkan model *Personality Disorders* DSM-5. Penelitian ini bertujuan untuk mengetahui validitas konstruk dari PID-5 dalam Bahasa Indonesia. Pengujian validitas konstruk dilakukan dengan analisis faktor berdasarkan teknik *Exploratory Factor Analysis* (EFA). Sampel dalam penelitian ini terdiri atas 245 individu (laki-laki = 88, perempuan = 157), dengan rata-rata usia 23.31 tahun. Hasil pengujian menunjukkan bahwa PID-5 dalam Bahasa Indonesia terdiri atas enam faktor. Terdapat perbedaan jumlah faktor antara PID-5 dalam Bahasa Indonesia dan versi aslinya. Temuan ini memiliki kesamaan dengan penelitian tentang alat ukur kepribadian lain yang menggunakan dasar teori *Big-5* di Asia.

Kata kunci: PID-5, DSM-5, gangguan kepribadian, *exploratory factor analysis* (EFA)

In 2013, American Psychiatric Association (APA) officially published Diagnostic and Statistical Manual of Mental Disorder – Fifth Edition (DSM-5), a revised version of DSM-IV-TR. The major transition in DSM-5 is the approach for mental disorder, which shifted from categorical approach to dimensional approach. One of the mental disorder classification modified are the Personality Disorders, which is still categorized in Section III (Emerging Measures and Models) because APA Board of Trustees had rejected it as an official

diagnostic criteria. They concluded it still needs more research before considered as an official model in DSM-5 (Hopwood et al., 2013).

The dimensional approach of personality disorder indicates personality functioning would be evaluated on a continuous dimension (Strickland, Drislane, Lucy, Krueger, & Patrick, 2013). In order to be diagnosed with Personality Disorders, two criterions must be met: impairments of personality functioning and presence of pathological personality trait. Impairments of personality functioning involves impairments in self and interpersonal. This impairments can be assessed using Level of Personality Functioning Scale. Pathological

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personality trait has five domains consisting multiple facets. The domains are negative affectivity, detachment, antagonism, disinhibition, and psychoticism (American Psychiatric Association, 2013).

Meanwhile, the number of mental disorders in Indonesia is known to be increasing, although there is no specific data about the prevalence of personality disorders (Kementerian Kesehatan Republik Indonesia, 2013). Nevertheless, the assessment of personality disorder is not accompanied by the use of adequate diagnostic tool, because only a small number of personality instruments are currently available in Indonesia (Halim, July 18, 2014, personal communication). Therefore, the need of an instrument that specifically identify the personality disorder in Indonesia is considered important for clinicians and for future studies.

In Indonesia, there are several personality instruments, one of them is NEO-PI-R, which is a personality instrument and was developed based on Big-5 theory (Halim, Derksen, & van der Staak, 2004). This instrument is able to predict the possibility of personality disorder occurrence, but the use of this instrument is more appropriate to measure normal personality. Furthermore, MMPI-2 is able to measure personality disorder using PSY-5 scale (Nastasya, 2004), but PSY-5 scale only assess pathological personality in general. Another personality instrument is Skala Kepribadian UGM, which is able to identify several mental disorders (Utami, 2001). Nevertheless this instrument does not measure personality disorders based on the new model in DSM-5, which measure personality disorders in five dimensions.

Personality Inventory for DSM-5 (PID-5) is a new instrument and developed based on DSM-5 model for personality disorders that aim to assist clinical psychologists in diagnosing patients. PID-5 was also developed to support research related to personality disorders (Watson, Stasik, Ro, & Clark, 2013). PID-5 was developed based on Five Factor Model (FFM) theory of McCrae and Costa. FFM theory posits that personality consist of five main factor, while PID-5 focus on pathological factors of those five personality factors. Therefore, PID-5 has five main factors of pathological personalities (Krueger, Derringer, Markon, Watson, & Skodol, 2012; Samuel, Hopwood, Krueger, Thomas, & Ruggero, 2013; American Psychiatric Association, 2013).

Negative affectivity (versus neuroticism). Frequent and intensive experiences of high levels of a wide range of negative emotions (e.g., anxiety, depression, guilt/shame, worry, anger) with their behavioral (e.g., self-harm) and interpersonal (e.g., dependency) manifestations.

