Reliability and Construct Validity of the Organizational Citizenship Behaviour (OCB) Scale

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ABSTRACT: The purpose of this study is to examine the reliability and construct validity of organizational citizenship behaviour, to find dimensions and indicators that can form organizational citizenship behaviour. Organizational citizenship behaviour measured by the dimensions of altruism, courtesy, conscientiousness, sportsmanship, and civic virtue. The population in this study were teachers in junior high schools in Purwokerto region with a total of 327 teachers. The sample of this study was 90 teachers. The sampling technique in this study uses accidental sampling. Data collection methods use the organizational citizenship behaviour scale. Research data were analyzed with Structural Equation Modeling (SEM) through the SmartPLS 3.2.8 program. Based on the analysis results, the dimensions and indicators that form the construct of organizational citizenship behaviour are declared valid and reliable. The most dimension that reflects the construction of organizational citizenship behaviour is a civic virtue, with a loading factor of 0.781. The lowest dimension that reflects the construct of organizational citizenship behaviour is courtesy with a loading factor of 0.400. This research shows that all dimensions and indicators are able to reflect and form the construct of organizational citizenship behaviour. Thus, the measurement model can be accepted because the theory was described organizational citizenship behaviour is consistent with empirical data obtained from the subject.

KEYWORDS - Altruism, Courtesy, Conscientiousness, Organizational Citizenship Behaviour, Sportsmanship, Civic Virtue

I. INTRODUCTION

Organizational citizenship behaviour is behaviour that is rarely owned in an organization (Shaheen, Gupta & Kumar, 2016), especially in education both teachers and other members who are stakeholders in the school environment (Shaheen, Gupta & Kumar, 2016; Ule, Živoder, & du Bois-Reymond, 2015; Johansson, 2016). The results showed that low organizational citizenship behaviour was one of the causes of the lack of improvement in the quality of education and voluntary behaviour in teaching (Shaheen, Gupta & Kumar, 2016; Somech & Oplatka, 2014). Teachers with less organizational citizenship behaviour can cause the problems in on-going education program such as lack of progress and improvement of teacher competence, as well as causing children's negative behaviour increase, dropping out and skipping class (Vukovic, Roberts, & Green Wright, 2013; Johansson, 2016). Thus, to overcome these limitations, it requires sincere work and voluntary behaviour outside of his job description or also called organizational citizenship behaviour.

Organizational citizenship behaviour has an important role in improving efficiency and effectiveness of work (Organs, Podsakof & Mackenzie, 2006), as well as improving teacher skills, creating a relationship of mutual trust, increasing confidence in the tasks and responsibilities given and increasing the professionalism of academic excellence (Choong, Ng, Na & Tan, 2019; Garg & Rastogi, 2006). In addition, organizational citizenship behaviour has an important role in the success of organizations to adapt to environmental changes (Shaheen, Gupta & Kumar, 2016). Teachers who do not have organizational citizenship behaviour make it possible to have little role in helping to achieve organizational goals, so it is less able to improve organizational performance. The impact of low organizational citizenship behaviour includes a lack of increased organizational effectiveness, innovation awareness, and the ability of individuals to adapt in various organizations (Podsakoff, MacKenzie, Paine and Buchrach, 2000; Fatimah, Hoesni & Hafidz, 2012).

Factors that influence organizational citizenship behaviour include internal factors such as job satisfaction, organizational commitment, personality, employee morale, and motivation, and another internal factor such as leadership style, trust in leadership and organizational culture (Organ, Podsakof & Mackenzie, 2006; Gupta, Shaheen & Reddy, 2017; Sulaiman, Nasir & Omar, 2014). Besides, the factors that influence organizational citizenship behaviour is self-efficacy (Choong, Ng, Na & Tan, 2019). Another factor that influence organizational citizenship behaviour is work involvement (Bakker & Leiter, 2010), where work involvement supports an extra role in work and organizational support (POS) (Gupta, Shaheen & Reddy, 2017).
where high organizational support will show organizational citizenship behaviour on employees. Individuals involved in their work will devote time and effort, pursue significant targets, and be fully concentrated on their work (Bakker, Schaufeli, Leiter & Tarris, 2008).

