Leaderdship Styles_DMS and TJS By Hasan Hariri

WORD COUNT



School Leadership & Management SCHOOL LEADERSHIP & MANAGEMENT Formerly School Organisation ISSN: 1363-2434 (Print) 1364-2626 (Online) Journal homepage: http://www.tandfonline.com/loi/cslm20 Teacher-perceived principal leadership styles, decision-making styles and job satisfaction: how congruent are data from Indonesia with the Anglophile and Western literature? Hasan Hariri, Richard Monypenny & Murray Prideaux To cite this article: Hasan Hariri, Richard Monypenny & Murray Prideaux (2016) Teacherperceived principal leadership styles, decision-making styles and job risfaction: how congruent are data from Indonesia with the Anglophile and Western literature?, School Leadership & Management, 36:1, 41-62, DOI: 10.1080/13632434.2016.1160210 To link to this article: http://dx.doi.org/10.1080/13632434.2016.1160210 Published online: 11 Apr 2016. Submit your article to this journal 🖸 Article views: 73 View related articles 🗩 🛛 View Crossmark data Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=csIm20 Download by: [Dr Hasan Hariri] Date: 05 June 2016, At: 06:55



Teacher-perceived principal leadership styles, decisionmaking styles and job satisfaction: how congruent are data from Indonesia with the Anglophile and Western literature?

Hasan Hariri^a, Richard Monypenny^b and Murray Prideaux^b

^aTeachers Training and Education Faculty, University of Lampung (Unila), Bandar Lampung, Indonesia; ^bCollege of Business, Law and Governance, James Cook University, Townsville, Australia

ABSTRACT

School leadership is seen as important for both schools and for government and private policy-makers. The relationships between teacher-perceived principal leadership styles, teacher-perceived principal decision-making styles and teacher-perceived job satisfaction in schools in Lampung Province, Indonesia were examined. Data were collected by questionnaires from 475 teachers. This paper uses Indonesian data, but the relationships studied will be of wider interest to school stakeholders in Indonesia and to a wider global readership. Considerable effort was placed on the collection of robust data to address existing gaps in the literature about these relationships. The data are available to be shared with other interested parties. Findings suggest that five variables (of the nine variables that were studied) can significantly (p < .001) predict teacher job satisfaction. Transformational leadership style and rational decision-making style are the best predictors and are likely to contribute to increased teacher 27 bb satisfaction. In contrast, laissez-faire leadership style, intuitive decision-making style and avoidant decision-making style are likely to contribute to decreased teacher job satisfaction. This paper is the third paper of five papers about school leadership in Indonesia.



Received 4 December 2013 Accepted 27 February 2016

KEYWORDS

Principal leadership styles; principal decision-making styles; teacher job satisfaction

Introduction

School leadership matters because it improves student outcomes and has an impact on student performance (Ward 2013, 62). This happens thro 75 school leadership influencing teachers' motivations, capacities, and their workplace climate and environment (Pont, Nusche, and Moorman 2008, 32), as well as through influencing school goals, culture, structure, social networks and people (Ward 2013, 62). Therefore, school leadership late been, and will continue to be, a priority in education policy in many countries; for example 33 cross the Organisation for Economic Co-operation and Development and its pa 84 r countries (Pont, Nusche, and Moorman 2008, 32).

School principals' leadership styles have been found to be related to decision-making styles (Kao and Kao 2007, 71). Effective school principals have been seen to involve teachers in decision-making (Barnett and McCormick 2003, 64; Parker and Raihani 2011; Pashiardis 1993, 8; Williams 2006). Principal leadership styles are related to their

CONTACT Richard Monypenny S richard.monypenny@jcu.edu.au 2016 Informa UK Limited, trading as Taylor & Francis Group

42 😉 H. HARIRI ET AL.

decision-making styles (Hariri, Monypenny, and Prideaux 2014) and principal decisionmaking styles can significantly predict teacher job satisfaction (Hariri, Monypenny, and Prideaux 2012). Effective principals also tend to produce satisfied teachers (Nguni, Sleegers, and Penessen 2006).

The aim of this paper is to investigate relationships between teacher-perceived principal leadership styles, teacher-perceived principal decision-making styles and teacher-perceived job satisfaction in schools in Lampung Province, Indonesia. Data are used first to draw conclusions about the relationships under study, and secondly to determine how congruent are the findings for Indonesia with similar Anglophile and Western literature. Two research questions guide this paper:

- (1) How significantly can teacher-perceived principal leadership styles and decisionmaking styles predict teacher job satisfaction?
- (2) How significantly can teacher-perceived principal leadership styles and decisionmaking styles still predict teacher job satisfaction after the participants' demographics (gender, marital status, certification, school location and tenure with current principal) are controlled for?

This research is important so that Indonesian researchers do not have to start from scratch or have to go back to basics in terms of leadership in schools in Indonesia; rather, they can focus on confirming or validating non-Indonesian findings with Indonesian data.

It is hoped that these findings will move the conversation forwards in terms of supporting the next generation of Indonesian researchers with some evidence to help them draw on some of the non-Indonesian findings in the largely Anglophile and Western literature. They will then be able to apply their findings in the Indonesian education system.

This paper has five parts. First, it reviews the literature on school leadership styles and the links to teacher job satisfaction. Second, it briefly describes the structure of Indonesia's educational system; how principals are selected and trained and the contextual variables (those variables outside the study) that frame the paper's findings. Third, it describes the sample, instruments, data collection procedure and data analysis. Fourth, it presents findings. Finally, it outlines conclusions and implications.

Literature review

Introduction

Indonesia, like other Asian countries, is a collectivist society, and the uniqueness of the Indonesian culture is 'kekeluargaan' (familial relationship) among the people (Raihani 2007). The transformational leadership model is applicable in the collectivist societies of Asia (including Indonesia) despite its origin from the individualistic United States (Bass 1999, 16). In this context, this paper draws on three peoples of the literature: the literature on school leadership styles, school decision-making styles and on teacher job satisfaction. However, within the context of this brief literature review, only school leadership and the links to job satisfaction are examined; for more details, please refer to Hariri (2011).