Detachment (versus extraversion). Avoidance of socio-emotional experience, including both withdrawal

from interpersonal interactions (ranging from casual, daily interactions to friendships to intimate relationships) with restricted affective experience and expression, particularly limited hedonic capacity.

Antagonism (versus agreeableness). Behaviors that put the individual at odds with other people, including an exaggerated sense of self-importance and a concomitant expectation of special treatment, as well as a callous antipathy toward others, encompassing both an unawareness of others' needs and feelings and a readiness to use others in the service of self-enhancement.

Disinhibition (versus conscientiousness). Orientation toward immediate gratification, leading to impulsive behavior driven by current thoughts, feelings, and external stimuli, without regard for past learning or consideration of future consequences.

Domain psychoticism (versus openness to experience). Exhibiting a wide range of culturally incongruent odd, eccentric, or unusual behaviors and cognitions, including both process (e.g., perception, dissociation) and content (e.g., beliefs).

Each domain in DSM-5 Model for Personality Disorders has multiple facets (American Psychiatric Association, 2013), as following (see Table 1).

In accordance with the development of DSM-5 model for personality disorders, PID-5 adaptation to Indonesian version is considered an utmost importance because PID-5 is the only instrument that assess pathological personality comprehensively based on DSM-5 model for personality disorders (Anderson, et al. 2013). The Indonesian version of PID-5 is a great support for Indonesian clinicians in updating their knowledge to the latest development of the personality disorder model. Hence, they also establish the proper diagnostic approach for it.

This study aims at testing the validity of construct using factor analysis, the technique used for factor analysis was EFA, due to the capability of it to discover patterns of correlation coefficient that suggest the existence of underlying psychological constructs (Cohen & Swerdlik, 2005). Therefore, this study can acknowledge the factors underlying 25 facets in Indonesian Version of PID-5. Besides, this study is able to be the base of other studies, especially studies with CFA technique.

Method

Participants

The research participants consisted of 245 students of Atma Jaya Catholic University of Indonesia and

Table 1
Personality Disorders DSM-5's Model Facets and Domains

Facet	Domain
Emotional lability	
Anxiousness	
Separation insecurity	Negative Affectivity
Submissiveness	
Perseveration	
Hostility	Negative Affectivity/ Antagonism
Depressivity	
Suspiciousness	Negative Affectivity/ Detachment
Restricted affectivity (lack of)	
Withdrawal	
Intimacy avoidance	Detachment
Anhedonia	
Manipulativeness	
Deceitfulness	
Grandiosity	Antagonism
Attention seeking	
Callousness	
Irresponsibility	
Impulsivity	
Distractibility	Disinhibition
Risk taking	
Rigid perfectionism (lack of)	
Unusual beliefs and experiences	
Eccentricity	Psychoticism
Cognitive and perceptual dysregulation	

Note. Source: American Psychiatric Association, 2013, page 779

people in the workforce which were chosen using convenience sampling technique. The minimum age and education level for participants were 18 years of age and junior high-school respectively. With this education level, it was expected that the participants understand some difficult items in PID-5. This provision is based on the research of the Original Version of PID-5 construction (Krueger et al., 2012). The majority of the participants were female (64.1%). The average age was 23.31 years of age ($SD = 6.62$) and the majority of education level were senior high-school (65.7%).

Procedures

Data acquisitions were administered by using the PID-5 to the participants in two ways, individual and classical, with the presence of the tester. These procedures was based on previous research using the PID-5 (De Fruyt et al., 2013). The participation were voluntary by

filling the informed consent sheet. The data collected from the administration were then analysed with the EFA using SPSS version 17.0.

Measures

The measurement instrument used in this study was the Indonesian version of PID-5, translated from its original English version. Translation was conducted in two phases, forward translation (FT) and backward translation (BT) by two different translators. The PID-5 measures five pathological personality domain and 25 facet branching-down from the five domains. The instrument consists of 220 items of statement to be responded with four optional answers ranging from "Very false or often False" to "Very true or Often true". The participants were required to fit-in each statement to him/her-self by choosing one of the four optional answers. The answers were scored between 0 to 3. The following are example of PID-5 items (see Table 2).

