The Correlation between school principal leadership competence and teachers' social behaviours

BURHANUDDIN YASIN,[1] FAISAL MUSTAFA,[2]

Abstract

It has been predicted that the leadership competence of school principals indirectly influences the achievements of students because it has a positive impact on the social behaviour of their teachers. However, the correlation between those variables has not been supported by data. This research was therefore aimed at finding evidence for any correlations between the leadership competence of principals and the social behaviour of teachers under them. The samples were selected randomly, resulting in the selection of 110 EFL teachers in the Province of Aceh, Indonesia. The data for this study were collected using two questionnaires, a questionnaire about the social behaviour of teachers and a questionnaire rating the leadership competence of school principals. The data were analyzed using the Spearman correlation formula at significance level of 0.05. The results showed that almost all the constructs for leadership competence of principals were correlated to all the constructs of social behaviour of teachers at low level (0-0.29, p-value < 0.05) and moderate level (0.30 – 0.49, p-value < 0.05) of correlation. It was unexpected that teachers' punctuality and accountability was not well-correlated to leadership competence of principals (p-value > 0.05). Based on the research results, it is recommended that the recruitment of school principals involve a standardized test consisting of all constructs of leadership competence.

Keywords
Correlation, EFL teacher, leadership competence, school principal social behaviours

1   Faculty of Teacher Training and Education, Universitas Syiah Kuala, Banda Aceh, Indonesia;
     e-mail: burhanyasin@unsyiah.ac.id
2   Faculty of Teacher Training and Education, Universitas Syiah Kuala, Banda Aceh, Indonesia;
     e-mail: faisal.mustafa@unsyiah.ac.id

Introduction

Teacher professional identity refers to the perceived importance of a teacher as a person and as a professional, and this perception can change based on the perception of others, (Karaolis & Philippou, 2019). The concept of teacher professional identity has been studied comprehensively, so it has become a separate field for educational research (Akkerman & Meijer, 2011; Beijaard et al., 2004). One of its most important constructs, the social behaviour of teachers, has been claimed as an important identifier for measuring the influence and the professional performance of teachers (Jermolajeva et al., 2019) In this, our research study we proposed that the social behaviour of teachers can be influenced by external factors such as (1) training in social behaviour, (2) exposure to an environment where certain social behaviour is reinforced, and/or most importantly (3) the leadership competence of the school principal.

The leadership competence of school principals is an area which has received attention by some researchers in the field of education management (Antoniou & Lu, 2018; Aydın & Pehlivan, 2010; Erlangga et al., 2015; Khan, 2012). Based on their research, there was consensus that the managerial competence of the principal can contribute to the academic achievement of students by improving the quality of instructions from their teachers (Gulcan, 2001; Ismail et al., 2018). Thus, a school principal should be selected based on their leadership competence, and tests have been developed to measure this competence.

Despite the significance of school principal leadership competence and its influence on teacher's social behaviour, research on how the leadership competence of a school principal affects the social behaviour of their teachers is rare. Research in this area has mostly focused on the impact of the leadership competence of the school principal on the motivation (Arman et al., 2016), functional competence (Ismail et al., 2018), performance (Erlangga et al., 2015), and work life quality (Rossmiller, 1992) of teachers under them. Information regarding the correlation between constructs of school principal leadership competence and those of teachers' social behaviour is very significant for education practitioners and policy makers in recruiting and training school principals. Therefore, this research was aimed at finding evidence to fill gaps in previous research by answering this research question "is there any significant correlation between the level of managerial competence of a principal and the social behaviour performance of their teachers?" This question was answered through a quantitative study, whose purpose is to make a generalization of the results to the context outside the current study.

This article first gives a brief overview of the variables to be analysed, and the next section is concerned with the methodology used for this study. The results and discussion are provided separately to make the article readable by both readers interested in either quantitative or qualitative information. The final section concludes the results of this study, along with the implications of the results.

Literature Review

This section presents the theoretical framework for this study. It includes discussions regarding the variables involved in this research, viz: the leadership competence of principals and the social behaviour of teachers

Leadership competence

Leadership competence is "the knowledge, skills, abilities, and other characteristics" possessed by a leader to motivate or instruct other people to perform work, which leads to reaching organizational goals (Fowler, 2018, p. 1). In the field of educational organization, a school principal needs to perform well in four aspects of leadership, which are treated as the one construct of leadership competence, viz: (1) Instructional competence, (2) Professional competence, (3) Motivational competence, and (4) Management behaviour (Goden et al., 2016). These aspects have been claimed to be associated with the school atmosphere (Ross & Cozzens, 2016), teachers' motivation in working (Arman et al., 2016), and teachers' competencies (Ismail et al., 2018).

Instructional competence, this first component of leadership competence refers to the ability to exercise power to influence learning (Yang, 1996). The main purpose of instructional leadership is to influence classroom instruction delivered by teachers (Gulcan, 2001). Therefore, a school principal needs to be competent to help teachers develop their lesson plans, assessments and tests. According to Ismail et al. (2018), instructional leadership practice can directly improve the' self-efficacy of teachers which can result in better classroom instructional quality. Instructional quality is strongly associated with the achievements of students (Huth, 2015). Therefore, instructional competence is a key competence which needs to be developed by a school principal to get better school performance.

Professional competence, this component of leadership competence is defined as the ability to supervise teachers, evaluate their performance, provide feedback and facilitate their professional development (Goden et al., 2016). Erlangga et al. (2015) considered that this competence was the key requirement for a school principal in terms of its effect on the performance of their teachers. Accordingly, there is agreement regarding the need for professional development programs for school principals (Valiente Sandó et al., 2018). In addition, in order to have a high level of professional competence, a school principal usually should have had a long career as a teacher (Burkhauser et al., 2012) to develop professional teaching competence.