Teachers who have organizational citizenship behaviour are shown by helping co-workers who have many tasks, replacing co-workers who cannot teach, coming to school earlier, respecting regulations in the organization, engaging in activities, respecting the rights of others in decision making, lack of behaviour complaining, gossiping or raising problems, being accountable to the organization and finding information that supports the organization's operations. Organizational citizenship behaviour is individual discretionary behaviour and is not explicitly recognized by the organization's formal appreciation (Bateman & Organ, 1983). Organizational citizenship behaviour was first founded by (Bateman & Organ, 1983) to explain behaviours that are beneficial to the organization and support what goes on an organization. Until now, research on organizational citizenship behaviour has been used in various contexts ranging from manufacturing, hospital restaurants and banks (Podsakoff, MacKenzie, Paine & Bachrach, 2000), and began research on organizational citizenship behaviour in schools (Oplatka, 2006, 2009; Somech & Ron, 2007). The positive impact of organizational citizenship behaviour has motivated researchers to explore its impact in the education sector, such as in schools and formal organizations (Shaheen, Gupta & Kumar, 2016).

The results of previous studies have explored the relationship between organizational citizenship behaviour and some organizational variables such as personality traits, suitability, attitudes and reward systems that have a positive relationship with organizational citizenship behaviour (Smith, Organ, & Near, 1983; Podsakoff, MacKenzie, Paine & Bachrach, 2000). In addition, it has been proven that organizational citizenship behaviour provides resources and bring coordination among members and their working group. Overall, the contribution of organizational citizenship behaviour makes it easier for organizations to adapt to environmental changes (Shaheen, Gupta & Kumar, 2016).

Organizational citizenship behaviour has a significant contribution to the work results of employees, researchers have explored organizational citizenship behaviour in various work scopes, such as hospitals, manufacturing units, restaurants, and the military (Podsakoff Podsakoff, MacKenzie, Paine & Bachrach, 2000). Organizational citizenship behaviour contributes to overall operational efficiency, customer satisfaction, and the quality of an organization's performance (George & Bettenhausen, 1990; MacKenzie, Podsakoff, & Fetter, 1991).

II. THEORETICAL FRAMEWORK

Robbins and Judge (2015) define organizational citizenship behaviour is a work behaviour that is shown by employees in an organization that is done voluntarily outside their job description that has been set to improve the progress of organizational performance. Whereas Meshane and Glinow (2017) explain that organizational citizenship behaviour is various forms of work behaviour that are the same and beneficial for others or for the organization itself that supports an organization's social goals both from social and psychological contexts. Organizational citizenship behaviour is the behaviour of individuals who have the freedom to choose, which will indirectly contribute to organizational effectiveness (Organ, 1988). Organizational citizenship behaviour is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the function of an efficient and effective organization (Organ, Podsakoff & Mackenzie, 2006). Besides that, organizational citizenship behaviour was implemented freely and exceeded the mandatory roles recognized through rewards (Podsakoff, McKenzie, Paine & Bachrach, 2007).

Dimensions of organizational citizenship behaviour according to Organ, Podsakoff, and McKenzie (2007) include conscientiousness, which is behaviour that meets or exceeds the minimum requirements required by the organization such as obedience and compliance with applicable regulations for example employees have the behaviour of coming to the office early, not waste time chatting on the phone or office, being high in presence, and doing something that exceeds normal needs and expectations. Altruism, which is the behaviour of helping others in the organization, such as replacing co-workers who do not come to work or taking a break, helping others whose jobs are overloaded, assisting the orientation process of new employees even if not asked. Civic virtue, which is employees contribute to political issues in the organization in a responsible way such as engaging and collaborating with teams and actively giving constructive suggestions and criticisms for the organization, paying attention to important meetings, using critical thinking skills to identify the problem and analyze it carefully. Sportmanship, which is the behaviour by employees that are not complaining, gossiping, and raising issues that happen. Courtesy, which is doing the best and respect for others, including behaviour such as helping someone to prevent a problem from happening, or taking steps to lighten up a problem.

Based on the dimensions of organizational citizenship behaviour, a conceptual framework of organizational citizenship behaviour can be formed, as shown in Figure 1.
Based on the description above, it can be concluded that organizational citizenship behaviour on employees is important in organizations, the purpose of this study is to examine the reliability and construct validity of organizational citizenship behaviour and examine the dimensions and indicators that can shape organizational citizenship behaviour.

