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Validation of Indonesian Version of Offence-Related Feelings of Guilt and Shame: A Rasch Model Analysis

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Abstract

This study aims to conduct an adaptation and validation of the Offence-Related Feelings of Shame and Guilt Scale (ORSGS) in the Indonesian language. ORGS was translated into the Indonesian language using a forward translation method by a bilingual psychology expert. Five hundred ten male prisoners from three correctional institutions in Indonesia were recruited and completed the Indonesian version of ORSGS in paper-and-pencil. A Rasch model approach was applied to evaluate the psychometric properties and validity of the adapted scale. The results showed that the Indonesian version of ORSGS had moderate Cronbach's Alpha reliability ($\alpha = .65$) and excellent item reliability (.99). Item logit ranged from -1.08 to .72 with a separation value of 8.79, showing that items were grouped into 12 groups. The unidimensionality was found as acceptable/ moderate by 30.4% total variance explained from Principal Component Analysis but still needs further confirmatory analysis. Item 1 and 2 were found to be misfit and need to be evaluated. According to the Rasch model result, it can be concluded that the Indonesian version of ORSGS was valid (10 out of 12 items were fit) and reliable (Item reliability: .99) to be used in the prisoner population. However, further investigation about its multidimensionality and criterion validity still needs to be conducted

Keywords: correctional institution, incarcerated person, inmates, Rasch model, shame and guilt

Abstrak

Penelitian ini bertujuan untuk melakukan adaptasi dan validasi Offence-Related Feelings of Shame and Guilt Scale (ORSGS) dalam bahasa Indonesia. ORGS diterjemahkan ke dalam bahasa Indonesia menggunakan metode forward translation oleh pakar psikologi bilingual. Sebanyak 510 narapidana laki-laki dari tiga lembaga pemasyarakatan di Indonesia direkrut dan menyelesaikan ORSGS versi bahasa Indonesia dalam bentuk kertas dan pensil. Pendekatan model Rasch diterapkan untuk mengevaluasi psikometris dan validitas skala yang disesuaikan. Hasil penelitian menunjukkan bahwa ORSGS versi bahasa Indonesia memiliki reliabilitas Cronbach's Alpha sedang ($\alpha = .65$) dan reliabilitas butir sangat baik (.99). Logit item berkisar antara -1.08 sampai dengan 0.72 dengan nilai separasi 8.79, menunjukkan bahwa item dikelompokkan menjadi 12 kelompok. Asumsi unidimensionalitas diterima dengan 30.4% total varians dijelaskan dari Analisis Komponen Utama, tetapi masih membutuhkan analisis konfirmasi lebih lanjut. Butir 1 dan 2 ditemukan tidak sesuai dan perlu dievaluasi. Berdasarkan hasil model Rasch, dapat disimpulkan bahwa ORSGS versi bahasa Indonesia valid (10 dari 12 item fit) dan reliabel (reliabilitas item: .99) untuk digunakan pada populasi narapidana. Namun, penyelidikan tentang multidimensi dan validitas kriterianya masih perlu dilakukan.

Kata kunci: lembaga pemasyarakatan, narapidana, model Rasch, rasa malu dan bersalah

Introduction

Feelings of shame and guilt experienced by prisoners have long been studied in the forensic field. Both of these feelings were initially one of the moral feelings whose function was to support the rehabilitation process, especially in the prevention of re-crime or recidivism behavior. These two feelings were also used interchangeably at first, but later studies proved to have different meanings and definitions. Feelings of shame with internal problems include depression and reports of low self-esteem, and those with external problems include hostility, aggression, and anti-social issues (Leach, 2017). Moreover, feelings of shame become an obstacle to immoral behavior and predict recidivism behavior that occurs in a person (Tangney et al., 2011b). The tendency that arises when someone feels embarrassed is associated with avoiding responsibility, blaming someone, being unable to manage emotions, and arising aggressive behavior (Tangney et al., 2011). Meanwhile, guilt is a response that arises when someone has committed an offense to another person and is a way for someone to seek forgiveness and improve relationships with other people (Riek et al., 2014). Guilt towards someone will encourage them to behave differently from before and regret and try to reflect on what they have done to others (Tangney et al., 2011). A person who made a mistake will feel that he has hurt someone else and will try not to do the same.

Recent studies of shame and guilt showed the different effects of these two feelings on prisoners' behavior. One of the bases used in distinguishing between shame and guilt is the type of situation that gives rise to the emotions that a person feels (Tracy & Robins, 2006). Feelings of shame tend to encourage criminals to avoid confession and to blame others. Conversely, guilt supports criminals in admitting mistakes and facilitates the rehabilitation process, and increases the involvement of individuals in therapeutic activities (Sturgess et al., 2016). Feelings of shame and guilt are emotions that have relevance to criminology and the rehabilitation process (Tangney et al., 2011). These two feelings are self-conscious emotions that arise due to failure but have different objects of evaluation. Self-shame involves more self-injurious sentences such as "I am a very bad person", and guilt focuses on specific behaviors such as "I have done something bad to someone" (Tangney et al., 2014).