Motivational competence, teachers require a school principal to have motivational competence, the ability to directly and indirectly motivate teachers to perform better in their jobs and hence to motivate students to perform better (Goden et al., 2016). According to Bitterová et al. (2014), school principals need to be able to create motivational strategies because teachers rate these as very significant for improving performance. A previous study by Lynet et al. (2008) found that school principals in Kenya provided rewards, guidance and

counselling to motivate their teachers. In addition, motivational strategies used by the school principals influenced the quality of classroom instruction delivered by their teachers (Apolline, 2015). Referring to the conceptual framework and motivational role of school principals provided by Lynet et al. (2008) Motivation competence provided by the principals creates more effective teaching by their teacher's, which results in higher academic achievements by their students.

Management behaviour, there have been many studies which deal with the behaviour of school principals in managing their schools, known as management behaviour (Karaköse, 2008; Soucie et al., 2000). Some studies have linked the principal's management behaviour to achievements such as student test scores (Agasisti et al., 2016). Yulk (2013) has categorized management behaviour into four components, viz: giving-seeking information, making decisions, influencing people and building relationships. Studies related to the preferred management behaviour of school principals have had conflicting results (Soucie et al., 2000; Stott & Tin, 2000). Differences in preferred management behaviour are to be expected because management behaviour is influenced by various factors including education level, gender, background, culture and age (Soucie et al., 2000). However, according to Yulk (2013), effective leaders use specific types of behaviour that are relevant for their leadership situation.

The social behaviours of teachers

The social behaviour of teachers, often known as good character, may indirectly influence academic achievements (Shah, 2009b; Shahmohammadi, 2014). An empirical study by Jermolajeva et al. (2019) showed that the social behaviour of teachers is positively correlated with their effective professional work. Aðalsteinsdóttir (2004) has stressed the importance for teachers to recognize and understand their own behaviour because it has a significant effect on the students' educational and social development. According to Lickona (1997), teachers' social behaviour is based on seven constructs, viz: (1) politeness, (2) honesty, (3) punctuality, (4) accountability, (5) care, (6) tolerance, and (7) helpfulness.

Politeness, to maintain a close relationship with students, teachers should always maintain a high level of polite behaviour with all their students (Rahayuningsih et al., 2020). Teachers must always use polite strategies to maintain effective classroom interaction and control (Mahmud, 2019). Brown and Levinson (1987) divided politeness strategies into positive politeness(showing that students' actions were desirable), negative politeness(correcting students' negative actions or words), and off –the-record politeness(producing language which needed to be interpreted)

Honesty, students consider that their teachers need to be honest (Mehdipour & Balaramulu, 2013). In fact, students rated "honesty" as one of the most important behaviours expected from their teachers (Shah, 2009b). In this case, honesty does not merely mean "not telling lies", but Nillsen (2005, p. 86) referred to honesty as "a general state of the person." However, we have not found any empirical studies which have investigated how teachers' honesty has contributed to better academic achievements.

Punctuality is another most important behaviour which students considered of paramount importance (Shah, 2009a). According to Sahito et al. (2016), punctuality is linked to time management, and thus it requires careful planning. In addition, teacher punctuality has been predicted to influence punctuality amongst their students (Butakor& Boatey, 2018). There is a consensus that punctual students tend to have better academic achievements (Elly, 2016; Sultana & Rashid, 2013; Wadi, 2016). Therefore, it can be concluded that the punctuality of their teacher will directly contribute to better academic achievements by their students.

Accountability, teachers "can be held accountable for the performance of their students," as can schools (De Fraine et al., 2002). However, the most direct accountability for the students' progress lies with the teacher because they are perceived as the school component which contributes the most to learning achievements (Schalock, 1998). In fact, many governments have made teachers accountable to achieve the standardized test scores required by their education programs (Berryhill et al., 2009). Therefore, policy is required to ensure that it is the responsibility of teachers to create a professional culture in their class rooms (Garver, 2019).

Care, for a better teaching and learning process, teachers should create a caring environment for their students (Garza et al., 2014). Caring refers to "providing the necessary scaffolding" (Garza, 2007, pp. 81–82; Garza et al., 2014, p. 2), supporting students to exhibit their best performance (Gay, 2000), and listening to them attentively (Alder, 2002). According to Mayeroff (1971, pp. 9–20), the aspects of caring include "knowing, alternating rhythms, patience, honesty, trust, humility, hope, and courage." Having a caring teacher can motivate students to put their best efforts into learning, and thus they can obtain better academic achievements (Lumpkin, 2007).

Tolerance means accepting "different views and beliefs, behaviours and practices" (Baklashova et al., 2015, p. 335). Teachers need to be tolerant to maintain harmony in their classrooms (Lee et al., 2011). This component of social behaviour has not been well documented. In fact, how the tolerance of teachers can affect achievements has not been explicitly explored or studied.

Helpfulness, teachers who are available for students outside the class are perceived as helpful teachers (Brown et al., 2009). Students rated their best teachers to have helpful inter-personal behaviour (Sztejnberg & Hurek, 2004). In addition, an effective classroom requires, among other things, the helpfulness of teachers (Slethaug, 2007). According to teachers, they feel more confident when they are perceived to have helpful interpersonal behaviour (Brekelmans et al., 2002). However, due to lack of research in this area, we know little about how interpersonal behaviour is correlated with academic achievements.

The current study

Some studies have been conducted to seek correlations between school principal leadership competence and teachers. Arman et al. (2016) analysed correlations between school principal leadership competence and teachers' motivation and performance. They found that the competence of the school principals positively affects both response variables. Erlangga et

al. (2015), conducted a similar study and found teachers' motivation correlated to performance, which was correlated to principal leadership competence. Ismail et al. (2018), conducted a research study on the correlation between school principal leadership competence and teachers' functional competence, and found that both variables showed strong positive correlation. Among research studies which investigated correlation between school principal leadership competence, teachers' social behaviour has been neglected. Therefore, linkages between these two variables need to be investigated through a systematic quantitative study.