III. METHODOLOGY

3.1 Population, sample and sampling techniques

The population in this study was teachers in junior high schools in the Purwokerto region, with a total of 327 teachers. The sample of this study was 90 teachers consisting of 52 women and 48 men. The sampling technique in this study uses accidental sampling.

3.2 Data Collection Method

Organizational citizenship behaviour in this study was measured using the organizational citizenship behaviour scale. The model used is a Likert scale, which consists of four alternative answers that include very appropriate, appropriate, inappropriate, and highly inappropriate. The scale of the study refers to the dimensions of organizational citizenship behaviour from Organ, Podsakoff, and Mckenzie (2007), which consists of altruism, conscientiousness, courtesy, sportsmanship, and civic virtue by adapting the scale of organizational citizenship behaviour from Tentama and Subardjo (2018).

Example of the item on the organizational citizenship behaviour scale on the conscientiousness dimension "I am willing to carry out work according to established operational standards”, an example of an item on the altruism dimension “I spend time helping co-workers in completing their work”, an example of an item on the dimensions of civic virtue “I can cooperate in organizational activities”, an example of the item in the sportsmanship dimension "I understand the minimum facilities provided by the organization”, and the example of the item in the courtesy dimension "I complete the task as well as possible, so I am not put a burden to my colleagues”. The blueprint that is used as a reference organizational citizenship behaviour scale can be seen in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Dimension</th>
<th>No. Item</th>
<th>∑</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Altruism</td>
<td>2,12</td>
<td>7,17</td>
</tr>
<tr>
<td>2</td>
<td>Conscientiousness</td>
<td>1,11</td>
<td>6,16</td>
</tr>
<tr>
<td>3</td>
<td>Courtesy</td>
<td>5,15</td>
<td>10,20</td>
</tr>
<tr>
<td>4</td>
<td>Sportsmanship</td>
<td>4,14</td>
<td>9,19</td>
</tr>
<tr>
<td>5</td>
<td>Civic Virtue</td>
<td>3,13</td>
<td>8,18</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

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3.3 Construct Validity and Reliability

Testing the construct validity and reliability using outer model testing. The construct validity test consists of convergent and discriminant validity tests. Convergent validity can be seen from the loading factor value > 0.5 and the Average Variance Extracted (AVE) value > 0.5 (Jogiyanto, 2011). While discriminant validity can be seen from comparing the roots of Average Variance Extracted (AVE) between dimensions must be higher than the correlation with other dimensions (Jogiyanto, 2011).

The construct reliability test is performed to show the internal consistency of the measuring instrument by looking at the value of composite reliability and Cronbach alpha with a higher value, it will show the consistency value of each item in measuring latent variables. According to Hair, Black, Babin, and Anderson (2014), the value of proper composite reliability and Cronbach alpha is > 0.7, and the value 0.6 is still acceptable (Jogiyanto, 2011).

3.4 Data Analysis

The research data were analyzed with structural equation modelling (SEM) through the Smart PLS 3.2.8 program with the 2nd Order CFA approach. Confirmatory Factor Analysis (CFA) is one of the main approaches in factor analysis. CFA can be used to test the dimensionality of a construct. This test used to do the measurement model so it can describe the dimensions and indicators in reflecting latent variables, namely organizational citizenship behaviour, by looking at the factor loading of each aspect that forms a construct. Confirmatory Factor Analysis (CFA) is also used to test the construct validity and construct reliability from indicators (items) that forming latent constructs (Latan, 2012). In this study, the CFA used the second-order confirmatory factor analysis (2nd order CFA), which is the measurement model consists of two levels. The first level analysis is done from the latent construct of dimensions to the indicators, and the second analysis is done from the latent construct to the dimension constructs (Latan, 2012).

IV. RESULT

Based on the testing outer testing model of the organizational citizenship behaviour scale using the Smart PLS 3.2.8 program, it can be seen as the results in Figure 2 below.

![Figure 2: Outer Model of Organizational Citizenship Behaviour Scale](image)

4.1 Convergent Validity

Based on the data analysis, the earned value loading factor of the variable to the dimensions and of dimensions to the indicator value > 0.4. The loading factor is 0.4 or more are considered to have validation that is strong enough to explain latent constructs (Hair, Hult, Ringle & Sarstedt, 2017). Convergent validity testing results can be seen in Table 2 and Table 3.