Research on feelings of shame and guilt has been developing, including those explaining that feelings of shame and guilt predict someone committing recidivism to assisted residents (Tangney et al., 2014). A person with feelings of shame and guilt tends to repeat his previous behavior. Longitudinal research explains that feelings of shame and guilt can predict risky and illegal behavior by young people, such as watching pornographic videos, consuming illegal drugs, and exhibiting aggressive behavior in social settings and at school (Stuewig et al., 2015).

Despite the theoretical framework that explained the distinction between shame and guilt, there was still a debate on the confirmation of the theory. Few empirical studies failed to confirm the distinction (Harris, 2003; Xuereb et al., 2009). The first study generated items measuring shame, guilt, and denial using the Delphi method and found that the three-factors model was unfit based on the Confirmatory Factor Analysis (CFA) (Xuereb et al., 2009). The second study found no distinction between shame and guilt using CFA among non-prisoners samples of drunk drivers, with many of them having problems related to substance abuse (Harris, 2003). Moreover, correlational studies examining the effect of shame and guilt led to a different conclusion, indicating that both concepts are not represented equally in many measurements (Tangney et al., 2011; Tangney et al., 2014). In addition, most studies used classical test theory to develop measurement and data analysis which was less able to produce interval data and robust analysis.

Measuring instruments were used to measure shame and guilt, including TOSCA (Test of Self Conscious Affect) (Tangney et al., 1989), Personal Feeling Questionnaire-2 (Harder & Zalma, 2011), State Shame and Guilt Scale (SSGS) (Marschall et al., 1994), Crime-Related Shame and Guilt. (T Rubia, 2016), and Offence-Related Feelings of Shame and Guilt Scale (Wright & Gudjonsson, 2007). So far, however, there is limited research on feelings of shame and guilt in Indonesia. One research on adolescents who experience delinquency tendencies used the TOSCA-3 measuring instrument to measure the level of shame and guilt. The results showed that feelings of shame and guilt could predict delinquent

behavior in adolescents (Garvin, 2019). For inmate subjects, a research using the Guilt and Shame Proneness (GASP) scale showed the Cronbach's alpha coefficient of .842 (Chairul, 2014). However, research that employs the Offence-Related Shame and Guilt Scale (ORSGS) measurement tool for prisoners has not been found in Indonesia. Offence-Related Shame and Guilt Scale (ORSGS) is needed to be adapted to understand more about moral feelings using specific measurements for offender population. Due to the limited studies on using ORSGS (Fuller et al., 2019; Kaya & Akan, 2020; Kovács et al., 2019), the need to evaluate this scale in another setting is more recommended. Thus, this study intends to fill the gap by evaluating ORSGS using the Rasch model in the Asian population, particularly the Indonesian offender population. Rasch modeling is considered powerful for examining unidimensionality of the scale along with psychometric properties based on Item-Response Theory (IRT) which has not been found in the previous studies. Validation study of ORSGS among the Asian population will also bring novel findings to validate the theoretical concept behind ORSGS due to cultural difference between western and eastern populations. This study aims to conduct an adaptation and validation of Offence-Related Feelings of Shame and Guilt Scale (ORSGS) in the Indonesian offender population.

Methods

Subjects

This study comprised 510 prisoners from three correctional institutions in Indonesia. The sample of this study was part of another study focusing on the development of the resilience-based intervention in male correctional institutions. Thus, all subjects in this study were male. The subjects chosen mainly were those aged 25-34 years old (34%), came from Javanese ethnic (88%), had married (54%), have a secondary degree (68%), and were sentenced with more than three years of detention (66%), and involved in cases related to drugs crime (53%). Those subjects were recruited using convenience sampling with careful attention to the heterogeneity of the demographic background of the sample. Considering the specific setting used in this study (i.e., male correctional institution), there were no further inclusion and exclusion criteria of subjects applied. Prior to the participation, all subjects received information regarding the aim of the study, the benefits and risks of participation, and the responsibility of the researcher and participants then signed the informed consent form. Detail of demographic information is displayed in Table 1.

Measurement

Offence-Related Feelings of Shame and Guilt Scale (ORSGS) is a scale intended to measure feelings of shame and guilt in relation to a crime or offence done by an offender (Wright & Gudjonsson, 2007). ORSGS is constructed based on the theory that defines shame and guilt as distinct emotions. Although the validation study of the scale is still preliminary, the scale showed consistent results to previous studies stating that shame and guilt were two distinct emotions. The two subscales (shame subscale and guilt subscale) had adequate internal consistency (shame: Cronbach's $\alpha = .78$; guilt: Cronbach's $\alpha = .79$) and moderate test-retest reliability (shame ICC: $r = .60$, $p < .001$; guilt ICC $r = .60$, $p < .001$) (Wright & Gudjonsson, 2007).