Since the leadership competence of a school principal is associated with the school environment, as proposed by Ross and Cozzens (2016), and a teacher is a part of the school environment it is hypothesized that the social behaviour of teachers is correlated to the leadership competence of the school principal. The information regarding this correlation is significant for stakeholders to decide which construct of leadership competence should be the focus in the school principal recruitment and pre-service or in-service training. Therefore, the quality of education at school can to some extent be improved. Therefore, this empirical research was done to answer the research question: Is there any correlation between the leadership competence of a school principal and the social behaviour of their teachers?

Methodology

Research design, participants, and locale of the study

The purpose of this study was to find the correlation between constructs of school principal leadership competence and those of teachers' social behaviour. Therefore, this research falls under a correlational study that is a study design in quantitative research. In addition, the variables to seek for correlation was based on previous assumptions proposed in previous research; therefore, this study was exploratory research. This quantitative study was based on observational data obtained from two questionnaires administered under supervision. Quantitative method is appropriate when the research deal with numbers and its purpose is to make generalization of the result (Roever & Phakiti, 2018). This research utilized nominal data converted to number and the analysis was performed using statistics, as suggested for a quantitative study (Neuman, 2014).

Since this study was to employ statistical analysis, which aimed to generalize the results, the sample size follows the requirement proposed for a correlational analysis, i.e. 50 (VanVoorhis & Morgan, 2007). However, we have accessed to larger sample size to arrive at better conclusion for our study. 110 teachers in the province of Aceh were randomly recruited to collect the data for this study. Amongst those teachers, 46 teachers (41.8%) were public senior high school teachers, 8 (7.3%) were vocational senior high school teachers, 52 (47.3%) were junior high school teachers, and 4, (3.6%) were elementary school teachers. All of them were EFL teachers who came from all the districts in the province of Aceh, including western, eastern, and central regions.

Data collection, establishment of reliability, and data analysis

The behaviours of teachers was assessed using a questionnaire designed based on the seven social behaviour constructs proposed in Lickona (1997), which include (a) politeness, (b) honesty, (c) punctuality, (d) accountability, (e) care, (f) tolerance and (g) helpfulness. These constructs are also known as good character constructs. Responses to all the questionnaire items for teachers' behaviour used a four-rating scale, viz: From 4 = always to 1 = rarely. Meanwhile, the leadership competence of the school principals was assessed based on a questionnaire recommended by Goden, Lumbab, Niez, and Coton (2016). This questionnaire was designed based on the constructs of leadership competence which include (1) instructional competence, (2) professional competence, (3) motivational competence and (4) management behaviour. The scales used for the management behaviour sub-scale used a 5-scale rating (from 5 = very competent to 1 = incompetent), and the other questions also used a 5-scale rating from 5= "very effective" to 1 = "ineffective/ not effective". All the questionnaire items were written in *Bahasa Indonesia*, the teachers' L1, to ensure that they did not misunderstood any items in the questionnaire, as suggested by Mackey and Gass (2005).

The reliability levels of the questionnaire were determined for all constructs using split-half technique, which determines the questionnaire internal consistency. The technique utilizes Cronbach's alpha formula, which uses a more sophisticated version of "the split-half analysis as it examines the average inter-item correlation of the items in the questionnaire" (Hinton, 2004, p. 302). The results of reliability analyses show that the questionnaire had high levels of internal consistency. The reliability levels for teachers' social behaviour constructs range between 0.85 and 0.93. In addition, the reliability levels for the constructs of principal's leadership competence range between 0.95 and 0.98. Those levels of internal consistency are considered very high, and thus no item needs to be removed (Stangor, 2011).

Before both of the questionnaires were administered, the teachers were gathered in a classroom and the researchers explained the purpose of the questionnaires and how to complete them, accompanied by examples. The instruction was made in the participants' native language as suggested by Mackey and Gass (2005). After that, each teacher was instructed to write down five colleagues who were so close to them that they could describe their personality. Because the participants were to report their colleagues' social behaviour, it is essential that they know each of them well (Moss, 2013). After that, the researchers randomly selected two of these colleagues. They were not allowed to select their colleagues because they tended to select the person with the best behaviour. Finally, the teachers each completed the two questionnaires delivered online using a Google questionnaire form, first about their two colleagues, who were not necessarily English teachers, and second about their school principal. The researchers were present in the classroom to supervise the participants in completing the questionnaires. It took about half an hour to complete both questionnaires.

Because two colleagues were selected for each teacher, the scores for each questionnaire item were the average of the two answers. Each construct in the questionnaires contained more than one question; therefore, the average results were used for the final

analyses. Finally, to compare whether there were any correlations between the social behaviour of the teachers and the leadership competence of the principals, the Spearman correlation analyses were used. This correlation formula is a non-parametric analysis for categorical data (Roever & Phakiti, 2018). These analyses were performed separately for each construct in both questionnaires. Correlations were decided at the 0.05 level of significance. This small significance level was used to avoid type I error, i.e. rejecting the null hypothesis when it is true (Stangor, 2011). The levels of correlations for the variables which significantly correlate were categories into three levels proposed by Cohen (1988), i.e. low (0.00 – 0.29), moderate (0.30 – 0.49), and high (0.50 – 1.00). This interpretation might be distorted by each data average if two colleagues randomly selected for each teacher had completely different social behaviour.

Ethical considerations

Since this research was self-funded, no external ethical approval was required. However, the informed consent was obtained from all the participants and their answers in the questionnaires were treated with confidentiality. They were not required or allowed to write their names, their colleagues' names, or their school principal's names in the questionnaire.