In t₈₃s of methodology, this paper first examines leadership styles, that is, transformational, transactional and laissez-faire leadership styles (Bass 1997; Northouse 2007). These can be measured using Multifactor Leadership Questionnaire (MLQ) 5X-Short (Bass and Avolio 2004). These three leadership styles tend to be related to particular decision-making styles (Tatum et al. 2003, 1012).74

Transformational leaders are usually associated with a more comprehensive (rational) decision-making style, while transactional leaders are associated with a less comprehensive decision-making style (Tatum et al. 2003, 1007). However, little is known in the literature about the relationships between the leadership styles and the decision-making styles across the v₈₂Id, particularly in Asia (including Indonesia).

Second, in terms of measuring decision-making, this paper draws on the General Decision-making Style (GDMS) inventory developed by Scott and Bruce (1995). The model consists of five different styles: rational, dependent, intuitive, spontaneous and avoidant decision-making.

Research has revealed the relationships between leadership style and job satisfaction (Ejimofor 2007; Elpers and Westhuis 2008; Erkutlu 2008; Griffiti 2004; Nguni, Sleegers, and Denessen 2006; Walumbwa et al. 2005). In particular, principal leadership style has a significant and positive effect on terms in job satisfaction (Ejimofor 2007; Griffith 2004; Nguni, Sleegers, and Denessen 2006). 'Satisfied teachers are likely to be more enthusiastic and to spend more time and energy on educating students' (Nguni, Sleegers, and Denessen 2006), 173). Accordingly, satisfied and productive teachers are a key factor in the success of education (Firman and Tola 2008) and can contribute to student achievement as a key indicator of school performance. Although extensive studies on these relationships have been undertaken, research on whether leadership styles as well as decision-making styles can predict job satisfaction in school contexts is scarce across the world, particularly in Asia.

School leadership

41

School leadership is important for school effectiveness, that is, to prepare students to achieve their future success. Principals have significant impacts upon the success of schools (Gurr, Drysdale, and Mulford 2005; Raihani 2008; Wanzare 272). In the last two decades, leadership development in schools (Mertkan 2011, 79) and the impact of transformational school leadership on school organisation, on teachers and on students (Leithwood and Sun 2012) has been an area of much research, and of policy activity. This is in part because preparation of school leaders is seen as a very serious business (Crawford and Cowie 2012; Odhiambo and Hii 2012; Siegrist 1999). This paper tak 71 school leadership to be school principal's leadership styles, and the school principal's decision-making styles and their interaction with teacher job satisfaction. This focus is largely because we care say from the work by Leithwood and his colleagues that, to date, they have not found a single case of a school improving its student achievement record in the absence of talented and effective leadership. However, studies of school leadership are still few in the Asian context (Raihani 2008; Wong and Wong 2005).

Links to job satisfaction

Job sat 23 ction is an affective or attitudinal reaction to a job (Spector 1985, 694). More precisely, job satisfaction is defined as a state of mind that encompasses all feelings determined by the extent to which the individuals perceive their job-related needs to be

44 😉 H. HARIRI ET AL.

being met (Evans 2001, 294). When an individual's needs are fulfilled, they will be satisfied, and vice versa (they will be dissatisfied when their needs are not met). In a school context (Boreham, Gray, and Blake 2006; Menon 2012; Ngimbudzi 2009; Seco 2002; Skaalvik and Skaalvik 2010), when teachers enjoy their work they do not want to leave their schools, they are devoted or committed to their job, and they do not want to abandon their profession – they are stimulated to perform their job very well to achieve school goal 65 eachers with high satisfaction often outperform those without high job satisfaction (Judge et [92]001, as cited in Klassen and Chiu 2010; Sargent and Hannum 2005).

With respect to job satisfaction and tradership styles, prior studies in both non-school and school contexts focu 17 more on relationships between transformational leadership style and job satisfaction. A number of studies have found that transformational leadership is related to job satisfaction gransformational leaders tend to give more job satisfaction to subordinates because they pay attention to an individual's needs; in contrast, transactional leaders simply foc 32 n exchange reward with subordinates and laissez-faire leaders avoid making decisions, give no feedback, abdicate responsibilitient make little effort to help subordinates satisfy their needs and do not use authority. Laissez-faire is the most passive and ineffective form of leadership (Antonakis, Avolio, and Sivasubramaniam 2003; Northouse 2007). For example, in the pro-school environment, leadership styles, particularly transformational leadership style, were found to have positive relationships with job satisfaction Results of a study by Walumbwa et al. (2005) in Kenyan and US financial firms indicated that transformational leadership had a positive and strong impact on jo and organisational commitment in both cultures. Elpers and Westhuis (2008) conducted a national survey of social workers in the United States of America and their chief finding was that of 53 his ational leadership influenced job satisfaction. Another research study also indicated that transformational leadership was significantly and positively related to job satisfaction (gnutlu 2008, 715). For example, in the school environment, research has revealed that the principal transformational leadership style showed a strong, positive and significant relationship to staff job satisfaction (Griffith 2004, 345; Nguni, Sleegers, and Denessen 2006). Principal transformational leadership significantly influenced teacher job satisfaction, and principals who had worked for a long term in their positions perceived themselves more transformational than short-term principals (Ejimofor 2007).

With respect to job satisfaction and decision-making styles, a number of findings suggest that school principal decision-making styles may be related to job satisfaction (Andersen 2010; Hans 70) and Andersen 2007).

Thus, the literature on the relationships between the principal's leadership styles, particularly transformational leadership style, decision-making styles and teacher job satisfaction are limited in developing countries (Michaelowa and Wittmann 2007, 52), and are still few in the Asian context (Raihani 2008; Wong and Wong 2005) and even fewer in an Indonesian school context.

The Indonesian educational context

The following four aspects of the Indonesian educational context are relevant and need to be considered when interpreting results:

What is the structure of the Indonesian educational system?

SCHOOL LEADERSHIP & MANAGEMENT 🛞 45

- How are principals selected and trained?
- Is the use of transformational leadership or transactional leadership more culturally relevant as opposed to the other leadership?
- Which are the contextual variables that could frame our findings?

46 The structure of the Indonesian educational system

Figure 1 shows the formal structure of the education system in Indonesia. Education starts with early childhood education at the age of five and ends with higher oducation.