In the preliminary result of the ORSGS development study, 12 items were obtained from exploratory factor analysis. Of 12 items, six items loaded into the guilt factor, five items loaded into the shame factor, and one item did not load substantially upon either factor. Two items were loaded unexpectedly into different factors. One item intended to be a guilt item loaded into the shame factor, and one reversed item intended to be a shame item loaded into the guilt factor. One of the two was recommended to be omitted in the further studies due to its weak item-total correlation within the factor. In this study, all 12 items were included to re-evaluate the scale's construct validity.

Table 1. Demographic Data of Subjects (N = 510)

Demographic information	n (%)
Educational level	
<i>Did not finish primary school</i>	33 (7%)
<i>Primary</i>	71 (14%)
<i>Secondary</i>	349 (68%)
<i>Tertiary</i>	57 (11%)
Marital status	
<i>Single</i>	148 (29%)
<i>Married</i>	277 (54%)
<i>Separated/ divorced</i>	85 (17%)
Age	
<i>18-24 years old</i>	118 (23%)
<i>25-34 years old</i>	191 (37%)
<i>35-44 years old</i>	125 (25%)
<i>45-54 years old</i>	52 (10%)
<i>>54 years old</i>	24 (5%)
Ethnicity	
<i>Javanese tribes</i>	448 (88%)
<i>Sulawesi tribes</i>	2 (1 %)
<i>Kalimantan tribes</i>	11 (2%)
<i>Sumatera tribes</i>	27 (5%)
<i>Others</i>	22 (4 %)
Case/ Crime	
<i>Drugs</i>	270 (53%)
<i>General criminal case</i>	226 (44%)
<i>Corruption</i>	14 (3%)
Sentence	
<i>Waiting for sentence</i>	22 (4%)
<i>3-12 months</i>	31 (6%)
<i>1-3 years</i>	120 (24%)
<i>>3 years</i>	336 (66%)
<i>Life sentence</i>	1 (<1%)

Sources: Personal data

The scale instructed the subjects to rate the items that describe some feelings they might feel after being apprehended for a crime. In the original version of ORSGS, responses were given on a seven-point Likert-type scale from 1 ('Not at all') to 7 ('Very much'). However, in this study, the responses were limited to the four-point Likert scale due to the low educational level of the majority of subjects and the difficulty of the subject in responding extensive range of responses. The score was reversed for the reversed item.

Procedures

The International Test Commission (ITC) Guideline in translating/adapting the test/scale (International Test Commission, 2016) was followed. Forward-translation design was mainly employed because it was more recommended when the researcher cannot conduct backward and forward translation. First, ORGS was forward-translated from English into the Indonesian language by a bilingual psychology expert. All authors checked the translated version, discussed, and made a consensus on conflicting translations. The Indonesian version of ORSGS was then administered to male prisoners from three correctional institutions in Indonesia after getting permission from the Ministry of Law and Human Rights in Indonesia. Before being administered to 510 prisoners, the translated scale was tried out on a small number of prisoners to check its readability of the scale.

This study adhered to the ethical principles stated in the Declaration of Helsinki. All subjects signed an informed consent form prior to their participation and after receiving complete information about the

study. There was no risk from participating in this study. All subjects received daily stuff as a reward for their participation.

The researcher's team came to each correctional institution involved in the study. With the help of the correctional institution staff, several prisoners were gathered at a meeting point inside the building and completed the scale, assisted by the researcher's team. The scale, along with demographic information, was administered in paper-and-pencil.

Data Analysis

All data were entered into Winsteps (Linacre, 2012) program as software to run the Rasch modeling. The Rasch modeling is based on George Rasch's mathematic modeling, transforming ordinal data into interval data with a logit unit (Bond & Fox, 2015). It is an application of modern test theory and can solve the problem of ordinal data gained from survey questionnaires and classical test theory (Boone et al., 2014). The basic assumptions of Rasch modeling are as follows: 1) each person has a certain ability, 2) each item has a certain difficulty/ facility, 3) the ability of the person and difficulty /facility of the item can be expressed by numbers along the line, 4) the probability of observing particular scored response can be computed based on the difference between the two numbers (Bond & Fox, 2015). With that assumption, the data derived from Rasch modeling will be independent of the raw score and not be influenced by the sample's characteristics (Boone et al., 2014). Another advantage of using Rasch modeling is the strict and more robust examination of unidimensionality (Bond & Fox, 2015).

