THE SERVANT LEADERSHIP ATTRIBUTES AMONG SUBJECT LEADERS IN MALAYSIA: AN EXPLORATORY FACTOR ANALYSIS

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ABSTRACT
Despite the growing interest in clarifying the nature of servant leadership, there is a lack of consensus on the operationalization of servant leadership, most notably in school context. Considering this, this article presents an Exploratory Factor Analysis (EFA) on this literature gap. By designating subject leader (Guru Kanan Mata Pelajaran) as servant leader—as suggested by the literature, 90 items were developed to measure the attributes of Teacher Capacity Building, Stewardship, Accountability, Self-competence, Compassion, Altruism and Shares Leadership among these unit of analysis. Data from 63 and 608 teachers from the first and second pilot test respectively was used to test the internal consistency and explore the latent factors of these attributes. Results indicated that only five factors i.e. attributes namely Self-competence, Shares Leadership, Accountability, Teacher Capacity Building and Stewardship was fit in delineating servant leadership attributes among these subject leaders. Critically, solid factor structures and good internal consistency across these factors indicated these attributes were tenable for school context in relation to subject leadership.

INTRODUCTION
Leadership position is endowed with power and power sometimes lured people into insatiability, narcissism or even victimization on others for personal gain (Harris, 2014; Levine & Boaks, 2014; Maner & Mead, 2010). Therefore, morality concern
in leadership is important (Hassan, Wright, & Yukl, 2014; Levine & Boaks, 2014; Olesia, Namusonge, & Iravo, 2013) and educational leadership is no exception because teaching is a noble profession in much the same way as religious profession (Ibrahim Ahmad Bajunid, Kamis, & Singh, 2008). Hence, educational leaders are always expected to exhibit noble virtues just as the religious figures need to be regarded as a righteous one (Ibrahim Ahmad Bajunid et al., 2008).

Therefore, it is crucial for Malaysian education system to create deeper understanding of servant leadership for the cultivation of good, reasonable personalities (Ibrahim Ahmad Bajunid, 2008) as it is a type of leadership that is linked to ethics, virtues and morality (Hackett & Wang, 2012; Monahan, 2012; Parris & Peachey, 2013). Intriguingly, although the study on servant leadership revolved around conceptual, measurement and model development (Parris & Peachey, 2013) nonetheless it has been found that there was a lack of consensus regarding the specific properties of servant leadership (Coetzer, Bussin, & Geldenhuys, 2017; Parris & Peachey, 2013; Van Dierendonck, 2011; Van Dierendonck & Nuijten, 2011).

Keeping this in view and considering the fact that leadership must be contextually-related in that it must be understood and developed within the context of workplace (Dalakoura, 2010; Harris, 2014; Spillane, Halverson, & Diamond, 2004) hence this research takes the initiative to derive a set of school context related servant leadership constructs and subsequently explore its latent structures in school setting.

**LITERATURE REVIEW**

Servant leadership was coined by Robert Kiefner Greenleaf (1904-1990) in his seminal essay entitled “The Servant as Leader” (1970). It asserts that leaders should always put others’ needs, aspirations and interest above their own and they always view themselves as “servants” whom are committed to the well-being of their followers rather than a leader that always command-and-control their followers (Barbuto & Wheeler, 2006; Dennis & Beach, 2005; Laub, 1999; Liden et al., 2008; Page & Wong, 2000; Sendjaya et al., 2008; Van Dierendonck, 2011). This underlying “motivation to serve” distinguishes servant leadership from other existing leadership theories (Sendjaya & James, 2002).
Interestingly, Greenleaf did not suggest any specific attributes for servant leadership (Rachmawati & Lantu, 2014; Van Dierendonck, 2011). Although numerous researchers had proposed various attributes thereafter nonetheless all these attributes were not customized to school context (Coetzer et al., 2017; Teh, 2017). Although there were several servant leadership studies which were carried out in school context however most of these researches were either engaging the attributes suggested by previous servant leadership scholars – which were non-educational context related in nature (Bowman, 2005, 2014, Cerit, 2009, 2010; Stoten, 2013); or employing prescriptive approach in relating the relevance of servant leadership to school context (Crippen, 2005, 2010) without suggesting a clear set of educational context attributes.