In the decentralised delivery, from early childhood education up to senior secondary education, education is managed under two systems – the district level is mainly responsible for education management, and the national level is responsible for overall

100	School	Education Level	Ed	lucation Delivery
Age	Year	Education Level	Decentralised	Centralised
	23			Doctoral
	22			(includes general & Islamic, and
Above 22	21			vocational, academic & professional)
	20			Master
	19			(includes general & Islamic, and vocational, academic & professional)
22	18			
21	17	Higher		Undergraduate
20	16	Education		(includes general & Islamic, and vocational & academic)
19	15			
18	14		General senior secondary	Islamic general senior secondary &
17	13	Secondary	& vocational senior	Islamic vocational senior secondary
16	12	Education	secondary (SMA & SMK)	(MA & MAK)
15	11		h-l	Interste fan Internet oan
14	10		Junior secondary (SMP)	Islamic junior secondary (MTs)
13	9		(OWP)	(1113)
12	8			
11	7			
10	6	Basic	Primary (SD)	Ielamia primoru (MI)
9	5	Education	Primary (SD)	Islamic primary (MI)
8	4			
7	3			
6	2			
5	1	Early Childhood Education	Kindergarten (TK)	Islamic kindergarten (RA)

Figure 1. The Indonesian education system. Source: Ministry of Education and Culture (2013, 10).

governance. In the centralised system for Islamic schools, the Ministry of Religious Affairs is responsible for corresponsible for corresponsible

Early childhood education is mostly private, with a greater number of schools located in urban than in rura greas, and commonly caters for five- to six-year-old children. Basic education consists of nine years of education (six years of primary school and three years of junior secondary school).

After completing the nine-year basic education, children move up to senior secondary education (within both the Islamic and non-Islamic systems). They can choose to attend either academically oriented schools or vocational chools.

The tertiary education consists of a number of different type 52 institutions, including public, private and Islamic universities and training institutions (Ministry of Education and Culture 2013, 9).

Selection and training of principals

The Indonesian Education System has a national standard to select principals, particularly *Permendiknas* (Regulation of Minister of National Education) No. 20 Year 2010 pertaining to the assignment to teachers of the additional task of being a school/Madrasah principal, if he/she fulfils both general and specific requirements specified in the regulation. However, some principals have been appointed without any consideration of their training or qualifications and have simply been 'selected' for the post by the local mayor (Sumintono et al. 2015, 5).

The cultural relevance of different leadership styles

Use of the transformational leadership model has not been widely recognised in Indonesia because there are still few studies of leadership in Indonesia, particularly in a school context (Hariri 2011, 3; Hariri, Monypenny, and Prideaux 2012, 1, 2014, 2; Sumintono et al. 2015).

However, despite of ed numbers of studies conducted to examine the relationships between culture and transformational leadership, it is likely that transformational leadership theory tends to be universal and desired by people around the world (Muenjohn 2010). In fact, Muenjohn and Armstrong (2007, 265) found evidence that supports that the transformational-transactional paradigm has a universal stic position. Bass (1999, 16) also supports this finding that the paradigm shows equal or even more applicability in the collectivist societies of Asia (including Indonesia), despite its origin from the individualistic United States.

Indonesian contextual variables

It is acknowledged that this paper is an Indonesian example of a well-rehearsed argument. But, one aspect of this paper is to determine how congruent are the findings from the Indonesian data with the largely Anglophile and Western literature.

It was suspected a priori that the Indonesian data would not be congruent with the largely Anglophile and Western literature. However, the Indonesian data were found to be largely congruent with the Anglophile and Western literature. Given this a priori expectation, the data collection was heavily influenced by the three standard questionnaires/ instruments used:

- The GAMS instrument (Scott and Bruce 1995);
- The by Q form 5X-Short (Bass and Avolio 2004) and
- The Job Satisfaction Survey (JSS) (Spector 1985).

Although the primary aim was to obtain robust data, it is expected that Indonesian educational contextual variables could well be explored in future research.

The study

Introduction

This paper uses three well-established questionnaire instruments plus a demographic questionnaire to obtain data from teachers about teacher-perceived principal leadership and decision-making styles and teacher-perceived job satisfaction. Within this context, this section looks at the sample, the instruments and the data analysis.

Sam 51

The data were collected from a sample of teachers in Lampung Province, Indonesia. Compared to the data source (Kemdiknas 2009a, 2009b), the sample closely resembles the actual work profile.

A three-stage sampling process was used to randomly select prospective participants:

- First, geographic districts (primary units) 6 geographic districts out of 14 districts (Bandar Lampung, Lampung Tengah, Lampung Selatan, Pesawaran, Pringsewu and Tanggamus) were selected.
- Second, schools (secondary units) 37 schools, out of 623 public junior secondary schools in Lampung Province (Kemdiknas 2009a), were selected in the six geographic districts.
- Finally, participants (tertiary units) a sample of 518 teachers, out of 11,401 teachers (Kemdiknas 2009b), was chosen from the selected schools. The survey was completed by 475 teachers (a 92% response rate). This sample size is greater than the recommended sample size; that is, for a population of 10,000, the recommended sample size is 370, based on 95% confidence level (Gray 2004, 218).

Instruments

The following four questionnaires were used to obtain data from principals and from teachers:

- the 51 MS instrument (Scott and Bruce 1995);
- the MLQ form 5X-Short (Bass and Avolio 2004);
- the JSS (Spector 1985) and
- a demographic questionnaire.

48 😉 H. HARIRI ET AL.

The four questionnaires were administered to the participants in person, using the hand delivery mode, in their natural setting (schools). The participants were advised that participation was voluntary, and were assured that their answers would remain confidents.

The GDMS instrument (Scott and Bruce 1995 and associated undated website) was used to describe decision-making grass.

This instrument comprises ive decision-making styles: rational, dependent, intug?, spontaneous and avoidant, with five items identified for each style and measured on a five-point Likert scale.

Experience has shown consistent findings and has reported the validity and reliability of the GDMS instrument. Consistency was found in that the five different styles are not mutually exclusive and the pattern of their interrelationships corresponds to the <u>46</u> inal findings (Scott and Bruce 1995). Other researchers have also reported acceptable validity and reliability of the GDMS instrument, see for example, Gambetti et al. (2008), Loo (2000), Thunholm (2009).

GDMS has also been recently compared with the Melbourne Decision Making Questionna gowith adequate concurrent validity (Di Fabio and Blustein 2010).

The MLQ form 5X-Short was developed by Bass (1985, 1995). It is the most widely used instrum 36 t to assess transformational and transactional leadership. The MLQ form 5X-Short consists of 45 items – 36 items represent 9 leadership factors, and 9 items meggine 3 leadership outcome scales.