In this study, several analyses based on Rasch modeling were applied to evaluate the reliability and validity of the Indonesian version of ORSGS. First, reliability analyses were applied, consisting of Cronbach's alpha reliability, item's reliability, and person's reliability. Second, logit value and separation value were examined for items. Third, principal component analysis was applied to evaluate the dimensionality of the scale. Fourth, the fitness of the item specifically was evaluated based on the following criteria: 1) *Infit MnSq* with a recommended value of $< \text{Mean} + \text{SD of Infit MnSq}$ (Sumintono & Widhiarso, 2013) and 2) the value of *Outfit MnSq* is between .4 and 1.6 (Bond & Fox, 2015). Other statistical indices will also be displayed.

Results and Discussion

Item Fitness

Table 2 shows the overall item-fit indices of ORSGS items. First, the *Infit MnSq* of items was evaluated. With the value of *Mean of Infit MnSq* and *SD*, the accepted range of *Infit MnSq* as an indicator of item fitness was 1.28. Based on this indicator, item 1 (*Infit MnSq* = 1.64) and 2 (*Infit MnSq* = 1.27) were found to be misfit.

The second evaluation was *Outfit MnSq*. Item 1 had an *Outfit MnSq* value of 1.74 (> 1.6), indicating misfit. These results suggest that item 1 and 2 needs to be evaluated. Results of the study showed that the Indonesian version of ORSGS had moderate Cronbach's Alpha reliability ($\alpha = .65$), poor person reliability (.59), and excellent item reliability (.99). These results indicate that the Indonesian version of the ORSGS can be used to measure the shame and guilt of prisoners in Indonesia. Another study utilizing this measuring tool was a research conducted on residents of the forensic psychiatry unit in the UK. It revealed no measure of criminal behavior or crime-related constructs to be included in the scale, so it is not clear how ORSGS relates to actual behavior. However, a later study reported that shame was associated with the difficulty of expressing anger, while guilt was related to the ability to control anger (Wright et al., 2008; Wright & Gudjonsson, 2007).

Despite having good internal reliability, Items 1 and 2 were found to be a misfit and need to be evaluated. An item misfit refers to a mismatch between the subject's observed and expected response patterns. The wrong response pattern can be caused by the subject's ability (too high or low) (Mousavi & Cui, 2020). Although more than half (68%) of the research subjects had a secondary level of education,

14% had a primary school level, and 7% of other respondents did not finish primary school. A study showed that education is positively related to an individual's ability to process information (Parisi et al., 2012). This is because individuals with a tertiary school level of education tend to have a longer time allocating their time to hone intellectual/cognitive activities and vice versa (Parisi et al., 2012).

Table 2. The Result of the ORSGS Fit Test

Item's Number	INFIT		OUTFIT		PT-MEA- SURE	Item's Fitness
	MNSQ	ZSTD	MNSQ	ZSTD		
1	1.64	-1.2	1.74	9.8	.10	Misfit
2	1.29	-3.6	1.29	4.8	.35	Misfit
3	.94	-.2	.95	-.9	.39	Fit
4	.74	-5.2	.74	-5.0	.54	Fit
5	.80	-.3.7	.80	-3.8	.61	Fit
6	.99	-6.2	.99	-.1	.60	Fit
7	.69	2.2	.70	-6.1	.64	Fit
8	1.10	4.0	1.10	1.7	.47	Fit
9	.81	4.8	.83	-3.3	.63	Fit
10	.73	8.9	.71	-5.6	.62	Fit
11	1.24	1.8	1.33	5.4	.05	Fit
12	1.14	-5.2	1.08	1.2	.43	Fit
<i>Mean</i>	1.01	-.3	1.02	-.2	-	
<i>SD</i>	.27	4.5	.30	4.8	-	

**Note: Bold numbers indicate misfit indices.*

Sources: Personal data

Item number 1 is 'I feel no need to make amends (makeup) for what I have done (reversed item)'. This item needs to be evaluated because the moral values experienced by the participants have changed. In this study, 24% of respondents had served a prison term of 2-3 years. The length of the detention period affects individual self-acceptance (Hamzah & Kumalasari, 2018). A study showed that the level of an individual's acceptance of the problems is a relatively lengthy process. So, those inmates who have served a prison term of more than two years reported that they could forgive themselves more and commit to being better (Hamzah & Kumalasari, 2018). In addition, religious intervention is one of the forms of intervention carried out in prisons in Indonesia (Cahyaningtyas & Wirasaputri, 2020). This study stated that religious interventions carried out in correctional institutions in Indonesia can be in the form of classical or individual forms which aim to build good character for the assisted residents, including accepting and forgiving themselves, accepting fate, repenting, and being committed (Cahyaningtyas & Wirasaputri, 2020) to become a better person. Religious interventions had significantly more positive recidivism outcomes in assisted citizens (Haviv et al., 2020).