While this could be construed as the case, an extant review on the servant leadership literature had revealed that all of the servant leadership attributes suggested by the scholars somewhat suggested the educational attributes of Teacher Capacity Building (TCB), Stewardship (STW), Accountability (ACT), Self-competence (SEC), Compassion (CMP), Altruism (ALT) and Shares Leadership (SHL) (see Teh, 2017, for more description). In this sense, since literature suggested that subject leaders (Guru Kanan Mata Pelajaran or Ketua Bidang) are servant leaders and there was a lack of studies to address this concern (Brown & Rutherford, 1998; Leithwood, 2016; Tajuddin Mohd Yunus, 2012) therefore this study is set to fill this literature gap. Besides, subject leaders are middle leaders and the fact that middle leaders always act as a “conduit” or “servant” in serving the senior management team (e.g. principal, senior assistants etc.) and teachers’ curriculum management work needs while they are also expected to be a “leader” in leading teachers in professional learning (Ghamrawi, 2013; Gurr & Drysdale, 2013; Ministry of Education Malaysia [MOE], 1992; Mohammed Sani, 2013; Peter, 2000) thus this somewhat suggested the relevance of servant leadership for subject leaders. Therefore, the operational definitions for these attributes are defined as follows.

**Teacher Capacity Building (TCB)** refers to the focus by the subject leader to transfer competencies necessary for teachers and groups in order to identify their issues and subsequently address their concerns in performing tasks. **Stewardship (STW)** refers to the focus
subject leader to realize social responsibility and to build community at organizational level and societal level. While Accountability (ACT) is the subject leader’s willing acceptance of the responsibilities inherent in the leadership position to serve the organization guided by implicit or explicit expectation that the subject leader will portray congruence between behaviour and communications and more importantly, the school leader is able to justify his or her beliefs, decisions or actions to constituents with sound reasons.

For Self-competence (SEC), it refers to the degree the subject leader is cognitively, emotionally and socially competent in carrying out organizational tasks. Compassion (CMP) is the displaying of sympathy followed by actions to relieve emotional distress or physical discomfort amongst teachers by providing emotional support, work flexibility or even material. Altruism (ALT) is a pro-social attitude that is characterized by the sacrifice of personal interest to help teachers and optimize teachers’ interest with no expectation for reward. Lastly, Shares Leadership (SHL) refers to the encouragement to teachers to manage work problems personally, lead others, share and coordinate tasks with others in task accomplishment and decision making process based on a shared purpose.

METHODOLOGY
After an extensive literature review, a total of 101 items were generated based on the definitions above and the rating scale used was Likert ordinal scale ranging from 6 (strongly agree) to 1 (strongly disagree) to form an instrument. Next, the instrument was sent for expert validation. The panel of experts consists of five experts whom possess extensive knowledge on measurement along with in-depth experience in educational leadership and management (ELM) (DeVellis, 2013; Masuwai Azwani et al., 2016). Among the experts includes a university professor and a lecturer specialized in both field of measurement and ELM while the remaining experts includes two university professors and a lecturer whom are experts in ELM.

The experts were required to provide their response for each item on a dichotomous instrument with categorical options of “suitable” and “unsuitable” for favourable and unfavourable item respectively (Masuwai Azwani et al., 2016). Besides, they were also required to provide comments for each item and overall suggestions to improve the instrument (DeVellis, 2013).
The content adequacy for the items were calculated based on Content Validity Ratio (CVR) (Lawshe, 1975; Masuwai Azwani et al., 2016; Sendjaya, Sarros, & Santora, 2008; Sendjaya, 2003; Taherdoost, 2016). CVR was selected as a criteria because it has been widely used in diverse fields, including education field as a valid method to quantify content validity in facilitating the rejection or retention of specific items (Ayre & Scally, 2014; Sendjaya et al., 2008).

The cut-off value of the inter-rater agreement was set at 1.00 as prescribed (Lawshe, 1975). Following this, 11 items were rejected and a total of 90 items were retained. Meanwhile, several items were also modified based on the comments and suggestions provided by the experts (DeVellis, 2013). Next, the instrument was translated into Malay language given the respondents are non-native speaker of English language (Kho, Hamidah Yusof, & Syed Ismail Syed Mohamad, 2015). To ensure the comparability of the items across languages, these instruments underwent back-translation to English language again (Banville, Desrosiers, & Genet-Volet, 2000; Kho et al., 2015; Tai, 2013). All these were done by engaging language experts from a public ELM training institution.