Analyses

There were two assumptions in EFA used in this analysis which were tested for their validity. The assumptions were sufficient sample quantity and there is no closed-correlation between facets. The validity was measured by sampling adequacy KMO index (minimum of .5) and by Bartlett's test of significancy (significant at LOS .005) (Fields, 2009). After both assumptions were met, the next steps were determining the number of factor to be extracted and to be rotated. Extraction was conducted based on eigenvalue score (> 1.0), whereas the rotation technique used was orthogonal with varimax method. The EFA technique used was principal component analysis.

Results

Reliability testing on 25 facet PID-5 shows Cronbach's Alpha coefficient of .77 (.55 - .94), whereas reliability testing on the five domain shows Cronbach's Alpha coefficient of .77 (.63 - .82). Based on this finding at both level, facet and domain, it is generally concluded that the Indonesian PID-5 is reliable (Nunnally, 1978).

Test results on both EFA assumptions showed their validity where KMO score is .885 and Bartlett's test shows significant score ($sig < .05$). The EFA results on Indonesian PID-5 is shown on Table 3.

Based on Table 3, the Indonesian PID-5 has six factors. The first consists of hostility, emotional lability,

Table 2
Example of PID-5 Items

Facet	Item
Hostility	32. <i>Saya bisa menjadi kejam ketika dibutuhkan</i> (I can be cruel if necessary)
Emotional Lability	102. <i>Saya orang yang sangat emosional</i> (I am a very emotional person)
Anxiousness	79. <i>Saya sangat khawatir dengan hal-hal buruk yang mungkin terjadi</i> (I am very anxious with the bad things that can happen)
Separation Insecurity	50. <i>Saya sangat khawatir ketika sendirian</i> (I am very anxious when I am alone)
Submissiveness	15. <i>Saya biasanya melakukan hal-hal yang orang lain pikir sebaiknya saya lakukan</i> (I usually do things that other people think I should do)
Perseveration	60. <i>Saya tetap menggunakan pendekatan yang sama meskipun hal itu tidak berhasil</i> (I continue to use the same approach even though it does not work)
Depressivity	27. <i>Saya sering merasa bahwa tidak ada tindakan saya yang sungguh berarti</i> (I often feel that nothing I do is truly meaningful)
Suspiciousness	103. <i>Orang lain akan memanfaatkan saya jika mereka bisa</i> (Other people will make use of me if they can)
Restricted Affectivity	45. <i>Saya memiliki reaksi emosional yang tidak bertahan lama terhadap suatu hal</i> (I do not have a long-lasting emotional reaction towards something)
Withdrawal	10. <i>Saya lebih suka untuk tidak terlalu dekat dengan orang lain</i> (I prefer not to be too close with others)
Intimacy Avoidance	89. <i>Saya lebih suka menjauhkan romantisme dari kehidupan saya</i> (I prefer to distance romance away from my life)
Anhedonia	23. <i>Sepertinya tidak ada yang dapat membuat saya sangat tertarik</i> (It seems that nothing can make me feel very interested)
Manipulativeness	107. <i>Saya piawai membuat orang melakukan apa yang saya mau</i> (I am talented in making people do what I want)
Deceitfulness	41. <i>Saya mengarang cerita mengenai suatu kejadian yang sama sekali tidak benar</i> (I make up stories about events that are completely not true)
Grandiosity	40. <i>Sejujurnya, saya benar-benar lebih penting dari orang lain</i> (Frankly, I am really more important than others)
Attention Seeking	14. <i>Saya melakukan berbagai hal untuk memastikan orang lain menyadari saya ada</i> (I do a lot of things to ensure that others realize that I exist)
Callousness	11. <i>Saya sering terlibat dalam perkelahian fisik</i> (I am often involved in physical fights)
Irresponsibility	31. <i>Orang lain melihat saya sebagai seseorang yang tidak bertanggung jawab</i> (Other people see me as irresponsible)
Impulsivity	17. <i>Meskipun saya tahu lebih baik, saya tetap mengambil keputusan secara gegabah</i> (Even though I know better, I still make decisions recklessly)
Distractibility	29. <i>Saya tidak dapat berkonsentrasi dalam apapun</i> (I cannot concentrate on anything)
Risk Taking	35. <i>Saya menghindari berbagai olah raga dan aktivitas yang berisiko</i> (I avoid various risky sports and activities)
Rigid Perfectionism	49. <i>Menurut orang lain, saya terlalu berfokus pada detail-detail yang kecil</i> (According to others, I am too focused on small details)
Unusual Beliefs and Experiences	99. <i>Saya terkadang mendengar hal-hal yang tidak bisa didengar oleh orang lain</i> (I sometimes hear things that others cannot hear)
Eccentricity	24. <i>Orang lain sepertinya berpikir bahwa tingkah laku saya aneh</i> (Others seem to think that my behavior is weird)
Perceptual Dysregulation	44. <i>Ini aneh, namun terkadang benda-benda biasa terlihat berbeda dari bentuk sebenarnya</i> (This is weird, but at times regular objects look different from its real shape)