Item number 2 is 'What I did was very much out of character. This item needs to be evaluated because the assisted residents feel used to getting negative assumptions from others, so this is not a problem (Leander Pontus et al., 2014). Several analyses regarding the types of cases also affect individuals' personalities (Sinha, 2016). In this study, 53% of respondents were juveniles involved in drug cases. Further study showed that individual prisoners of drug abuse cases tend to have the potential to have an anti-social personality so that they are more indifferent to the views of others (Aggarwal et al., 2015).

Reliability of the Scale, Item, and Person

The result of the reliability analysis showed that the Indonesian version of ORSGS had Cronbach's α coefficient of .65, which was considered moderate. The Rasch model analysis also examined the reliability of persons and items from the data. It was found that the person's reliability was .59, which was considered poor. Nevertheless, the item's reliability was .99, which was considered excellent. The difference between the person and item reliability in this study was as expected because the offender population was known as unreliable and had honesty or trust issues. For instance, some prisoners had

personality disorders such as anti-social personality disorder or psychopathy, which make them tend to behave against the rule, including deceitfulness (Boduszek et al., 2016; Martin et al., 2019). Furthermore, the prisoner population in this study mainly was of drug-related crimes, which tend to have substance use disorder and are associated with dissocial behaviors and antagonism (Patterson et al., 2021; Seyed Hashemi et al., 2019). Using Rasch modeling, the weakness of the sample could be conveyed, and the actual reliability of the items could be confirmed.

Item Logit and Separation Value

Using the Rasch model analysis, *a priori* requirements of objective measurement were employed in the model analysis, i.e., the data were linear, missing data could be resolved, estimation should be robust, was sensitive to misfits or outliers condition, sample-free measurement was provided (Sumintono & Widhiarso, 2013). To follow these requirements, each response of the ORSGS items was transformed into a logit. This transformation was aimed to change the prior ordinal data into interval data. Based on the Item-Response Theory (IRT), the Rasch model analysis also could examine the level of difficulty/facility (inability test's term) of each item based on the pattern in the scalogram. The scalogram showed the distribution of items and person's interaction. Based on the scalogram data, the rank of items' logit, which showed the level of difficulty of items, was obtained. The lower the logit value, the easier the respondents agree with the statement. Conversely, the higher the logit value, the more difficult respondents agree with the statement. Table 2 displays the logit value of ORSGS's items in the Indonesian version. Item logit ranged from -1.08 to .72 with a separation value of 8.79, showing that items were grouped into 12 groups that were considered good. In addition, the person's separation value was 1.2, which means that the people could be grouped into two groups. The detail of the item logit of ORSGS is displayed in Table 1.

Table 3. Item Logit of ORSGS's Items

Item	Logit Value
I would do anything to undo what I did	.72
I can't bear the thought that people know what I have done	.69
It's very unpleasant for me when I think of how other people see me now	.35
My conscience is troubled by what I have done	.31
After what I did, I feel less worthy than other people	.19
I try to avoid seeing people who know what I have done	.18
I can't help thinking about the hurt I have caused to the people involved	.05
I can't help worrying about what people must think of me after what I did	-.02
What I did was very much out of character	-.06
I feel no need to make amends (make up) for what I have done*	-.26
I will never forgive myself for what I have done	-1.05
Despite what I did I feel equal to other people*	-1.08

*reversed items

Sources: Personal data

Unidimensionality of the Scale

There are two subscales in ORSGS. They are shame subscales with seven items (e.g., It's very unpleasant for me when I think of how other people see me now) and guilt subscales with five items (e.g., I would do anything to undo what I did). This study examined the dimensionality of ORSGS due to inconsistency in the previous studies about shame and guilt as the distinct or same latent variable (June Price Tangney et al., 2011; Xuereb et al., 2009). **Table 3** shows a 30.4% total variance explained by Principal Component Analysis. In addition, the total unexplained variance of 10.9%, 7.8%, 6.7%, and 6.7% in the 1st to fourth contrasts, respectively. The total variance explained of >20% was considered acceptable/ moderate, >40% was good, and >60% was excellent (Sumintono & Widhiarso, 2013). In addition, the proportion of unexplained variance in each contrast was suggested to be no more than 10% (Sumintono & Widhiarso, 2013). The result of this study found that unidimensionality of ORSGS was

not strongly supported, with 30.4% of the total variance explained (<40%), and there was one unexplained variance of 10.9% (>10%).

Table 4. Instrument Unidimensionality Test Results

Description	Empirical	Modeled
Total raw variance in observations	100%	100%
Raw variance explained by measures	30.4%	30.2%
Raw variance explained by persons	8.9%	8.9%
Raw variance explained by items	21.5%	21.3%
Raw unexplained variance (total)	69.6%	69.8%
Unexplained variance in first contrast	10.9%	-
Unexplained variance in second contrast	8.9%	-
Unexplained variance in third contrast	7.8%	-
Unexplained variance in fourth contrast	6.7%	-

Sources: Personal data

Furthermore, the differences in psychological constructs in the east and the west could be one of the reasons for the different interpretations of the statements in these items (Cahyaningtyas & Wirasaputri, 2020). In this study, 88% of the participants came from the Javanese tribe who instilled one value, namely "*sopo nandur ngunduh*" which means that all actions have consequences so that individuals learn more to accept the consequences of what they do without worrying about the views of others (Fuadi, 2018). In this study, 100% of the participants were male, so further studies can further test the effectiveness of the ORSGS scale in female participants.