Findings

The objective of this research was to find out correlation between constructs of school principal's leadership competence and those of teacher's social behaviour. For systematic description of the analysis results, this section is divided into two parts, i.e. the first part where the description of the data is presented and the second part where the results from the inferential statistical analyses are displayed.

Descriptive statistics

In administering the questionnaire for the social behaviour of teachers, the participating teachers filled in questionnaire ratings for their two self-selected colleagues. The subjects that the selected colleagues were teaching are set out in Table 1 that follows.

Table 1. *Subjects taught by colleagues selected by participating teachers*

Subjects	Male	Female	Totals	Frequency
English	3	41	44	23.0%
Math	4	25	29	15.2%
Indonesian Language	4	18	22	11.5%
Natural Science	0	15	15	7.9%
Social Science	0	13	13	6.8%
Chemistry	2	8	10	5.2%
Biology	2	6	8	4.2%

Table 1. *continued……*

Subjects	Male	Female	Totals	Frequency
Religion	1	6	7	3.7%
Moral education	3	3	6	3.1%
Sports & Health Education	4	2	6	3.1%
Economics	1	4	5	2.6%
Arts	0	5	5	2.6%
Physics	1	3	4	2.1%
History	3	1	4	2.1%
Arabic	0	3	3	1.6%
General Subject	0	3	3	1.6%
Geography	0	2	2	1.0%
Japanese	0	1	1	0.5%
Fashion	0	1	1	0.5%
Productive	0	1	1	0.5%
Counselling	0	1	1	0.5%
Special education	0	1	1	0.5%
TOTAL	29	162	191	100.0%

The table showed that teachers of English (EFL) were the most numerous with 44 or 23% of the total of the selected colleagues. This was expected because it was English teachers who provided the five names of their closest colleagues, and it is common for teachers to be close to other teachers teaching the same subject at their school. In addition, 85% of the selected colleagues were females, and this is representative of the gender distribution of teachers in schools in Indonesia. The ages of the selected colleagues are presented in Table 2 which follows.

Table 2. *Age ranges of the selected teachers*

Age Range	Number of teachers	Frequency
25-30	28	14.7%
31-35	60	31.4%
36-40	58	30.4%
41-45	19	9.9%
46-50	16	8.4%
51-55	8	4.2%
56-60	1	0.5%
>60	1	0.5%
Totals	191	100.0%

Table 2 shows that over half of the teachers selected were between 31 and 40 years of age. Only 5% of them were over 50 years old.

Descriptive results of questionnaire constructs

Table 3 provides descriptive statistics of the results of the questionnaire for the social behaviour of the teachers and for the leadership competence of the principals. Table 3 a for the social behaviour of teachers and Table 3b for the Leadership Competence of Principals include seven values, viz: minimum values, quartile 1, median, quartile 3, mean, maximum and standard deviation.

Table 3a. *Social behaviour of teachers*

No	Construct	Min	Q1	Med	Q3	Max	Mean	SD
1	Politeness	1.00	3.26	3.55	3.86	4.00	3.49	0.47
2	Honesty	1.86	2.71	3.14	3.57	4.00	3.14	0.53
3	Punctuality	2.00	3.00	3.33	3.69	4.00	3.31	0.47
4	Accountability	2.06	3.00	3.38	3.75	4.00	3.35	0.44
5	Care	2.06	3.00	3.38	3.70	4.00	3.34	0.45
6	Tolerance	1.42	3.00	3.33	3.67	4.00	3.29	0.54
7	Helpfulness	2.00	3.00	3.50	3.83	4.00	3.39	0.51

Table 3b. *Leadership competence of principals*

No	Construct	Min	Q1	Med	Q3	Max	Mean	SD
1	Instructional competence	1.20	2.40	3. 20	3.93	4.80	3.14	0.91
2	Professional competence	1.10	2.48	3.25	4.00	4.80	3.14	0.88
3	Motivational competence	1.40	2.80	3.60	4.10	5.00	3.45	0.96
4	Management behaviour	1.37	2.69	3.45	3.84	4.77	3.25	0.81

Table 3 shows that the data only deviates about 0.5 from the mean for the social behaviour of teachers, and close to 1 for leadership competence of their principals. In addition, the means for the social behaviour were higher than those for leadership competence.
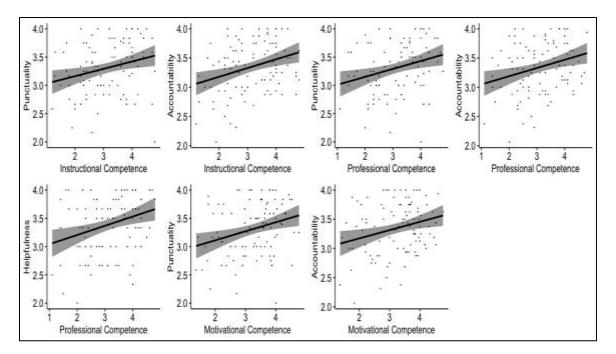
Correlation analyses

The correlations between constructs in leadership competence of principals and the social behaviour of teachers were obtained based on the Spearman correlation coefficient. The results of the correlation analyses are presented in the following correlation matrix table.