Transformational leadership comprises five factors: idealised influence (attributes), idealised influence (b19 viour), inspirational motivation – these three factors previously labelled charisma – intellectual stimulation, and individualised consideration. Transactional leadership comprises three factors: contingent reward, management-by-exception active and management-by-exception passive – these las two factors previously labelled management-by-exception; also, one non-transactional laissez-faire leadership factor.

The MLQ form 5X-Short is evaluated on a five-point Likert scale (Bass and Avolio 2004). MLQ form 5X-Short has well-established validity and reliability. In particular, reliabilities for the total items and for each leadership factor scale ranged from 0.74 to 0.94. All the reliabilities of the scales were generally high, exceeding standard cut-offs for internal consistency recommended in the literature (Bass and Avolio 2004, 48).

The JSS (Spector 1985) is particularly us 201 for non-profit, public and human service organisations including schools. The JSS7s a 36-item survey instrument designed to measure nine sub-scales of employee job satisfaction: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work and communication. It is measured on a six-point Likert scale and is designed to yield a good measure of overall job satisfaction. JSS has well-established validity and reliability. In particular, Spector (1994) reported that internal consistency reliabilities (coefficient alphas) based on a sample of 2870 ranged from 0.62 to 0.82 for individual facets, 0.91 for total of all facets (composite).

Other researchers have also reported acceptable validity and reliability of JSS, see, for example, Anderfuhren-Biget et al. (2010), Chou et al. (2011).

The first three instruments were translated from English into Indonesian and then back translated, by another person, from Indonesian into English and compared to the original English versions. These three instruments were field tested to ensure both their reliability

in terms of the Indonesian language and in terms of cultural differences between English and Indonesian.

In examining relationships between teacher-perceived principal leadership styles, teacher-perceived principal decision-making styles and teacher-perceived job satisfaction in schools in Lampung Province, Indonesia, two research questions guide this paper:

- (1) How significantly can teacher-perceived principal leadership styles and decisionmaking styles predict teacher job satisfaction?
- (2) How significantly can teacher-perceived principal leadership styles and decisionmaking styles still predict teacher job satisfaction after the participants' demographics (gender, marital status, certification, school location and tenure with current principal) are controlled for?

Data analysis

Teacher responses to the questionnaires were analysed using Statistical Package for the Social Sciences (SPSS) version 18. The analysis was carried out as follows:

- First, the data were prepared prior to analysis by coding, entered into SPSS, cleaned for errors, checked for missing data and rescaled as required.
- Second, descriptive analysis was employed to describe the participants and the variables.
- Third, the following general assumptions of parametric data were checked: continuous measures, random sampling, normal distribution, independence of observations and homogeneity of variance.
- Finally, multiple regression analysis (standard and hierarchical) was employed to check the multiple regression assumptions and then to address the research questions.

Results

Participants

Table 1 reports frequency and percentage of the participants' demographics: gender, marital status, certification, school location and tenure with current principal. In particular, the teachers included in the sample had been with their current principal for at least one year to allow possible impact of principals on teachers.

Variables

Table 2 reports mean, standard deviation, skewness and kurtosis to describe the characteristics of the variables. The nine variables are total teacher job satisfaction (TJS); teacher-perceived principal leadership styles: transformed (TF), transactional (TA) and laissez-faire (LF); and teacher-perceived principal decision-making styles: rational (Rat), intuitive (Int), dependent (38), avoidant (Avo) and spontaneous (Spo).

In terms of leadership styles, mean of transformational leadership style was the highest (M = 2.51, SD = 0.56), followed by mean of transactional leadership style (M = 2.04, SD = 0.49) and laissez-faire leadership style (M = 0.82, SD = 0.67). The scores in the rating

	eachers' demographics (n = 475).	
Demographics	Frequency	%
Gender:		
Male	207	43.6
Female	268	56.4
Marital status:		
Single	24	5.1
Married	451	94.9
Certification:		
Yes (Certified)	245	51.6
No (Uncertified)	230	48.4
School location:		
Urban	205	43.2
Rural	270	56.8
Ter43 with current principal:		
1–2 years	285	60.0
3-4 years	126	26.5
5-6 years	26	5.5
>6 years	38	8.0

ranged from 0 to 4 (Bass and Avolio 2004). These findings suggest that, according to tears' perceptions, principals in public junior secondary schools in Lampung Province were more likely to exhibit transformational leadership style, lenglikely to exhibit transactional leadership style and hardly likely to exhibit laissez-faire leadership style.

In terms of decision-making styles, mean of rational decision-making style was the highest (M = 22.15, SD = 3.18), followed by mean of dependent decision-making style (M = 18.84, SD = 4.15), spontaneous decision-making style (M = 13.99, SD = 4.47), intuitive decision-making style (M = 13.65, SD = 5.44) and avoidant decision-making style (M =10.26, SD = 4.32). Mean of overall teacher job satisfaction was 163.34 (SD = 23.20). The mean of total teacher job satisfaction can be interpreted: 36–107 dissatisfaction; 108– 143 ambivalent; 144–216 satisfaction (Spector 1994). Despite exhibiting all the five decision-rpping styles, principals in public junior secondary schools in Lampung Province exhibited rational decision-making style more often than the other decision-making styles and, in general, teachers were satisfied (163 in the range 144–216).

Assumptions

The following five general assumptions of a parametric test: continuous measures, random sampling, independence of observations, normal distribution and homogeneity of variance (Pallant 2007, 203), were confirmed to hold. The following eight specific assumptions

Variables ^a	М	SD	Skewness	Kurtosis excess
Transformational	2,509	0,560	-0.406	-0.091
Transactional	2.040	0.490	-0.261	-0.365
Laissez-faire	0.819	0.674	0.642	-0.423
Rational	22.145	3.176	-1.267	1.233
Intuitive	13.648	5.437	0.024	-1.006
Dependent	18.842	4.146	-0.479	-0.294
Avoidant	10.263	4.323	0.666	-0.266
Spontaneous	13.987	4.469	0.036	-0.521
Total teacher job satisfaction	163.339	23.199	-0.166	-0.643

^aTransformed values of variables.

of multiple regression: sample size, multicollinearity and singularity, normality, linearity and homoscedasticity, independence of residuals, as well as outliers (Pallant 2007, 148-149), were confirmed to hold.