anxiousness, separation insecurity, perseveration, depressivity, suspiciousness, and distractibility facet. The second consists of manipulativeness, deceitfulness, grandiosity, attention seeking, and callousness facet.

The third consists of restricted affectivity, withdrawal, intimacy avoidance, and anhedonia facet. The fourth consists of risk taking, unusual beliefs and experiences, eccentricity, and perceptual dysregulation facet. The

Table 3
Factor Structure of Facet of Indonesian PID-5

Facet	1	2	3	4	5	6
<i>Manipulativeness</i>	.090	.779	.095	.232	.067	.116
<i>Deceitfulness</i>	.133	.730	.248	.066	.377	.059
<i>Grandiosity</i>	.048	.792	.033	.159	-.271	-.010
<i>Attention Seeking</i>	.221	.750	-.122	.032	-.049	.283
<i>Callousness</i>	.332	.533	.396	.284	.246	-.229
<i>Hostility</i>	.773	.275	.142	.153	-.028	-.125
<i>Emotional Lability</i>	.854	.080	-.000	.203	.011	.086
<i>Anxiousness</i>	.763	.057	.156	-.115	-.079	.213
<i>Separation Insecurity</i>	.498	.349	-.127	-.007	.046	.258
<i>Submissiveness</i>	.109	.117	.037	-.022	-.012	.826
<i>Perseveration</i>	.484	.216	.349	.301	.021	.418
<i>Depressivity</i>	.587	-.033	.456	.131	.269	.182
<i>Suspiciousness</i>	.479	.327	.397	.048	.076	-.023
<i>Restricted Affectivity</i>	-.089	.087	.713	.093	-.280	.215
<i>Withdrawal</i>	.333	.031	.712	.016	-.042	-.135
<i>Intimacy Avoidance</i>	.026	.023	.702	.058	.090	.059
<i>Anhedonia</i>	.516	-.021	.517	-.024	.310	.046
<i>Irresponsibility</i>	.331	.290	.225	.232	.514	.273
<i>Impulsivity</i>	.292	.160	.044	.305	.581	.377
<i>Distractibility</i>	.545	.162	.178	.053	.371	.486
<i>Risk Taking</i>	-.073	.114	-.090	.840	.077	.042
<i>Rigid Perfectionism</i>	.279	.209	.211	.098	-.739	.231
<i>Unusual Beliefs & Experiences</i>	.226	.293	.378	.583	-.066	-.088
<i>Eccentricity</i>	.375	.238	.428	.523	.146	.050
<i>Perceptual Dysregulation</i>	.442	.329	.411	.461	.028	.101

Notes. Bold numbers are significant factor loading (> .4). Bold and underlined numbers are the highest factor loading.

fifth consists of irresponsibility, impulsivity and rigid perfectionism facet. The sixth consists of only one facet that is submissiveness. Referring to the facets inside each factor as shown in Table 3, the factors represent construct negative affectivity, antagonism, detachment, psychoticism, and disinhibition respectively. The sixth factor which consist of only one facet then therefore represents construct submissiveness.