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Table 2. Loading Factor Value (Variable-Dimension)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Loading Factor</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td>0.762</td>
<td>Valid</td>
</tr>
<tr>
<td>Sportsmanship</td>
<td>0.718</td>
<td>Valid</td>
</tr>
<tr>
<td>Civic Virtue</td>
<td>0.781</td>
<td>Valid</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.423</td>
<td>Valid</td>
</tr>
<tr>
<td>Courtesy</td>
<td>0.400</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Table 3. Loading Factor Value (Dimension-Indicator)

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading Factor</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCB.AL3</td>
<td>0.401</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.AL12</td>
<td>0.983</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.Sp9</td>
<td>0.518</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.Sp19</td>
<td>0.944</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.CV8</td>
<td>0.915</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.CV10</td>
<td>0.700</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.CT1</td>
<td>0.498</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.CT11</td>
<td>0.963</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.C18</td>
<td>0.760</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.C20</td>
<td>0.788</td>
<td>Valid</td>
</tr>
<tr>
<td>OCB.C15</td>
<td>0.595</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Furthermore, the results of the convergent validity test show the Average Variance Extracted (AVE) value > 0.5. The value of Average Variance Extracted (AVE) from the organizational citizenship behaviour variable is 0.513, and the value of Average Variance Extracted (AVE) from each dimension of organizational citizenship behaviour can be seen on Table 4.

Table 4. Value of Average Variance Extracted (AVE) of Organizational Citizenship Behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>AVE Value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td>0.563</td>
<td>Valid</td>
</tr>
<tr>
<td>Courtesy</td>
<td>0.517</td>
<td>Valid</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.588</td>
<td>Valid</td>
</tr>
<tr>
<td>Civic Virtue</td>
<td>0.663</td>
<td>Valid</td>
</tr>
<tr>
<td>Sportsmanship</td>
<td>0.580</td>
<td>Valid</td>
</tr>
</tbody>
</table>

4.2 Discriminant Validity

Based on the results of discriminant validity test shows that the root value of Average Variance Extracted (AVE) in each dimension of organizational citizenship behaviour is higher than the root value of Average Variance Extracted (AVE) in other dimensions of organizational citizenship behaviour, so the discriminant validity criteria are met. The root value of the Average Variance Extracted (AVE) of the organizational citizenship behaviour variable can be seen in Table 5.

Table 5. Root Value of the Average Variance Extracted (AVE) of Organizational Citizenship Behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Altruism</th>
<th>Courtesy</th>
<th>Conscientiousness</th>
<th>Civic Virtue</th>
<th>Sportsmanship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td>0.751</td>
<td>0.197</td>
<td>0.440</td>
<td>0.502</td>
<td>0.319</td>
</tr>
<tr>
<td>Courtesy</td>
<td>0.197</td>
<td>0.719</td>
<td>0.195</td>
<td>0.269</td>
<td>0.434</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.440</td>
<td>0.195</td>
<td>0.767</td>
<td>0.406</td>
<td>0.294</td>
</tr>
<tr>
<td>Civic Virtue</td>
<td>0.502</td>
<td>0.269</td>
<td>0.406</td>
<td>0.815</td>
<td>0.434</td>
</tr>
<tr>
<td>Sportsmanship</td>
<td>0.319</td>
<td>0.434</td>
<td>0.294</td>
<td>0.434</td>
<td>0.761</td>
</tr>
</tbody>
</table>

Construct reliability testing is done by testing the outer model seen from the composite reliability and Cronbach alpha values. This test is done by looking at the value of composite reliability and Cronbach alpha > 0.6, which means that the scale in this study is reliable. The composite reliability and Cronbach alpha values can be seen in Table 6.

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Based on the results of construct validity testing in table 6, it shows that the scale of organizational citizenship behaviour has good reliability and gives the meaning that the form that measures the bullying variable meets the unidimensional criteria (Hair, Hult, Ringle & Sarstedt, 2017). This is indicated by the value of composite reliability 0.801 and Cronbach alpha 0.627. The construct validity and reliability tests produce valid and reliable items that are able to reflect the dimensions of organizational citizenship behaviour, that is, items at numbers 1,3,8,9,10,11,12,15,19,18 and 20. Based on the results of the analysis of research data using outer model testing shows that the measurement model is acceptable because the dimensions of organizational citizenship behaviour can reflect the variable of organizational citizenship behaviour.