Table 4. *Correlations between leadership competence and social behaviour*

	Instructional competence		Professional competence		Motivational competence		Management behaviour	
	R	p-value	R	p-value	R	p-value	R	p-value
Politeness	0.4156	0.0000	0.4102	0.0000	0.3501	0.0003	0.4356	0.0000
Honesty	0.3516	0.0002	0.4341	0.0000	0.3356	0.0005	0.3977	0.0000
Punctuality	0.2912	0.0027	0.2914	0.0027	0.1853	0.0597	0.2840	0.0035
Accountability	0.2588	0.0079	0.2390	0.0145	0.1621	0.1001	0.2072	0.0348
Care	0.4271	0.0000	0.3236	0.0008	0.3067	0.0015	0.3597	0.0002
Tolerance	0.3456	0.0003	0.3207	0.0009	0.3176	0.0010	0.3365	0.0005
Helpfulness	0.3138	0.0012	0.2663	0.0063	0.3174	0.0010	0.3493	0.0003

Table 4 shows that almost all pairs are significantly correlated at the important cut-off level of 0.05, except for the motivational competence of principals and the punctuality and accountability of teachers. However, the levels of the correlations are mostly rather weak, especially for motivational competence. The strength of correlation was categorized using the range provided by Cohen (1988), i.e. low (0.00 – 0.29), moderate (0.30 – 0.49), and high (0.50 – 1.00). Thus, based on Table 4, the correlations ranged from low to moderate. For better visualization, the low and moderate correlations are presented in the following figures.

Figure 1. *Low correlations between leadership competences of principals and social behaviour of teachers*
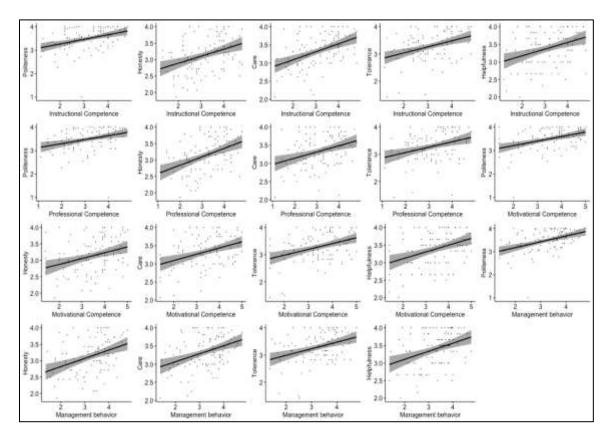
Figure 2. *Moderate Correlations between leadership competences of principals and social behaviour of teachers*

Figure 1 and Figure 2 above show that the linear correlation lines are uniform across all pairs for each figure, and there is a slight difference between the lines in Figure 1 (low correlation) and Figure 2 (Moderate correlation).

Discussion

The objective of this study was to find correlations between the constructs of leadership competencies for high school principals and the social behaviour of teachers. The correlations were obtained by analysing the results of two questionnaires using the Spearman correlation formula. The results showed that the politeness, honesty, care, and tolerance of teachers were all positively correlated to all the constructs of managerial competencies of the principal at a moderate level (0.30 – 0.49). The helpfulness of teachers was only lowly correlated to the professional competence of the principals but was moderately correlated to other constructs of managerial competence. In addition, the punctuality and helpfulness of teachers were lowly correlated to all the constructs of managerial competence of their principals except for motivational competence, where there was no evidence of correlation.

As much as the results were interesting, it was unexpected that punctuality and accountability were not correlated to all constructs of leadership competence, and when they were, the correlations were low. An explanation for the uncorrelated construct of punctuality has been given by Levine et al. (1980) who found that punctuality is a complex behaviour, and it requires a high degree of internal force. Meanwhile, the leadership competence of the principals is not an internal force, but rather, it is an external force. Although an external force is influential for other constructs, it does not have much effect on punctuality, nor does it have much effect on accountability. As for accountability, according to Bivins (2016) accountability is a very important element of human character due to the power that it possesses. Accountable behaviour requires strong beliefs and attitude (Hall et al., 2017), and it seems that the leadership competence of a principal, especially motivational competence, cannot trigger those requirements.

A weak correlation was also found between professional competence and the helpfulness of teachers. The professional competence of a principal was found to be related to the performance and development of their teachers (Goden et al., 2016), which are more related to competency than social behaviour. When implementing professional competence, school principals must give feedback for the performances of their teachers, which must be related to their performances in their classrooms. On the other hand, teachers are considered helpful when they are available for counselling outside their classroom settings (Brown et al., 2009). The results showed that these variables were lowly correlated. On the other hand, the helpfulness of teachers was moderately correlated with the motivational competence and management behaviour of their principal because principals can motivate their teachers to be helpful and to show a model of how to be helpful. In addition, helpfulness was also moderately correlated to the instructional competence of their principal because principals can instruct teachers to participate in activities that are perceived as helpful by their students.

The other four constructs for the social behaviour of teachers were moderately correlated to all the constructs for the leadership competence of principals, viz: politeness, honesty, care, and tolerance. These results suggest that, first, the better the leadership competence of a school principal, the more polite, honest, caring and tolerant the teachers will be in the given school. If this correlation signals causation, it is suggested that school principals be selected after meeting a standard in leadership competence to ensure that they can lead their staff to be better teachers. According to Mahmud (2019), Shah (2009b), Garza et al. (2014), and Lee et al. (2011), when teachers are polite, honest, caring, and tolerant students will have a better learning experience, which is a strong predictor of better academic achievement (Diseth et al., 2006).

The results of this study have confirmed that most of the constructs of leadership competence of principals are significantly correlated with the social behaviour of their teachers, at the 0.05 level of significance. Correlation, where no other variables are controlled, does not imply causation. Thus it is not wise to conclude that constructs of the social behaviour of teachers which were correlated to those of the leadership competence of principals were actually influenced by the leadership competence. However, this causal relationship can be presumed as this relationship is predicted in other literature. In this study,

experts in educational management have claimed that leadership competence can contribute to the social behaviour of teachers without statistical evidence; hence, in this case a causal relationship can be assumed.