Results and discussion regarding research question 1

This research question examines whether relationships between teacher-perceived principal leadership styles and teacher-perceived principal decision-making styles can significantly predict teacher job satisfaction.

The eight variables are the independent (predictor) variables. Teacher job satisfaction is the dependent variable. A standard multiple regression appropriate to answer this research question and is most commonly used when no a priori hypotheses are made to determine the order of entry of the independent variables (Pallant 2007, 147).

Four successive regression analyses were undertaken; the details of the first three are attached (see the appendix).

The fourth and final regression analysis was performed by removing the lowest non-significant regression coefficient (dependent decision-making style). The five variables produced an R^2 of 0.500, and an adjusted R^2 of 0.495 (see Table 3), with F(5, 469) = 93.832, p = .000 (see Table 4).

Table 5 reports the coefficients that resulted from the fourth and final regression analysis. The analysis was stopped at this phase because it produced significant results for all five predictor variables. 20

Given the above results, the final prediction model is:

 $Y_i = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + \varepsilon_i.$

The variables are defined as follows: Y is the teacher job satisfaction; the the participant; B the regression coefficients (B_0 the intercept, B_1 the coefficient of X_1); X_1 the

Table 3. Model s	summary of 18 cher job satis	faction with five predictor varial	oles.
Model	R^2	Adjusted R ²	SE of estimate
1	0.500	0.495	16.490

Description: The sector of teacher is a satisfaction with five predictor variables		bl	e	4.	AN	OV.	Αo	f teacl	her j	job	satist	faction	with	five	predictor	variable
--	--	----	---	----	----	-----	----	---------	-------	-----	--------	---------	------	------	-----------	----------

Model		SS	df	MS	F	р
1	Regression	127,569.158	5	25,513.832	93.832***	.000
	Residual	127,525.271	469	271.909		
	Total	255,094.429	474			

****p < .001.

Table 5. Coefficients with five predictor variable
--

Variable	В	SEB	β	t	р	Part corr.
Total teacher job satisfaction (Constant)	118.353	7.600		15.573***	.000	
Transformational	10.866	1.550	0.262	7.011***	.000	0.229
Laissez-faire	-4.013	1.244	-0.117	-3.225***	.001	-0.105
Rational	1.917	0.282	0.262	6.798***	.000	0.222
Intuitive	-0.614	0.160	-0.144	-3.842***	.000	-0.125
Avoidant	-1.273	0.206	-0.237	-6.184***	.000	-0.202
****p < .001.						

Downloaded by [Dr Hasan Hariri] at 06:55 05 June 2016

52 🔄 H. HARIRI ET AL.

transformational leadership style; X_2 the laissez-faire leadership style; X_3 the rational decision-making style; X_4 the intuitive decision-making style; X_5 the avoidant decision-making style; ϵ a random disturbance (error) term assumed mean zero and constant finite variance and *B*'s parameters.

48

The unstandardised coefficient values listed as *B* can be used to construct a regression equation as above but depend on the units of measurements of the variables. In contrast, the standardised coefficients (β -values) have been converted to the same scale – all are measured in standard deviation units so that they can be compared and easy to interpret [35] ld 2005, 193; Pallant 2007, 159) in predicting teacher job satisfaction. The greater the β -values, the stronger the contribution of the predictor variables to the teacher job satisfaction would be.

Table 5 reports coefficients of the variables. In particular, transformational leadership style had a standardised β of 0.262. This value indicates that as transformational leadership style increases by one standard deviation, teacher job satisfaction increases by 0.262 standard deviations. The standard deviation for teacher job satisfaction was 23.199 and so this constitutes a change of 6.078 (0.262 × 23.199). Avoidant decision-making style had a standardised β of -0.237. This value indicates that as avoidant decision-making style increases by one standard deviation, teacher job satisfaction decreases by 0.237 standard deviations. The standard deviation for teacher job satisfaction was 23.199 and so this constitutes a change of -5.498 (-0.237×23.199). This interpretation is true only if the effects of the other predictor variables are held constant. The residuals of the model are found to be normal and homoscedastic.

These findings suggest that:

- First, the five variables can predict teacher job satisfaction significantly (p > .001).
- Second, transformational leadership style and rational decision-making style are identified as the best predictors because thes $_{64}$ vo styles achieved the highest β .
- Finally, the five predictor variables jointly account for 50% of the variance in teacher job satisfaction, indicating that there is another 50% of the variance unexplained. This unexplained variance is accounted for by other variables, perhaps other aspects of principal leadership, teacher job satisfaction or participant demographics.

16

Although the five predictor variables jointly account for only 50% of the variance in teacher job satisfaction, the model is highly significant overall by regression *F*-test (Alghabban 2004, 397). In addition, the adjusted R^2 value was 0.495, very similar to the R^2 value of 0.500 (a very little shrinkage of 0.5%). Considering the above findings, it can be said that the model can predict teacher job satisfaction with great accuracy.

It was found, in relation to Research Question 1, that transformational leadership sige and rational decision-making style result in the largest unique contribution to teacher job satisfaction.

These findings are consistent w 87 previous findings as indicated in the literature review (Hariri 2011); specifically, in terms of transformational leadership and job satisfaction, see for example, Griffith (2004); Nguni, Sleegers, and Denessen (2006), and in terms of decision-making and job satisfaction, see, for example, Andersen (2010); Hansson and Andersen (2007).

Results and discussion regarding research question 2

This research question examines whether the model of the five predictor variables can still significantly predict teacher job satisfaction after the possible effects of the participants' demographics (gender, marital status, certification, school location and tenure with current principal) are controlled for using a hierarchical multiple regression analysis as suggested by Pallant (2007, 147). In particular, the teachers included in the sample had been with their current principal for at least one year to allow possible impact of principals on teachers. In this analysis, the possible effects of the con 63 led variables were removed to test whether the five predictor variables can still predict a significant amount of the variance in teacher job satisfaction.

Table 6 reports coefficients of the two models produced by this hierarchical multiple regression analysis.

- Model 1 consisted of the controlled variables entered in the first block.
- Model 2 consisted of all variables entered in the first and the second blocks.