Meanwhile, in order to ensure the equivalence of the translation thus the items were cross-examined by three bilingual secondary school teachers. They were requested to evaluate whether the terminology used in the items suits the reading level and general knowledge of the respondents in schools as they are experienced educators whom were familiar with school life. Besides, they were also requested to trim the items for brevity purpose besides rectifying the syntax of the items for better clarity.

In order to gather preliminary practical insights into the instrument, personal interviews were conducted upon three teachers as suggested by Netemeyer, Bearden and Sharma (2003) and Tai (2013). The teachers were similar to those would be approached in actual survey (Netemeyer, Bearden, & Sharma, 2003). The interviews were aimed to identify any problems in relation to format, syntax, instrument design, completion time, and to address any comments or suggestions (Netemeyer et al., 2003; Tai, 2013). Apart from the common groueses about the lengthiness of the entire instrument, the teachers interviewed were generally satisfied with the instrument.
Next, the instrument was administered to six teachers to evaluate the clarity of the items by using a scale of one to ten (Flowers, 2006; Tai, 2013). In this sense, item with an average score of 70% and above would be retained for pilot test as it implies high content validity level (Sidek Mohd Noah & Jamaludin Ahmad, 2005; Tuckman & Waheed, 1981). As expected, all items in each dimension recorded a very high average score for clarity with at least 9.57 and the entire score was 9.63. Meaning, all items are high in content validity.

With this, the instrument was administered to the sample of study in two separate pilot tests as follows.

For the first pilot test, 14 schools were picked randomly from the overall 38 schools in Kuantan district, Pahang state with 6 Malay Language teachers were picked randomly from each of these schools. This amounted to a total of 84 (14x6) teachers being selected as the sample for this initial test. It is noteworthy that teachers were selected as the unit of analysis given this research uses a peer-rated approach i.e. assessment from the perspective of teachers upon the predetermined leadership behaviour demonstrated by the language department subject leader, so as to avoid social desirability bias that often occurred in self-rated approach (Kieruj & Moors, 2013; Moors, Kieruj, & Vermunt, 2014; Williams, 2010).

After the data was collected, to assess the reliability of the items, Cronbach’s alpha was used as it is the most widely used important measure of internal consistency and interrelatedness among set of items that determines the instrument’s quality (DeVellis, 2013; Netemeyer et al., 2003). The cut-off value was set at .80 based on the advice by DeVellis (2013) Besides, following the advice by Ho (2014), item-total correlation of 0.33 was also used as the criterion to guide decisions on the retention or deletion of items.

The data was processed with SPSS v.23 and the result revealed that the instrument had achieved a remarkable alpha value of .996. Meanwhile, it had also been found that all the items achieved alpha value of .90 and above with no items violating the item-total correlation criterion mentioned above. More importantly, no items had also been found to have negative value for the item-total correlation which
implies that the items represent their respective constructs accurately at this juncture. For this reason, all items were retained for second pilot test.

For the second pilot test, the sample was taken from Peninsular Malaysia. Following the 5:1 sample–to-items ratio suggested by Hair, Black, Babin and Anderson (2010), a sample size of 450 (5x90) would be the sampling frame for this pilot test. Hence, seven schools were selected from each state and five teachers were selected randomly from each of these schools resulting in a total of 455 (7x13x5) teachers were selected.

After data collection, the data was normalized and linearized using SPSS v.23 A close inspection of the correlation matrix revealed that almost all coefficients exceeded the cut-off value .33 (Ho, 2014; Tabachnick & Fidell, 2007). In addition, the communalities values also exceeded the threshold of .50 as suggested by Hair et al. (2010) and the result of the Kaiser-Meyer-Olkin (KMO) exceeded the cut-off value of .60 at .967 (Bartlett, 1950; Hair et al., 2010; Kaiser, 1970; Tabachnick & Fidell, 2007) with the statistically significant Bartlett’s Test of Sphericity at p< .05 indicated that the data possess adequate sample size and factorial correlation fitness for factor analysis (Hair et al., 2010; Ho, 2014; Meyers, Gamst, & Guarino, 2013; Pallant, 2010).