Also, this study has shown that the leadership competence of school principals did not influence the punctuality of their teachers because punctuality needs strong intrinsic motivation. Therefore, due to the significance of punctuality in education, a test of punctuality should be included in teacher recruitment tests. In addition, pre-service teachers should be exposed to activities which can develop punctuality during their formal training at university. In addition, accountability also needs to be holistically accessed to ensure that teachers achieve a standard level of accountable behaviour. An accountability assessment scale has been developed by Hochwarter et al. (2007), which can be adapted for schools although it was initially intended for use to assess political accountability.

The objective of a quantitative study is to generalize the results of statistical analysis in a broader context. However, the generalizability of the results from this research must be subject to some limitations. First, some school principals who were included in these analyses had just been appointed, so it was not clear whether their leadership competence had had an adequate effect on the social behaviour of teachers under them. Second, the effect of demographic data such as age, level of education and social status might play a role in these correlations. However, in this study, it was not possible to separate the data for such analyses due to the small sample size. Possibly, in future, new studies can base their conclusions on larger samples. Finally, no other variables were controlled in this study. Although the literature supports causal relationship, there is a possibility for other confounding variables. Therefore, when further experimental studies are done in future, more confident conclusions can then be drawn.

Conclusion and Implications

The objective of this research study was to find out whether the leadership competence of school principals could be correlated to the social behaviour of their teachers. The study data was obtained from questionnaires distributed to 110 teachers of English as a foreign language. Two questionnaires were used in this study, viz: one about the social behaviour of teachers and the other concerning the leadership competence of their principals. In the first questionnaire the teachers rated the constructs of social behaviour for two of their colleagues, and in the second one they rated the leadership competence of their school principal. Correlations were calculated for each construct of both variables using the Spearman Correlation formula at the 0.05 level of significance. The results showed good evidence of correlation between variables except for those between the constructs of motivational competence for the principal and punctuality and accountability for the teachers where there was low correlation. Another low correlation was found between the helpfulness behaviour of teachers and the professional competence of their principal. All other variable pairs were moderately correlated. Based on the study results, it is recommended that school principals should be recruited using a standardized test which includes constructs of leadership

competence because their competence will indirectly contribute to the academic and other achievements of their students.

The results of this study have provided some implications in the field of educational management. First, based on these unexpected results, we can conclude that a school principal needs to take a more serious approach to ensure that teachers are punctual and accountable. Dorsel (1987) has suggested that severe punishment for not being punctual and accountable, which are both external factors, might help. Second, this study has shown that leadership competence is so significant for teachers that it can have a significant effect on the academic achievement of students by improving the performance of teachers in terms of their social behaviour. Therefore, recruitment for school principals should be based on a standardized test consisting of all constructs of leadership competence outlined in this study.

Disclosure statement

There is no conflict of interest reported by the authors.

Acknowledgments

References

Aðalsteinsdóttir, K. (2004). Teachers' behaviour and practices in the classroom. *Scandinavian Journal of Educational Research*, *48*(1), 95–113.

Agasisti, T., Falzetti, P., & Soncin, M. (2016). Italian school principals' managerial behaviors and students' test scores: An empirical analysis. *SIEP Working Paper*, *709*.

Akkerman, S. F., & Meijer, P. C. (2011). A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, *27*(2), 308–319.

Alder, N. (2002). Interpretations of the meaning of care: Creating caring relationships in urban middle school classrooms. *Urban Education*, *37*(2), 241–266.

Antoniou, P., & Lu, M. (2018). Evaluating the measuring properties of the principal instructional management rating scale in the Chinese educational system. *Educational Management Administration & Leadership*, *46*(4), 624–641.

Apolline, A. T. (2015). *Motivational strategies used by principals in the management of schools: The case of some selected secondary schools in the Fako Division of the Southwest Region of Cameroon*. University of Jyvaskyla.

Arman, Thalib, S. B., & Manda, D. (2016). The effect of school supervisors competence and school principals competence on work motivation and performance of Junior High

School teachers in Maros Regency, Indonesia. *International Journal of Environmental and Science Education*, *11*(15), 7309–7317.

Aydın, İ., & Pehlivan, Z. (2010). Strategies and personality types used by primary school principals in Turkey to influence teachers (Ankara case). *Procedia - Social and Behavioral Sciences*, *2*, 3652–3659.

Baklashova, T. A., Galishnikova, E. M., & Khafizova, L. V. (2015). The effects of education on tolerance: Research of students' social and ethnic attitudes. *Mediterranean Journal of Social Sciences*, *6*(1), 335–340.

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, *20*(2), 107–128.

Berryhill, J., Linney, J. A., & Fromewick, J. (2009). The effects of education accountability on teachers: Are policies too stress-provoking for their own good? *International Journal of Education Policy and Leadership*, *4*(5), 1–14.

Bitterová, M., Hašková, A., & Pisoňová, M. (2014). School leader's competencies in management area. *Procedia - Social and Behavioral Sciences*, *149*, 114–118.

Bivins, T. H. (2016). Responsibility and Accountability. In K. Fitzpatrick & C. Bronstein (Eds.), *Ethics in Public Relations: Responsible Advocacy Ethics in public relations: Responsible advocacy* (pp. 19–38). SAGE Publications, Inc.

Brekelmans, M., Wubbels, T., & den Brok, P. (2002). Teacher experience and the teacher–student relationship in the classroom environment. In S. C. Goh & M. S. Khine (Eds.), *Studies in Educational Learning Environments: An International Perspective* (pp. 73–99). World Scientific. https://doi.org/10.1142/9789812777133_0004

Brown, M. J., Baillie, M., & Fraser, S. (2009). Rating ratemyprofessors.com: A comparison of online and official student evaluations of teaching. *2College Teaching*, *57*(2), 89–92.