In addition, the findings show that there are three facets which aren't under the proper factors. First, the distractibility facet comes from disinhibition domain, but EFA results show it under the negative affectivity factor. Second, the risk taking facet comes from disinhibition domain, and the EFA results show it under the psychoticism factor. Third, the submissiveness facet comes from negative affectivity domain, and the EFA results show it creating one factor in-group with perseveration and distractibility facet. But perseveration and distractibility then grouped under

the negative affectivity factor for both facet have the highest factor loading in the factor. Therefore, the submissiveness facet was then decided as single facet in the sixth factor.

The research also found the existence of some facets that have high factor loading in more than one factor such as perseveration (in submissiveness factor), depressivity (in detachment factor), anhedonia (in negative affectivity factor), distractibility (in submissiveness factor), eccentricity (in detachment factor), and perceptual dysregulation (in negative affectivity and detachment factor). This shows the existence of common factor for the six facets with facets in the other factors.

Discussion

Construct validity test using EFA shows that 25 facets in PID-5 were arranged in six solution factors.

Based on the composition of factors and their facets, there is no significant difference between the facets and factors in the Indonesian PID-5 on one side and, on the other side, the Personality Disorders DSM-5 model. Also, in general, factor structure from the Indonesia PID-5 is equivalent with that of the EFA on the original PID-5 (De Fruyt et al., 2013).

There are three facets under inappropriate factor. Distractibility facet was found under one factor with facets from negative affectivity domain. This is similar to findings in other research (Thomas et al., 2013). In this facet some items have similar nuances to the item under the domain of negative affectivity. For example, the item number 47 from distractibility facet which states "I am not good at making plan into the future", has nuances similar to item number 95 from the domain of negative affectivity which states "I am becoming very nervous when thinking about the future". The similarity of the two items were shown in their nuances about difficulties relating to the future events. It is concluded that distractibility does not only have disinhibition content, but also has negative affectivity content.

The finding shows that the risk-taking facet share some common factors with the facets from the psychoticism domain, which was also found in another research (De Fruyt et al., 2013). In this facet, the existence of some items with nuances similar to that of the items under the psychoticism domain. For example, item number 3 from risk-taking facet which states "People describe me as a person of no fear", has similar nuance to that of item number 25 from psychoticism domain which states "People tell me that I think in strange way". The similarity between the two items is shown in the nuance of the way of thinking that is not common. In addition, to take risky action, people need to have uncommon way of thinking.

This study found that submissiveness facet is the only facet in the sixth factor, despite that in this factor there are actually two other facets, perseverance and distractibility. It happened because these two facets has been included to another factor. This submissiveness factor structure is similar to the findings in research conducted by De Fruyt et al. (2013), where submissiveness is separated from negative affectivity factor, and has a common factor with perseverance.

Furthermore, it also found significant and high, but negative factor loading in the rigid perfectionism facet. Theoretically, rigid perfectionism is more related to domain conscientiousness from FFM, a tendency to look perfect (Feist, J. & Feist, G.J., 2009). As previously discussed, conscientiousness domain is the negation of disinhibition

Table 4
Domain-Facet Model of the Indonesian PID-5

Facet	Domain
Emotional lability	
Anxiousness	
Separation insecurity	
Perseveration	
Hostility	Negative Affectivity
Depressivity	
Suspiciousness	
Distractibility	
Manipulativeness	
Deceitfulness	
Grandiosity	Antagonism
Attention seeking	
Callousness	
Withdrawal	
Intimacy avoidance	
Anhedonia	Detachment
Restricted affectivity	
Irresponsibility	
Impulsivity	Disinhibition
Rigid perfectionism	
Unusual beliefs and experiences	
Eccentricity	
Perceptual dysregulation	Psychoticism
Risk taking	
Submissiveness	Submissiveness

domain from PID-5. This is reiterated by finding by De Fruyt et al. (2013), where rigid perfectionism has negative factor loading against factor disinhibition. When conducting EFA at the same time with NEO-PI-3, it was found that factor loading from rigid perfectionism facet and conscientiousness domain are similarly negative with relatively high scores (- .63 and - .95).