Model 1 including the controlled variables and teacher job satisfaction as the dependent variable produced an R^2 of 0.036, and an adjusted R^2 of 0.028 (see Table 7), with F (4, 470) = 4.360, p = .002 (see Table 8). Model 2 including all the variables produced an R of 0.711, an R^2 of 0.505, and an adjusted R^2 of 0.496 (see Table 7), with F(9, 465) = 52.773, p = .000 (see Table 8).

These findings suggest that model 1 a 10 unts for 3.6% of the variance in teacher job satisfaction and model 2 accounts for 50.5% of the variance in teacher job satisfaction.

Model	Variable	В	SE B	β	t	р
1	(Constant)	155.391	5.397		28.794	.000
	Gender	-1.848	2.200	-0.040	-0.840	.401
	Marital status	4.087	4.898	0.039	0.834	.404
	Teacher certification	1.174	2.194	0.025	0.535	.593
	School location	7.989	2.228	0.171	3.586	.000
2	(Constant)	114.934	9.166		12.539	.000
	Gender	-0.243	1.630	-0.005	-0.149	.882
	Marital status	1.879	3.546	0.018	0.530	.596
	Teacher certification	-0.429	1.583	-0.009	-0.271	.787
	School location	3.393	1.647	0.073*	2.060	.040
	Transformational	10.875	1.549	0.263***	7.021	.000
	Laissez-faire	-4.158	1.246	-0.121**	-3.338	.001
	Rational	1.880	0.289	0.257***	6.508	.000
	Intuitive	-0.558	0.162	-0.131**	-3.438	.001
85	Avoidant	-1.253	0.208	-0.234***	-6.034	.000

Table 6. Coefficients of hierarchical n	multiple	regression	analysis.
---	----------	------------	-----------

*p < .05. **p < .01.

*****p* < .001.

Table 7. Model summary of teacher job satisfaction with two models.	12

						Statistics		
Model	R ²	Adjusted R ²	SE of estimate	R ²	F	df1	df2	Sig. F
1	0.036	0.028	22.876	0.036	4.360	4	470	.002
2	0.505	0.496	16.474	0.470	88.266	9	465	.000

54 👄 H. HARIRI ET AL.

Model		SS	df	MS	F	р
1	Regression	9127.52	4	2281.880	4.360**	.002
	Residual	245,966.91	470	523.334		
	Total	255,094.43	474			
2	Regression	128,898.81	9	14,322.090	52.773***	0.000
	Residual	126,195.62	465	271.388		
	Total	255,094.43	474			

De 8. ANOVA of teacher job satisfaction with two models.

**p < .01.

****p < .001.

These five predictor variables significantly account for an additional 47% (50.5–3.6%) of the variance in teacher job satisfaction at a significance level of .000 when the effects of gender, marital status, certification and school location of participants are statistically controlled for. The model as a whole is very highly significant, with F(9, 465) = 52.77, p < .0001.

Table 6 reports the model 2 coefficients, indicating how much each predictor variable contributes to predicting teacher job satisfaction. At a significance level of .01, five predicting variables appear to make a significant contribution and style ($\beta = 0.263$), rational decision-making style ($\beta = 0.257$), avoidant decision-making style ($\beta = -0.234$), intuitive decision-making style ($\beta = -0.131$) and laissez-faire leadership style ($\beta = -0.121$). However, the other four variables (gender, marital status, teacher certification and school location) do not appear to make a unique contribution at this significance level.

These findings suggest that the model (consisting of the five predictor variables) is still able to predict teacher job satisfaction significantly (p < .001) after controlling for gender, marital status, certification and school location. In particular, these findings have not been previously described for Indonesia in the literature.

It was found in relation to Research Question 2 (that examines whether the model can still significantly predict teacher job satisfaction after the possible effects of gender, marital status, certification and school location of participants are controlled for) that the model consisting of the five predictor variables is still able to predict teacher job satisfaction. These findings, in team of the ability of the model to still predict after other variables are controlled for, are consistent with previous findings as indicated in the literature review (Hariri 2011).

In general, relevant literature on whether these leadership styles and decision-making styles collectively can be used as indicates to predict job satisfaction is not easy to find. However, firstly in terms of relationships between leadership styles and 14 b satisfaction, to some extent this study shows consistent findings with those of earlier studies undertaken in countries across the world and in a variety of organisational contexts over time. For example, Ali et al. (2014), Aydin, Sarier, and Uysal (2013), Bogler (2001), Dumdum, Lowe, and Avolio (2002), Erkutlu (2008), Hui et al. (2013), Medley and Larochelle (1995), Morrison, Jones, and Fuller (1997), Nielsen et al. (2009), Nguni, Sleegers, and Denessen (2006, 146), Walumbwa et al. (2005).

Secondly, in terms of relationships between decision-making and job satisfaction, findings of this study are consistent with previous research such as Hariri, Monypenny, and Prideaux (2012), Hui et al. (2013), Witt, Andrews, and Kacmar (2000).

Conclusions

This paper examines relationships between three teacher-perceived principal leadership styl₆₀ transformational, transactional and laissez-faire) and five teacher-perceived principal decision-making styles (rational, dependent, intuitive, spontaneous and avoidant) as indicators to predict teacher job satisfaction using survey data from a sample of 475 teachers in 6 public junior secondary school districts (6 out of 14 school districts) in Lampung Province (1 out of the 33 provinces) in Indonesia.

First, the findings identified:

- That principals exhibited all three leader 59 styles and all five decision-making styles.
- That principals are more likely to exhibit transformational leadership style, less likely to exhibit transactional leadership style and hardly likely to exhibit laissez-faire leadership style.
- That principals are more likely to exhibit rational decision-making style and less likely to exhibit the other decision-making styles.
- That, in general, teachers are satisfied (163 in the range 144-216; Spector 1994).

Second, the findings show:

- In ter 29 of Research Question 1 (That is: How significantly can teacher-perceived principal leadership styles 29 d decision-making styles predict teacher job satisfaction?) that transformational leadership style and rational decision-making style result in the largest unique contribution to teacher job satisfaction.
- In terms of Research Question 2 (That is: How significantly can the model (consisting of the five predictor variables) still predict teacher job satisfaction after the participants' demographics (gender, marital status, certification, school location and tenure with current principal) are controlled for?) – that the model is still able to predict teacher job satisfaction.