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (J. J. Gwnperz (ed.). Cambridge University Press. https://doi.org/10.2307/3587263

Burkhauser, S., Pierson, A., Gates, S. M., & Hamilton, L. S. (2012). *Addressing challenges in evaluating school principal improvement efforts*. RAND Corporation.

Butakor, P. K., & Boatey, B. O. (2018). Supervision of teacher's punctuality and students' attendance in senior high schools: Exploring the views of students. *Journal of Education and Practice*, *9*(30), 71–79.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

De Fraine, B., Van Damme, J., & Onghena, P. (2002). Accountability of schools and teachers: What should be taken into account? *European Educational Research Journal*, *1*(3), 403–428. https://doi.org/10.2304/eerj.2002.1.3.2

Diseth, Å., Pallesen, S., Hovland, A., & Larsen, S. (2006). Course experience, approaches to learning and academic achievement. *Education + Training*, *48*(2/3), 156–169.

Dorsel, T. N. (1987). Education's "4th R": Responsibility. *Psychology in the Schools*, *24*, 151–152. https://doi.org/10.1002/1520-6807

Elly, R. (2016). Hubungan kedisiplinan terhadap hasil belajar siswa kelas V di SD Negeri 10 Banda Aceh [Correlation between punctuality and achievement of grade five

students at Public Elementary School 10 in Banda Aceh]. *Jurnal Pesona Dasar*, *3*(4), 43–53.

Erlangga, E., Sugiyo, & Supriyo. (2015). Kepemimpinan kepala sekolah, kompetensi professional berpengaruh terhadap kinerja guru BK melalui motivasi kerja [School principal leadership, professional competence influenced councelling teachers' performance through working motivation]. *Jurnal Bimbingan Konseling*, *4*(2), 72–78.

Fowler, S. (2018). Toward a new curriculum of leadership competencies: Advances in motivation science call for rethinking leadership development. *Advances in Developing Human Resources*, *20*(2), 182–196. https://doi.org/10.1177/1523422318756644

Garver, R. (2019). Evaluative relationships: teacher accountability and professional culture. *Journal of Education Policy*. https://doi.org/10.1080/02680939.2019.1566972

Garza, R. (2007). "She teaches you like if she were your friend:" Latino high school students describe attributes of a caring teacher Introduction. *Journal of Border Educational Research Journal of Border Educational Research*, *6*(1), 81–90.

Garza, R., Alejandro, E. A., Blythe, T., & Fite, K. (2014). Caring for students: What teachers have to say. *International Scholarly Research Notices*, *2014*, 1–7.

Gay, G. (2000). *Culturally responsive teaching: theory, research, and practice*. New York: Teachers College Press.

Goden, L. T., Lumbab, N. T., Niez, R. A., & Coton, V. G. (2016). Influence of school heads' instructional competencies on teachers' management in Leyte division, Philippines. *International Journal of Engineering Sciences & Research Technology*, *5*(7), 513–530.

Gulcan, M. G. (2001). Research on instructional leadership competencies of school principals. *Education*, *132*(3), 625–636.

Hall, A. T., Frink, D. D., & Buckley, M. R. (2017). An accountability account: A review and synthesis of the theoretical and empirical research on felt accountability. *Journal of Organizational Behavior*, *38*(2), 204–224. https://doi.org/10.1002/job.2052

Hinton, P. R. (2004). *Statistics explained* (2nd ed.). New York: Routledge.

Hochwarter, W. A., Ferris, G. R., Gavin, M. B., Perrewé, P. L., Hall, A. T., & Frink, D. D. (2007). Political skill as neutralizer of felt accountability—job tension effects on job performance ratings: A longitudinal investigation. *Organizational Behavior and Human Decision Processes*, *102*(2), 226–239. https://doi.org/10.1016/j.obhdp.2006.09.003

Huth, R. (2015). A strategy for classroom management success. *Journal on Best Teaching Practices*, *2*(2), 4–6.

Ismail, S. N., Don, Y., Husin, F., & Khalid, R. (2018). Instructional leadership and teachers' functional competency across the 21st century learning. *International Journal of Instruction*, *11*(3), 135–152. https://doi.org/10.12973/iji.2018.11310a

Jermolajeva, J., Bogdanova, T., & Silchenkova, S. (2019). Social behavior of school teachers of Latvia and Russia in the structure of teacher professional identity. *Economics and Culture*, *15*(2), 43–54. https://doi.org/10.2478/jec-2018-0019

Karaköse, T. (2008). An Evaluation on Principals' Managerial Behaviors: The Profile of Principal from the Teachers' Point of View. *World Applied Sciences Journal*, *3*(1), 67–72.

Karaolis, A., & Philippou, G. N. (2019). Teachers' professional identity. In M. S. Hannula,

G. C. Leder, F. Morselli, M. Vollstedt, & Q. Zhang (Eds.), *Affect and Mathematics Education. ICME-13 Monographs* (pp. 397–417). Springer International Publishing.

Khan, A. (2012). Instructional management of a private and a government secondary school principal in Northern Pakistan. *International Journal of Educational Development*, *32*(1), 120–131. https://doi.org/10.1016/j.ijedudev.2010.12.003

Lee, Y., Chao, C., & Chen, C. (2011). The influences of interest in learning and learning hours on learning outcomes. *Global Journal of Engineering Education*, *13*(3), 140–153.

Levine, R. V., West, L. J., & Reis, H. T. (1980). Perceptions of time and punctuality in the United States and Brazil. *Journal of Personality and Social Psychology*, *38*(4), 541–550.

Lickona, T. (1997). The teacher's role in character education. *Journal of Education*, *179*(2), 63–80. https://doi.org/10.1177/002205749717900206

Lumpkin, A. (2007). Caring teachers the key to student learning. *Kappa Delta Pi Record*, *43*(4), 158–160.