Another important discussion is about the dimensionality of ORSGS. The result in this study could not strongly support that ORSGS was unidimensional, although the item statistics were good. Based on previous studies, most of the studies on shame and guilt confirm those two constructions as distinct. However, there are few evidences that this distinction may not be generalized to all criminal-type of transgression or failure. People with substance abuse problems may not have a different response in terms of shame and guilt because the nature of the transgression is not harming others but themselves (Harris, 2003). Given that most of this study's samples were prisoners with problems related to drugs abuse, it gives a similar note that shame and guilt may not be distinct across the criminal type of behavior. Thus further study to examine the factorial structure of moral emotion in the specific incarcerated sample is recommended.

Conclusion

This study concluded that the adapted version of OSRGS into Bahasa Indonesia is acceptable. The Indonesian version of ORSGS was also valid and reliable to be used in the prisoner population. Based on the results, the Indonesian version of ORSGS had moderate Cronbach's Alpha reliability, excellent item reliability (.99), and acceptable item-fit indices. Further, Items 1 and 2 were misfits and need to be evaluated. Further investigation into the criterion validity and multidimensionality of ORSGS in the forensic population is recommended.

References

- Aggarwal, A., Vaish, S., Sharma, D., Sushil, C., Usman, N., & Sudarsanan, S. (2015). A Study of personality profile and criminal behavior in substance abusers. *Industrial Psychiatry Journal*, 24(1). <https://doi.org/10.4103/0972-6748.160960>
- Boduszek, D., Dhingra, K., & Debowska, A. (2016). The moderating role of psychopathic traits in the relationship between period of confinement and criminal social identity in a sample of juvenile prisoners. *Journal of Criminal Justice*, 44, 30–35. <https://doi.org/10.1016/j.jcrimjus.2015.11.005>

- Bond, T. G., & Fox, C. M. (2015). *Applying the Rasch model: Fundamental measurement in the human sciences (Third edition)*. Routledge.
- Boone, W. J., Yale, M. S., & Staver, J. R. (2014). Rasch analysis in the human sciences. In *Rasch Analysis in the Human Sciences*. <https://doi.org/10.1007/978-94-007-6857-4>
- Cahyaningtyas, I., & Wirasaputri, N. M. (2020). An Application on Prisoners Treatment Model Based of Islamic Religion in The Correctional Institutions. *Ijtima'iyya: Journal of Muslim Society Research*, 5(1). <https://doi.org/10.24090/ijtimaiyya.v5i1.3868>
- Chairul, N. (2014). *Rasa bersalah pada narapidana wanita*. Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Fuadi, A. (2018). Internalization of 'Kualat' Teaching As an Attempt To Prevent Corrupt Behavior Among Civil Servants. *Asia Pacific Fraud Journal*, 3(1), 1–9. <https://doi.org/10.21532/apfj.001.18.03.01.01>
- Fuller, J., Tapp, J., & Draycott, S. (2019). Are guilt and shame in male forensic patients associated with treatment motivation and readiness? *Criminal Behaviour and Mental Health*, 29(2), 111–121. <https://doi.org/10.1002/cbm.2105>
- Garvin, G. (2019). Peran emosi malu dan bersalah terhadap kecenderungan delinkuensi remaja. *Jurnal Sains Psikologi*, 8(1), 182–186.
- Hamzah, I., & Kumalasari, F. H. (2018). Self-acceptance and significant others as a factor of the resilience of female prisoners with life sentences Self-acceptance and significant others as a factor of the resilience of female prisoners with life sentences. *Journal of Correctional Issues*, 1(2), 90–99.
- Harder, D. H., & Zalma, A. (2011). Two Promising Shame and Guilt Scales: A Construct Validity Comparison. *Journal of Personality Assessment*, 55(3–4), 729–745. <https://doi.org/10.1080/00223891.1990.9674108>
- Harris, N. (2003). Reassessing the dimensionality of the moral emotions. *British Journal of Psychology*, 94, 457–473. <https://doi.org/10.1348/000712603322503033>
- Haviv, N., Weisburd, D., Hasisi, B., Shoham, E., & Wolfowicz, M. (2020). Do religious programs in prison work? A quasi-experimental evaluation in the Israeli prison service. *Journal of Experimental Criminology*, 16(4), 505–533. <https://doi.org/10.1007/s11292-019-09375-0>
- International Test Commission. (2016). *The ITC guidelines for translating and adapting tests (second edition)*. www.InTestCom.org.
- Kaya, E., & Akan, O. (2020). Assessment of anger, depression symptoms, offence-related shame and guilt levels in women patients with migraine. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences*, 33, 358–365. <https://doi.org/10.14744/DAJPNS.2020.00104>
- Kovács, Z., Kun, B., Griffiths, M. D., & Demetrovics, Z. (2019). A longitudinal study of adaption to prison after initial incarceration. *Psychiatry Research*, 273(November 2018), 240–246. <https://doi.org/10.1016/j.psychres.2019.01.023>
- Leach, C. W. (2017). Understanding shame and guilt. In L. Woodyatt, E. L. Worthington Jr., M. Wenzel, & B. J. Griffin (Eds.), *Handbook of the Psychology of Self-Forgiveness* (pp. 17–28). Springer International Publishing.
- Leander Pontus, N., Shah, J. Y., & Sanders, S. (2014). Indifferent reactions: Regulatory responses to the apathy of others. *Journal of Personality and Social Psychology*, 107(2). <https://doi.org/10.1037/a0037073>
- Linacre, J. M. (2012). *Winsteps [Software]*. <http://www.winsteps.com/index.html>.
- Marschall, D., Sanftner, J., & Tangney, J. (1994). The state shame and guilt scale. In *Shame and Guilt*.
- Martin, S., Zabala, C., Del-Monte, J., Graziani, P., Aizpurua, E., Barry, T. J., & Ricarte, J. (2019). Examining the relationships between impulsivity, aggression, and recidivism for prisoners with anti-social personality disorder. *Aggression and Violent Behavior*, 49(August), 101314. <https://doi.org/10.1016/j.avb.2019.07.009>