In the original PID-5, there are some facets under two domains, such as hostility (under negative affectivity and antagonism domain), depressivity, suspiciousness, and restricted affectivity (under negative affectivity and detachment domain). EFA result to Indonesian PID-5 shows that hostility facet is under negative affectivity factor, whereas restricted affectivity facet is under detachment factor. It also shows that depressivity and suspiciousness facet have high factor loading in negative affectivity and detachment factor. This is in accordance with the domain-trait model in Personality Disorder DSM-5 (American Psychiatric Association, 2013). But based on result of the highest factor loading, it can be concluded that these two facets are more appropriate under the negative affectivity factor. In the Indonesian Version of PID-5, the 25 existing facets can be explained

with the six factors. The following is the domain-facet model of the Indonesian PID-5 (see Table 4).

There is a difference in amount of factors between Indonesian Version of PID-5 and Original Version of PID-5. The result from the Original Version of PID-5 research shows that EFA generates five factors solution, both in clinical population (Quilty, Ayearst, Chmielewski, Pollock, & Bagby, 2013) and normal population (De Fruyt et al., 2013). It shows that the six factors finding in Indonesian Version of PID-5 may be influenced by cultural factors and becomes to be the unique characteristic of Indonesian Version of PID-5 itself.

The finding of six factors of personality is also shown in the analysis of a personality measure developed in Chinese culture. Cheung, van de Vijver, and Leong (2011) explained their finding for the factor analysis of two personality instruments, CPAI (Cross-Cultural (Chinese) Personality Assessment Inventory, a personality instrument which is developed based on Chinese culture) and NEO-PI-R. The factor analysis showed that there were six factor solution, and an additional factor was named as Interpersonal Relatedness. The factor contained several subfactors which measured predisposition to have a certain attitude toward their environment, such as attitude toward beliefs, family value, cultural norm, interpersonal relationship, and sensitivity to other people (Cross-cultural (Chinese) Personality Assessment Inventory, 2014).

Submissiveness and interpersonal relatedness factor are two different entities. Submissiveness factor describes a pathological personality, that is the tendency to adapts one's behavior even when doing so contradicts one's own interests, needs, or desires (American Psychiatric Association, 2013), and interpersonal relatedness describes a normal personality. Nevertheless, both factors have similarities as it relates to the attitude of people that are influenced by their environment. Moreover, submissiveness is likely to be a personality aspect of Indonesians. There is a "harmony" ethic in Indonesians, where people tend to be more relatively compromising or submissive when it comes to conflict resolution or interacting with others (Halim, Derksen, & van der Staak, in Setiadi, Supratiknya, Lonner, & Poortinga, 2004). This will then explain the reason why submissiveness is separated from other facets. Therefore, the sixth factor (submissiveness, in the context of pathological personality) may reflect the uniqueness of personality of people in Asian culture, especially Indonesia.

Limitations

This study has shortcoming in sampling, where the sample is originally from normal population. This

potentially limits the range of pathological personality dimension, and hence tends to result in low variability. In addition, participants from normal population in contrast to clinical population, may have different interpretation in specific *items*. This is shown from the high scores found in some participants on *facet* from *domain psychoticism*.

Conclusions and Recommendations

Based on the psychometry analysis and testing, it can be concluded that the Indonesian PID-5 is valid in measuring construct. This measuring instrument is valid on the basis of factor analysis method using *exploratory factor analysis* (EFA) technique. Therefore, the Indonesian PID-5 is potentially capable to be used as supporting diagnostic tool for clinicians.

For further studies, it is recommended to focus on the diagnostic utility of the Indonesian PID-5. Diagnostic utility is a psychometric component intended to examine the instrument's ability to differentiate diagnostic groups and to classify the type of mental disorder from the individuals (Canivez & Gaboury, 2013) aspect of a personality instrument specifically in clinical psychology. Testing a measurement tool would provide a support for clinicians in establishing diagnosis. In addition, the Indonesian PID-5 should be further tested to improve its validity, especially using a factor analysis with CFA technique, and reliability in order to benefit the users.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorder* (5th ed.). Washington DC: Authors.
- Anderson, J. L., Sellbom, M., Bagby, R. M., Quilty, L. C., Veltri, C. O. C., Markon, K. E., & Krueger, R. F. (2013). On the convergence between PSY-5 domains and PID-5 domains and facets: Implications for assessment of DSM-5 personality traits. *Assessment*, 20(3), 286-294.
- Canivez, G. L., & Gaboury, A. R. (2013). Construct validity and diagnostic utility of the cognitive assessment system for ADHD. *Journal of Attention Disorders*, XX(X), 1-11.
- Cheung, F. M., van de Vijver, F. J. R., & Leong, F. T. L. (2011). Toward a new approach to the study of personality in culture. *American Psychological Association*, 66(7), 593-603.
- Cohen, R. J., & Swerdlik, M. E. (2005). *Psychological testing and assessment: An introduction to tests and*