Next, the data was subjected to Principal Component Analysis (PCA). The PCA result in Table 1.1 revealed the presence of twelve components or factors with eigenvalues exceeding 1 that surpassed the threshold of 60% total variance explained (Meyers et al., 2013). However, a closer look at the scree plot (Figure 1.1) revealed that there is a clear break only between the sixth and seventh components. In other words, components 6 and 7 explain more variance than the remaining components suggesting that only seven components to be retained. By referring to the total variance explained in Table 1.1 again, this makes sense as the amount of variance explained only levelled off after the eighth factor.

As the eigenvalue method tends to over or under-extract factors and given the fact that the parallel analysis is more accurate than the scree plot method especially when working with ordinal data therefore parallel analysis method was used to verify the exact number
numbers of factors extracted (Gaskin & Happell, 2014). According to the result of the parallel analysis, only six factors’ eigenvalues are greater than the initial eigenvalues in Table 1.1 meaning only six factors should be retained. To aid interpretation, the six factors were subjected to varimax rotation.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>46.311</td>
<td>51.456</td>
</tr>
<tr>
<td>2</td>
<td>3.818</td>
<td>4.243</td>
</tr>
<tr>
<td>3</td>
<td>2.394</td>
<td>2.660</td>
</tr>
<tr>
<td>4</td>
<td>1.999</td>
<td>2.221</td>
</tr>
<tr>
<td>5</td>
<td>1.840</td>
<td>2.045</td>
</tr>
<tr>
<td>6</td>
<td>1.712</td>
<td>1.902</td>
</tr>
<tr>
<td>7</td>
<td>1.565</td>
<td>1.739</td>
</tr>
<tr>
<td>8</td>
<td>1.292</td>
<td>1.435</td>
</tr>
<tr>
<td>9</td>
<td>1.204</td>
<td>1.338</td>
</tr>
<tr>
<td>10</td>
<td>1.135</td>
<td>1.262</td>
</tr>
<tr>
<td>11</td>
<td>1.091</td>
<td>1.212</td>
</tr>
<tr>
<td>12</td>
<td>1.038</td>
<td>1.153</td>
</tr>
<tr>
<td>13</td>
<td>.973</td>
<td>1.082</td>
</tr>
<tr>
<td>14</td>
<td>.927</td>
<td>1.030</td>
</tr>
<tr>
<td>15</td>
<td>.909</td>
<td>1.010</td>
</tr>
</tbody>
</table>

Note: Component 16 to 90 was pared for brevity reason.
The rotated solution revealed that the six factors explained a total of 64.527 percent of the variance in which Factor 1 contributing 16.82 percent, Factor 2 contributing 16.65 percent, Factor 3 contributing 11.10 percent, Factor 4 contributing 10.94 percent, Factor 5 contributing 6.85 percent and Factor 6 contributing 2.18 percent. Intriguingly, the result of the rotated component matrix indicated only five factors was best in explaining the data, with no items loaded on the sixth factor. A close inspection revealed that all items possess loadings from as low as .502 to as high as .707.

To confirm the result above, the data was rotated again using oblique rotation strategy specifically promax rotation. As expected, the result of the promax rotation also supported the five-factor model above with almost similar grouping of items. Since the total variance explained by the five factors exceeded the 60 percent threshold (Meyers et al., 2013) therefore the researcher decided to adopt the five-factors model for further analysis. For this reason, the data was re-run using the previous orthogonal rotation method–varimax rotation, by restricting the number of factors to be extracted to five instead of six.

After the result was obtained, the researcher decided to select five highest loading items to represent each factor instead of minimum three items (Hair et al., 2010). The selected items, its construct changes and factor loadings are shown in Appendix 1.1.
RESULT AND DISCUSSION

The first factor was termed as Self-competence (SEC) as all of the items were originally from this particular dimension as outlined earlier. As for the second factor, the five highest loading items were all from the Shares Leadership (SHL) dimension. Inevitably, this factor was labeled as Shares Leadership (SHL). This was not surprising as leadership sharing is a common practice in middle leadership reality, including for subject leaders (Ghamrawi, 2013; Harris & Jones, 2017; Leithwood, 2016).