Third, the findings suggest:

- That five variables (of the nine variables that were studied) can significantly (*p* < .001) predict teacher job satisfaction. These 58° variables are:
 - (i) Two teacher-perceived principal leadership styles: transformational and laissezfaire and 79
 - (ii) Three teacher-perceived principal decision-making styles: rational, intuitive and avoidant. 78
- That transformational leadership style and rational decision-making style are the best
 predictors and are likely to contribute to increased teacher job satisfaction.
- That, in contrast, laissez-faire leadership style, intuitive decision-making 57 le and avoidant decision-making style are likely to contribute to decreased teacher job satisfaction.

Based on these findings, it is suggested that the findings for Indonesia are largely congruent with similar Anglophile and Western literature. Thus, these findings suggest that research can build on the Anglophile and Western literature rather than having to 56 😉 H. HARIRI ET AL.

return to basics, and can move forward to resolve the limitations and simplifying assumptions used in this paper.

Limitations and simplifying assumptions

It is acknowledged that this paper is an Indonesian example of a well-rehearsed argument. But, given that the results suggest that the data from Indonesia are, in fact, largely congruent with the Anglophile and Western literature, this paper offers the field a starting point upon which to build research into the Indonesian aspects of the field and to explore the Indonesian contextual variables, the limitations and the simplifying assumptions in this paper.

The main limitations and simplifying assumptions that are beyond the focus of this paper are:

77

- Cross-cultural validity. This paper excludes the issue of cross-cultural validity.
- Dynamics of relationships over time and space. This paper implies static relationships.
- Cultural aspects of learning and knowing. This paper does not examine this issue.
- Dynamics of the 'way of being' in schools in Indonesia. This paper uses instruments that imply a static way of being.
- Developments in the non-Anglophile and non-Western literature. This paper largely
 uses the Anglophile and Western literature.
- Differences between teacher quality and teacher satisfaction. This paper uses teacher satisfaction, and specifically teacher self-perceived satisfaction. The data to evaluate the relationship between teacher quality and teacher satisfaction could be presented in another paper.

Acknowledgements

We acknowledge the editorial assistance for the underlying research upon which this paper is based. We would like to thank our colleagues for commenting on earlier drafts and Sharon Read for copyediting.

24 Disclosure statement

No potential conflict of interest was reported by the authors.

Funding



We acknowledge the significant financial support from the Directorate General of Higher Education, the Ministry of National Education, the Republic of Indonesia, through the University of Lampung (Unila), by scholarship [warranty no. 1781/D4.4/2008] and financial support from James Cook University for field work. Funding for the develop 40 ht of this paper are those in kind contributions regularly available from our Organisation, the College of Business, Law and Governance, James Cook University, Townsville Campus, Australia.

Notes on contributors

Dr Hasan Hariri, is lecturer in Master of Education Management, Teachers Training and Education Faculty, University of Lampung (Unila), Bandar Lampung, Indonesia. His current research interests include: leadership, school leadership and management, decision-making, and job satisfaction.

Richard Monypenny, is Adjunct Associate Professor in Economics, College of Business, Law and Governance, James Cook University, Townsville 4811, Australia. His current research interests include: Successful regional development, systems thinking, small group dynamics, collaboration, and facilitating change.

Dr Murray Prideaux, is Senior Lecturer in Management, College of Business, Law and Governance, James Cook University, Townsville 4811, Australia.

References

Alghabban, A. 2004. Dictionary of Pharmacovigilance. London: Pharmaceutical Press.

- Ali, N., S. Jan, A. Ali, and M. Tariq. 2014. "Transformational and Transactional Leadership as Predictors of Job Satisfaction, Commitment, Perceived Performance and Turnover Intention (Empirical Evidence from Malakand Division, Pakistan)." *Life Science Journal* 11 (5): 48–53.
- Anderfuhren-Biget, S., F. Varone, D. Giauque, and A. Ritz. 2010. "Motivating Employees of the Public Sector: Does Public Service Motivation Matter?" *International Public Management Journal* 13 (3): 213–246. doi:10.1080/10967494.2010.503783.
- Andersen, J. A. 2010. "Public Versus Private Managers: How Public and Private Managers Differ in Leadership Behaviour." *Public Administration Review* 70 (1): 131–141. doi:10.1111/j.1540-6210. 2009.02117.x.
- Antonakis, J., B. J. Avolio, and N. Sivasubramaniam. 2003. "Context and Leadership: An Examination of the Nine-Factor Full-Range Leadership Theory Using the Multifactor Leadership Questionnaire." *Leadership Quarterly* 14 (3): 261–295. doi:10.1016/S1048-9843(03)00030-4.
- Aydin, A., Y. Sarier, and S. Uysal. 2013. "The Effect of School Principals' Leadership Styles on Teachers' Organizational Commitment and Job Satisfaction." *Educational Sciences: Theory and Practice* 13 (2): 806–811.
- Barnett, K., and J. McCormick. 2003. "Vision, Relationships and Teacher Motivation: A Case Study." Journal of Educational Administration 41 (1): 55–73. doi:10.1108/09578230310457439.
- Bass, B. M. 1985. Leadership and Performance Beyond Expectation. New York: Free Press.
- Bass, B. M. 1995. "Theory of Transformational Leadership Redux." The Leadership Quarterly 6 (4): 463– 478.
- Bass, B. M. 1997. "Does the Transactional–Transformational Leadership Paradigm Transcend Organizational and National Boundaries?" The American Psychologist 52 (2): 130–139.
- Bass, B. M. 1999. "Two Decades of Research and Development in Transformational Leadership." European Journal of Work and Organizational Psychology 8 (1): 9–32.
- Bass, B. M., and B. J. Avolio. 2004. Multifactor Leadership Questionnaire: Manual and Sampler Set. 3rd ed. Menlo Park, CA: Mind Garden.
- Bogler, R. 2001. "The Influence of Leadership Style on Teacher Job Satisfaction." Educational Administration Quarterly 37 (5): 662–683.
- Boreham, N., P. Gray, and A. Blake. 2006. "Job Satisfaction among Newly Qualified Teachers in Scotland." Paper presented at the Annual Conference of the British Educational Research Association, University of Warwick, September. http://www.ioe.stir.ac.uk/research/projects/epl/ documents/NBBERA06.pdf.
- Chou, Y., L. Fu, T. Kröger, and C. Ru-yan. 2011. "Job Satisfaction and Quality of Life among Home Care Workers: A Comparison of Home Care Workers Who Are and Who Are Not Informal Carers." *International Psychogeriatrics* 23 (5): 814–825. doi:10.1017/S104161021000219X.
- Crawford, M., and M. Cowie. 2012. "Bridging Theory and Practice in Headship Preparation: Interpreting Experience and Challenging Assumptions." *Educational Management Administration* and Leadership 40 (2): 175–187. doi:10.1177/1741143211427978.