- measurement* (6th ed). New York: McGraw-Hill International Edition.
- Cross-cultural (Chinese) Personality Assessment Inventory. (2014). *CPAI scale names*. Retrieved from <http://ww2.psy.cuhk.edu.hk/~cpaiweb/English/CPAIversions.html>
- De Fruyt, F., Clercq, B. D., Bolle, M. D., Wille, B., Markon, K., Krueger, R. F. (2013). General and maladaptive traits in a five-factor framework for DSM-5 in a university student sample. *Assessment, 20*(3), 295-307.
- Feist, J., & Feist, G. J. (2009). *Theories of personality* (7th ed). New York: McGraw-Hill International Edition.
- Fields, A. (2009). *Discovering statistics using SPSS* (3rd ed). London: SAGE Publications Ltd.
- Halim, M. S., Derksen, J. J. L., & van der Staak, C. P. F. (2004). Development of the Revised NEO Personality Inventory for Indonesia: A preliminary study. In B. N. Setiadi, A. Supratiknya, W. J. Lonner, & Y. H. Poortinga (Eds.), *Ongoing themes in psychology and culture*. Melbourne, FL: International Association for Cross-Cultural Psychology.
- Hopwood, C. J., Wright, A. G. C., Krueger, R. F., Schade, N., Markon, K. E., & Morey, L. C. (2013). DSM-5 pathological personality traits and the personality assessment inventory. *Assessment, 20*(3), 269-285.
- Kementerian Kesehatan Republik Indonesia. (2013). *Penyajian pokok-pokok hasil riset kesehatan dasar 2013*. Retrieved from <http://labdata.litbang.depkes.go.id/>
- Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., Skodol, A. E. (2012). Initial construction of maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine, 42*, 1879-1890.
- Nastasya, P. (2004). *Adaptasi MMPI-2 untuk Aplikasi Indonesia: Analisis Psikometrik Personality Psychopathology Five Scales* (Unpublished mini-thesis). Universitas Katolik Indonesia Atma Jaya, Jakarta.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed). New York: McGraw-Hill, Inc.
- Quilty, L. C., Ayearst, L., Chmielewski, M., Pollock, B. G., & Bagby, R. M. (2013). Psychometric properties of the Personality Inventory for DSM-5 in an APA DSM-5 field trial sample. *Assessment, 20*(3), 362-369.
- Samuel, D. B., Hopwood, C. J., Krueger, R. F., Thomas, K. M., & Ruggero, C. J. (2013). Comparing methods for scoring personality disorder types using maladaptive traits in DSM-5. *Assessment, 20*(3), 353-361.
- Strickland, C. M., Drislane, L. E., Lucy, M., Krueger, R. F., & Patrick, C. J. (2013). Characterizing psychopathy using DSM-5 personality traits. *Assessment, 20*(3), 327-338.
- Thomas, K. M., Yalch, M. M., Krueger, R. F., Wright, A. G. C., Markon, K. E., & Hopwood, C. J. (2013). The convergent structure of DSM-5 personality trait facets and five-factor model trait domains. *Assessment, 20*(3), 308-311.
- Utami, M. S. (2001). *Skala kepribadian UGM: Alat diagnosis gangguan psikologis masyarakat Indonesia*. Laporan penelitian hibah bersaing VII/4 perguruan tinggi. Yogyakarta: Lembaga Penelitian Universitas Gadjah Mada.
- Watson, D., Stasik, S. M., Ro, E., Clark, L. A. (2013). Integrating normal and pathological personality: Relating the DSM-5 trait-dimensional model to general traits of personality. *Assessment, 20*(3), 312-326.