For the third factor, the five highest loading items were from Stewardship (STW) and Accountability (ACT) dimensions. Nonetheless, viewing from the lens of work reality of subject leaders, the act of carrying out tasks responsibly (ACT38), assigning teaching duties strategically (STW23), seeking teachers’ view during meeting (ACT46) and being proactive in work (ACT37) implies the practice of “building internal accountability” among teachers in their departments in which this is indeed part of the work routine of subject leaders (Leithwood, 2016). Meanwhile, engaging teachers in curriculum planning activities (STW22) clearly exemplified the practice of “realizing external accountability” in which this was also considered as the duty of subject leader as they were expected by school’s stakeholders to uplift teaching and learning in their subject area (Leithwood, 2016; Turner, 2005). Hence, this factor was termed as “Accountability” (ACT).

The fourth factor was termed “Teacher Capacity Building” (TCB) as all five items selected were from this particular dimension. As for the last factor, the fifth factor, only contains four items thus all items were selected. However, among these items three were from Teacher Capacity Building (TCB) and one was from Stewardship (STW). View differently, the TCB items suggested that the subject leader builds teachers’ professional capacity through collaborative learning practice which implies the work of building professional learning community (Admiraal & Lockhorst, 2012; Brouwer et al., 2012; Stoll et al., 2006). Implicitly, this alludes to the fact that the subject leader “builds community” in school. On the other hand, by referring to the subject leader’s leadership practices outlined by Leithwood (2016), item STW32 (facilitates teachers’ participation in the local community activities) is related to “building productive relations with families and
community” which implies performing “social responsibility” in that the subject leader works with the local community to deliver quality education for long term society welfare (Caldwell et al., 2008, 2010; Hernandez, 2008). Succinctly, the subject leader realizes social responsibility. Put together, it was clear that subject leader engages in “Stewardship” as “social responsibility” and “build community” denote such practice. Critically, considering subject leaders are teacher leaders and Stewardship is an essential attribute for teacher leaders (Harris, 2003; Katzenmeyer & Moller, 2001) hence the last factor was labeled as Stewardship (STW).

Lastly, each factor was assessed by Cronbach’s alpha measure (Hair et al., 2010). The cut-off value for the alpha value was set at >. 70 as suggested by Hair et al. (2010). The result (Appendix 1.1) revealed that all factors possessed alpha that exceeded the cut-off value required.

CONCLUSION

By and large, the exploratory factor analysis had identified the underlying structure of servant leadership attributes in school context. Particularly, servant leadership attributes among subject leaders in schools. Although this study only resides at exploratory level nonetheless it had explored a new horizon into servant leadership feasibility in school context, particularly servant leadership in middle management reality. However, confirmatory factor analysis (cfa) is still needed to measure the items’ psychometric properties before the construct validity for these attributes can be further verified (dennis & bocarnea, 2005; hair et al., 2010; Kline, 2011; meyers et al., 2013). Therefore, future research should use structural equation modelling (sem) to accomplish these purposes so as to confirm these attributes (brown, 2015; hair et al., 2010; Meyers et al., 2013).
REFERENCES


Masuwai Azwani, Nor’ain Mohd Tajudin, & Noor Shah Saad. (2016). Evaluating the face and content validity of a Teaching and Learning Guiding Principles