Lynet, M. L., Judith, A., & Kasandi, S. (2008). The motivational strategies used by headteachers in academic achievement in secondary schools in Vihiga District, Kenya. *Problems of Education in the 21th Century*, *8*, 79–89.

Mahmud, M. (2019). The use of politeness strategies in the classroom context by English university students. *Indonesian Journal of Applied Linguistics*, *8*(3), 597–606.

Mayeroff, M. (1971). *On caring*. Harper and Row.

Mehdipour, Y., & Balaramulu, D. (2013). Students attitude toward teacher's behavior in Hyderabad universities. *International Journal of Scientific and Research Publications*, *3*(6),1-5.

Moss, C. (2013). Research on classroom summative assessment. In J. H. McMillan *SAGE handbook of research on classroom assessment* (pp. 235-255). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781452218649.n14

Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Essex: Pearson Education Limited.

Nillsen, R. (2005). The concept of integrity in teaching and learning. *Journal of University Teaching and Learning Practice*, *2*(3), 85–93.

Rahayuningsih, D., Saleh, M., & Fitriati, S. W. (2020). The realization of politeness strategies in EFL teacher-students classroom interaction. *English Education Journal*, *10*(1), 85–93.

Roever, C., & Phakiti, A. (2018). *Quantitative methods for second language research*. New York: Routledge.

Ross, D. J., & Cozzens, J. A. (2016). The principalship: Essential core competencies for instructional leadership and its impact on school climate. *Journal of Education and Training Studies*, *4*(9), 162–176. https://doi.org/10.11114/jets.v4i9.1562

Rossmiller, R. A. (1992). The Secondary School Principal and Teachers' Quality of work Life. *Educational Management Administration & Leadership*, *20*(3), 132–146.

Sahito, Z., Khawaja, M., Panhwar, U. M., Siddiqui, A., & Saeed, H. (2016). Teachers' time management and the performance of students: A comparison of government and private schools of Hyderabad, Sindh, Pakistan. *World Journal of Education*, *6*(6), 42–50.

Schalock, H. D. E. L. (1998). Student progress in learning: Teacher responsibility, accountability, and reality. *Journal of Personnel Evaluation in Education*, *12*(2), 237–246.

Shah, S. S. A. (2009a). *Impact of teacher's behavior on the academic achievement of university students*. Arid Agriculture University.

Shah, S. S. A. (2009b). Impact of teacher's behaviour on the academic achievement of university students. *Journal of College Teaching & Learning*, *6*(1), 69–74. https://doi.org/10.19030/tlc.v6i1.1183

Shahmohammadi, N. (2014). Review on the impact of teachers' behaviour on students' self-regulation. *Procedia - Social and Behavioral Sciences*, *114*, 130–135. https://doi.org/10.1016/j.sbspro.2013.12.672

Slethaug, G. E. (2007). The teacher-oriented classroom. In G. E. Slethaug (Ed.), *Teaching Abroad* (pp. 79–102). Hongkong University Press. https://doi.org/10.1038/352273c0

Soucie, D., Ming, Z. Y., & Fatt, L. W. (2000). Managerial behaviours of primary and secondary school principals in Singapore. *ERA-AME-AMIC Joint Conference*, 511–519.

Stangor, C. (2011). *Research methods for the behavioral sciences* (4th ed.). Belmont: Wadsworth, Cengage Learning.

Stott, K., & Tin, L. G. (2000). Leadership in Singapore schools: The impact of national culture. *Asia Pacific Journal of Education*, *20*(2), 99–109. https://doi.org/10.1080/02188791.2000.10600186

Sultana, A. M., & Rashid, S. N. M. B. (2013). A study on time management and punctuality issues among students at secondary school, Kedah. *American Journal of Economics*, *3*(5C), 52–56. https://doi.org/10.5923/c.economics.201301.10

Sztejnberg, A., & Hurek, J. (2004). Preferred teacher-student interpersonal behavior: Differences between Polish primary and higher education students ' perceptions. *Journal of Classroom Interaction*, *39*(2), 32–40.

Valiente Sandó, P., Prada, J. J. D. T., Sarduy, Y. P., & Ramírez, J. G. (2018). The training of school principals: A study in the Cuban context. *Educational Management Administration and Leadership*, *46*(2), 258–278. https://doi.org/10.1177/1741143217725321

VanVoorhis, C. R. W., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology, 3*(2), 43–50.

Wadi, H. (2016). Hubungan kedisiplinan belajar siswa dengan hasil belajar pada mata pelajaran Teknik Las Dasar di SMK Muhammadiyah 1 Padang [Correlation between punctuality in learning and achievement in Basic Welding Technique at SMK Muhammadiyah 1 Padang]. *Jurnal Pendidikan Teknik Mesin*, *1*(3).

Yang, C. S. (1996). *Instructional leadership behaviors of elementary school principals in Taiwan, Republic of China*. University of Northern Colorado, Greeley, CO.

Yulk, G. (2013). *Leadership in organizations* (8th ed.). Pearson Education Limited.

Biographical notes

BURHANUDDIN YASIN holds a PhD in Education Management and is a senior lecturer at the Study Program of English Language Education, Faculty of Teacher Training and Education, University of Syiah Kuala, Banda Aceh, Indonesia. He is currently the head of the Study Program of English Language Education at the same university. E-mail: burhanyasin@unsyiah.ac.id

FAISAL MUSTAFA graduated from Syiah Kuala University with a Bachelor's degree in English Language Teaching in 2008 and earned a Master's degree in Linguistics from the University of Manchester in 2011. He is currently the vice chief editor of the Studies in English Language and Education, an academic journal managed by the Department of English Education at the Syiah Kuala University, Banda Aceh, Indonesia. E-mail: faisal.mustafa@unsyiah.ac.id