- Mousavi, A., & Cui, Y. (2020). The effect of person misfit on item parameter estimation and classification accuracy: A simulation study. *Education Sciences*, 10(11). <https://doi.org/10.3390/educsci10110324>
- Parisi, J. M., Rebok, G. W., Xue, Q. L., Fried, L. P., Seeman, T. E., Tanner, E. K., Gruenewald, T. L., Frick, K. D., & Carlson, M. C. (2012). The role of education and intellectual activity on cognition. *Journal of Aging Research*, 2012. <https://doi.org/10.1155/2012/416132>
- Patterson, A., Sonnweber, M., Lau, S., Günther, M. P., Seifritz, E., & Kirchbner, J. (2021). Schizophrenia and substance use disorder: Characteristics of coexisting issues in a forensic setting. *Drug and Alcohol Dependence*, 226(May), 108850. <https://doi.org/10.1016/j.drugalcdep.2021.108850>
- Riek, B. M., Luna, L. M. R., & Schnabelrauch, C. A. (2014). Transgressors' guilt and shame: A longitudinal examination of forgiveness seeking. *Journal of Social and Personal Relationships*, 31(6), 751–772. <https://doi.org/10.1177/0265407513503595>
- Seyed Hashemi, S. G., Merghati Khoei, E., Hosseinezhad, S., Mousavi, M., Dadashzadeh, S., Mostafaloo, T., Mahmoudi, S., & Yousefi, H. (2019). Personality traits and substance use disorders: Comparative study with drug user and non-drug user population. *Personality and Individual Differences*, 148(December 2018), 50–56. <https://doi.org/10.1016/j.paid.2019.05.015>
- Sinha, S. (2016). Personality correlates of criminals: A comparative study between normal controls and criminals. *Industrial Psychiatry Journal*, 25(1). <https://doi.org/10.4103/0972-6748.196058>
- Stuewig, J., Tangney, J. P., Kendall, S., Folk, J. B., Meyer, C. R., & Dearing, R. L. (2015). Children's Proneness to Shame and Guilt Predict Risky and Illegal Behaviors in Young Adulthood. *Child Psychiatry and Human Development*, 46(2). <https://doi.org/10.1007/s10578-014-0467-1>
- Sturgess, D., Woodhams, J., & Tonkin, M. (2016). Treatment Engagement from the Perspective of the Offender: Reasons for Noncompletion and Completion of Treatment-A Systematic Review. In *International Journal of Offender Therapy and Comparative Criminology* (Vol. 60, Issue 16). <https://doi.org/10.1177/0306624X15586038>
- Sumintono, B., & Widhiarso, W. (2013). *Aplikasi model Rasch untuk penelitian ilmu-ilmu sosial*. Tim Komunikata Publishing House.
- T Rubia, M. K. (2016). Development of a Crime-Related Shame and Guilt Scale for Prisoners in the Philippine Context. *Journal of Forensic Psychology*, 01(03). <https://doi.org/10.4172/2475-319x.1000112>
- Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (1989). *Test of Self-Conscious Affect*. Fairfax.
- Tangney, June P., Stuewig, J., Mashek, D., & Hastings, M. (2011). Assessing jail inmates' proneness to shame and guilt: Feeling bad about the behavior or the self? *Criminal Justice and Behavior*, 38(7), 710–734. <https://doi.org/10.1177/0093854811405762>
- Tangney, June P., Stuewig, J., & Martinez, A. G. (2014). Two Faces of Shame: Understanding Shame and Guilt in the Prediction of Jail Inmates' Recidivism. *Psychological Science*, 25(3), 799–805. <https://doi.org/10.1177/0956797613508790>
- Tangney, June Price, Stuewig, J., & Hafez, L. (2011b). Shame, guilt, and remorse: Implication for offender population. *Journal of Forensic Psychiatry and Psychology*, 22(5), 706–723. <https://doi.org/10.1080/14789949.2011.617541>
- Tracy, J. L., & Robins, R. W. (2006). Appraisal antecedents of shame and guilt: Support for a theoretical model. *Personality and Social Psychology Bulletin*, 32(10), 1339–1351. <https://doi.org/10.1177/0146167206290212>
- Wright, K., & Gudjonsson, G. H. (2007). The development of a scale for measuring offence-related feelings of shame and guilt. *Journal of Forensic Psychiatry and Psychology*, 18(3), 307–316. <https://doi.org/10.1080/14789940701292810>
- Wright, K., Gudjonsson, G. H., & Young, S. (2008). An investigation of the relationship between anger and offence-related shame and guilt. *Psychology, Crime and Law*, 14(5), 415–423. <https://doi.org/10.1080/10683160701770369>
- Xuereb, S., Ireland, J. L., & Davies, M. (2009). Development and preliminary assessment of a measure of shame, guilt, and denial of offenders. *Journal of Forensic Psychiatry and Psychology*, 20(5), 640–660. <https://doi.org/10.1080/14789940903174014>