## Appendix 1.1: Selected Items after EFA, Construct Changes, Factor Loading and Cronbach’s Alpha (α)

<table>
<thead>
<tr>
<th>Construct Before PCA</th>
<th>Item</th>
<th>Construct After PCA</th>
<th>Factor Loading</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-competence (SEC)</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SEC60</td>
<td>treats all teachers fairly even those whom had offended him/ her</td>
<td>SEC1</td>
<td>.731</td>
<td></td>
</tr>
<tr>
<td>SEC61</td>
<td>listens to what school members want to say before responding accordingly</td>
<td>SEC2</td>
<td>.717</td>
<td></td>
</tr>
<tr>
<td>SEC53</td>
<td>able to suggest alternative ideas to resolve work conflicts between school members</td>
<td>SEC3</td>
<td>.706</td>
<td>.909</td>
</tr>
<tr>
<td>SEC56</td>
<td>able to adapt different ideas into a concise approach during school meetings</td>
<td>SEC4</td>
<td>.694</td>
<td></td>
</tr>
<tr>
<td>SEC55</td>
<td>always explains the message implied in any information received before others</td>
<td>SEC5</td>
<td>.691</td>
<td></td>
</tr>
<tr>
<td><strong>Shares Leadership (SHL)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHL89</td>
<td>guides teachers to make decisions on the work they are in-charge of</td>
<td>SHL6</td>
<td>.705</td>
<td></td>
</tr>
<tr>
<td>SHL90</td>
<td>displays appreciation for teachers’ efforts in assisting colleagues</td>
<td>SHL7</td>
<td>.677</td>
<td></td>
</tr>
<tr>
<td>SHL87</td>
<td>guides teachers to coordinate their task with the work of other teachers</td>
<td>SHL8</td>
<td>.677</td>
<td>.927</td>
</tr>
<tr>
<td>SHL88</td>
<td>encourages teachers to consider colleagues’ ideas in work</td>
<td>SHL9</td>
<td>.676</td>
<td></td>
</tr>
<tr>
<td>SHL82</td>
<td>sets department’s achievement target that considered teachers’ views</td>
<td>SHL10</td>
<td>.654</td>
<td></td>
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<tr>
<td><strong>Accountability (ACT)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ACT38</td>
<td>carries out any task responsibly without abdicating it to others</td>
<td>ACT11</td>
<td>.594</td>
<td></td>
</tr>
<tr>
<td>STW23</td>
<td>assigns teaching duties according to teachers’ expertise</td>
<td>ACT12</td>
<td>.577</td>
<td></td>
</tr>
<tr>
<td>STW46</td>
<td>seeks feedback from teachers regarding department work during meetings</td>
<td>ACT13</td>
<td>.569</td>
<td>.894</td>
</tr>
<tr>
<td>ACT37</td>
<td>always proactive in handling departmental work instead of waiting to be told by the principal</td>
<td>ACT14</td>
<td>.567</td>
<td></td>
</tr>
<tr>
<td>STW22</td>
<td>Engages teachers in curriculum activities</td>
<td>ACT15</td>
<td>.539</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Capacity Building (TCB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCB7</td>
<td>gives constructive feedback on teaching issues raised by teachers</td>
<td>TCB16</td>
<td>.737</td>
<td></td>
</tr>
<tr>
<td>TCB6</td>
<td>helps teachers to identify their weakness in teaching and learning</td>
<td>TCB17</td>
<td>.723</td>
<td></td>
</tr>
<tr>
<td>TCB9</td>
<td>guides teachers to teach innovatively according to their competence</td>
<td>TCB18</td>
<td>.701</td>
<td>.905</td>
</tr>
<tr>
<td>TCB8</td>
<td>provides pedagogy ideas to teachers who need guidance</td>
<td>TCB19</td>
<td>.699</td>
<td></td>
</tr>
<tr>
<td>TCB2</td>
<td>guides teachers to use educational theories in lesson planning</td>
<td>TCB20</td>
<td>.690</td>
<td></td>
</tr>
<tr>
<td><strong>Stewardship (STW)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCB17</td>
<td>use teachers’ quality work outcome to inspire other teachers to improve themselves</td>
<td>STW21</td>
<td>.568</td>
<td></td>
</tr>
<tr>
<td>STW32</td>
<td>facilitates teachers’ participation in the local community activities</td>
<td>STW22</td>
<td>.561</td>
<td></td>
</tr>
<tr>
<td>TCB15</td>
<td>guides teachers to use online social network such as Facebook, blog, etc. to gain extra knowledge about teaching and learning</td>
<td>STW23</td>
<td>.538</td>
<td>.811</td>
</tr>
<tr>
<td>TCB14</td>
<td>alerts teachers to read educational news regularly as a way to link their teaching practices with educational theories</td>
<td>STW24</td>
<td>.537</td>
<td></td>
</tr>
</tbody>
</table>