### Table 6. Value of Composite Reliability and Cronbach’s Alpha of Organizational Citizenship Behaviour

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Citizenship Behaviour</td>
<td>0.627</td>
<td>0.801</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

V. DISCUSSION

Based on the results of the analysis of the construct validity and reliability, the dimensions and indicators that can establish the construct of organizational citizenship behaviour are declared valid and reliable. Therefore, all dimensions are able to reflect and form the construct of organizational citizenship behaviour. The most dominant dimension and able to reflect organizational citizenship behaviour is civic virtue with a loading factor value of 0.781. Civic virtue is shown by behaviours such as helping unintentionally to get the work done, helping co-workers who have many tasks, or replacing co-workers who cannot teach. This is supported by valid and reliable indicators that show that teacher helps other co-workers who are unable to attend class to give assignments to their students.

The weakest dimension reflecting organizational citizenship behaviour is courtesy, with a loading factor of 0.400. Courtesy is shown by respecting the rights of others, such as helping work to solve problems or provide solutions to problems. Valid and reliable indicators show that each teacher respects and helps solve the problems of other co-workers, but there are obstacles such as the learning process in accordance with the 2013 curriculum. Teachers are required to be creative in the learning process, but the infrastructure does not support, there are also teachers who do not have the initiative to create learning media. Teachers only use books as learning media, this is what makes the implementation of the 2013 curriculum not going well.

The results of previous studies on organizational citizenship behaviour variables that are relevant to this study and also explain the reliability and validity of the organizational citizenship behaviour scale include the Paille (2009) by modifying the scale that put forward by Podsakoff and MacKensie (1994). The study shows that the organizational citizenship behaviour scale has fulfilled the reliability requirements with Cronbach alpha is 0.609, the study also showed that the dimension that most strongly reflects organizational citizenship behaviour is a civic virtue.

Another study conducted by Aoyagi, Cox, and McGuire (2008) of 193 college students consists of 97 men, and 96 women with an organizational citizenship behaviour scale of 13 items showed that the organizational citizenship behaviour scale had fulfilled the reliability requirements with Cronbach alpha of 0.605. Bachrach, Powell, Bendoly, and Richey (2006) research showed that the dimension of civic virtue may reflect organizational citizenship behaviour and has been qualified from reliability requirements with Cronbach alpha value is 0.62, another study conducted by Jiang, Zhao, and Ni (2017) shows that the scale of organizational citizenship behaviour fulfils the reliability requirements with a Cronbach alpha value of 0.518. Then Hazzi and Maldon (2017) research show the scale of organizational citizenship behaviour qualified the reliability requirements with a Cronbach’s alpha value is 0.616. The results of this study when compared with this research show that the results of this study can be used as instruments to measure organizational citizenship behaviour because the results of the reliability analysis show that the scale in this study has a higher reliability value with a Cronbach alpha value of 0.627.

The results of this study are expected to provide an overview of the validity and reliability of organizational citizenship behaviour scale in improving organizational citizenship behaviour in junior high school teachers in Purwokerto region, so it can be used in research data collection and become a reference in further research related to organizational citizenship behaviour.

VI. CONCLUSION

The conclusions in this study are: 1) The scale of organizational citizenship behaviour has fulfilled good construct validity and reliability, 2) All dimensions significantly form organizational citizenship behaviour. The most dominant dimension that reflects organizational citizenship behaviour is a civic virtue, and

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the weakest dimension that reflects organizational citizenship behaviour is courtesy. In this study, a model of organizational citizenship behaviour scale measurement was formed that was in accordance with empirical data obtained from subjects at the study site.

REFERENCES


[3]. S.T. Johansson, Parents negotiating change a middle-class lens on schooling of children with autism in urban India, Contemporary Education Dialogue, 13(1), 2016, 93-120.


[21]. S.B. MacKenzie, P.M. Podsakoff, and R. Fetter, Organizational citizenship behaviour and objective productivity as determinants of managerial evaluations of salespersons’ performance, Organizational Behaviour and Human Decision Processes, 50(1), 1991,
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