Appendix 1. ORSGS Original Version

Below are a number of sentences that describe some of the things that people might feel after being apprehended for a crime. For each sentence, we would like you to tell us how well it describes how you feel now.

Responses are ranged from 1 (Not at all) to 7 (Very much).

Scoring can be done by summing up all responses score for each item, with reversing score for reversed items.

1. I feel no need to make amends (make up) for what I have done. (reversed item)
2. What I did was very much out of character.
3. I try to avoid seeing people who know what I have done.
4. I can't bear the thought that people know what I have done.
5. I can't help thinking about the hurt I have caused the people involved.
6. After what I did, I feel less worthy than other people.
7. I can't help worrying about what people must think of me after what I did.
8. I will never forgive myself for what I have done.
9. It's very unpleasant for me when I think of how other people see me now.
10. My conscience is troubled by what I have done.
11. Despite what I did I feel equal to other people. (reversed item)
12. I would do anything to undo what I did.

Appendix 2. ORSGS Indonesian Version

Kalimat-kalimat di bawah menggambarkan tentang beberapa hal yang dapat saja orang rasakan setelah melakukan tindakan kejahatan. Untuk setiap kalimat, Anda diminta untuk menggambarkan dengan tepat, sejauh mana Anda merasakan hal tersebut sekarang dengan memberikan tanda silang (X) pada salah satu pilihan jawaban.

Pilihan respon bergerak dari angka 1 (Tidak sesuai sama sekali) sampai angka 7 (Sangat sesuai).

Penskoran dapat dilakukan dengan menjumlahkan skor yang diperoleh dari respon pada tiap item, dengan skor *reversed items* dibalik terlebih dulu.

1. Saya merasa tidak perlu mengubah apa yang sudah saya lakukan. (*reversed item*)
2. Apa yang telah saya lakukan tidak sesuai dengan karakter saya.
3. Saya menghindari bertemu dengan orang-orang yang tahu apa yang sudah saya lakukan.
4. Saya tidak bisa menahan pikiran bahwa orang tahu apa yang sudah saya lakukan.
5. Saya tidak bisa membendung pikiran tentang rasa sakit yang sudah saya sebabkan pada orang lain.
6. Bila melihat lagi apa yang dulu saya lakukan, saya merasa kurang berharga dibandingkan orang lain.
7. Saya tidak bisa menahan rasa cemas tentang bagaimana orang lain memikirkan apa yang sudah saya lakukan.
8. Saya tidak akan pernah memaafkan diriku untuk apa yang pernah saya lakukan.
9. Saya merasa tidak nyaman sekali ketika saya memikirkan bagaimana orang lain lain memandang saya sekarang.
10. Hati nurani saya terusik oleh apa yang pernah saya lakukan.
11. Kendati ada perbuatan tertentu di masa lalu, saya merasa sama saja dengan orang lain. (*reversed item*)
12. Saya akan melakukan apa saja untuk menghapus tindakan yang sudah saya lakukan.

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