- 58 🕒 H. HARIRI ET AL.
- Di Fabio, A., and D. L. Blustein. 2010. "Emotional Intelligence and Decisional Conflict Styles: Some Empirical Evidence among Italian High School Students." Journal of Career Assessment 18 (1): 71–81. doi:10.1177/1069072709350904.
- Dumdum, U. R., K. B. Lowe, and B. J. Avolio. 2002. A Meta-analysis of Transformational and Transactional Leadership Correlates of Effectiveness and Satisfaction: An Update and Extension. UK: Emerald Group. doi.10.1108/S1479-357120130000005008
- Ejimofor, F. O. 2007. "Principals' Transformational Leadership Skills and Their Teachers' Job Satisfaction in Nigeria." Doctoral dissertation, Cleveland State University. http://etd.ohiolink.edu/view.cgi?acc_num=csu1202235575.
- Elpers, K., and D. J. Westhuis. 2008. "Organizational Leadership and Its Impact on Social Workers' Job Satisfaction: A National Study." Administration in Social Work 32 (3): 26–43. doi:10.1080/ 03643100801922399.
- Erkutlu, H. 2008. "The Impact of Transformational Leadership on Organizational and Leadership Effectiveness." *The Journal of Management Development* 27 (7): 708–726. doi:10.1108/02621710810883616.
- Evans, L. 2001. "Delving Deeper into Morale, Job Satisfaction and Motivation among Educational Professionals: Re-examining the Leadership Dimension." Educational Management Administration and Leadership 29 (3): 291–306.
- Field, A. 2005. Discovering Statistics Using SPSS. London: SAGE.
- Firman, H., and B. Tola. 2008. "The Future of Schooling in Indonesia." Journal of International Cooperation in Education 11 (1): 71–84.
- Gambetti, E., M. Fabbri, L. Bensi, and L. Tonetti. 2008. "A Contribution to the Italian Validation of the General Decision-Making Style Inventory." *Personality and Individual Differences* 44 (4): 842–852. doi:10.1016/j.paid.2007.10.017.
- Gray, D. E. 2004. Doing Research in the Real World. London: SAGE.
- Griffith, J. 2004. "Relation of Principal Transformational Leadership to School Staff Job Satisfaction, Staff Turnover, and School Performance." *Journal of Educational Administration* 42 (3): 333–356. doi:10.1108/09578230410534667.
- Gurr, D., L. Drysdale, and B. Mulford. 2005. "Successful Principal Leadership: Australian Case Studies." Journal of Educational Administration 43 (6): 539–551. doi:10.1108/09578230510625647.
- Hansson, P. H., and J. A. Andersen. 2007. "The Swedish Principal: Leadership Style, Decision-Making Style and Motivation Profile." *International Electronic Journal for Leadership in Learning* 11 (8). http://iejll.synergiesprairies.ca/iejll/index.php/ijll/issue/view/37.
- Hariri, H. 2011. "Leadership Styles, Decision-Making Styles, and Teacher Job Satisfaction: An Indonesian School Context." PhD thesis, James Cook University. http://eprints.jcu.edu.au/22095/.
- Hariri, H., R. Monypenny, and M. Prideaux. 2012. "Principalship in an Indonesian School Context: Can Principal Decision-Making Styles Significantly Predict Teacher Job Satisfaction?" School Leadership & Management 32 (5): 453–471.
- Hariri, H., R. Monypenny, and M. Prideaux. 2014. "Leadership Styles and Decision-Making Styles in an Indonesian School Context." School Leadership & Management 34 (3): 284–298.
- Hui, H., H. S. Jenatabadi, N. A. Binti Ismail, and C. W. J. Wan Mohamed Radzi. 2013. "Principal's Leadership Style and Teacher Job Satisfaction: A Case Study in China." IJCRB, August, Vol. 5, No. 4. SSRN: http://ssrn.com/abstract=2378172.
- Kao, P.-H., and H. Kao. 2007. "Taiwanese Executive's Leadership Styles and Their Preferred Decision-Making Models Used in Mainland China." *Journal of American Academy of Business, Cambridge* 10 (2): 71–79.
- Kemdiknas. 2009a. "Rekap data DIKNAS: Rekap data per propinsi." http://npsn.jardiknas.org/cont/ data_statistik/rekap_diknas.php31/08/2009.
- Kemdiknas. 2009b. "Jumlah kepala sekolah dan guru menurut status kepegawaian dan golongan tiap provinsi." http://www.kemdiknas.go.id/media/213896/index_smp_0809.pdf.
- Klassen, R. M., and M. M. Chiu. 2010. "Effects on Teachers' Self-efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress." *Journal of Educational Psychology* 102 (3): 741–756. doi:10.1037/a0019237.

- Leithwood, K., and J. Sun. 2012. "The Nature and Effects of Transformational School Leadership: A Meta-analytic Review of Unpublished Research." *Educational Administration Quarterly* 48: 387. doi:10.1177/0013161X11436268.
- Loo, R. 2000. "A Psychometric Evaluation of the General Decision-Making Style Inventory." Personality and Individual Differences 29 (5): 895–905. doi:10.1016/S0191-8869(99)00241-X.
- Medley, F., and D. R. Larochelle. 1995. "Transformational Leadership and Job Satisfaction." Nursing Management 26 (9): 64JJ–64NN.
- Menon, M. E. 2012. "Do Beginning Teachers Receive Adequate Support from Their Headteachers?" Educational Management Administration and Leadership 40 (2): 217–231. doi:10.1177/ 1741143211427981.
- Mertkan, S. 2011. "Tensions in Leadership Development: Head Teachers' Experience in North Cyprus." School Leadership and Management 31 (1): 79–90. doi:10.1080/13632434.2010.540560.
- Michaelowa, K., and E. Wittmann. 2007. "The Cost, Satisfaction, and Achievement of Primary Education Evidence from Francophone Sub-Saharan Africa." *The Journal of Developing Areas* 41 (1): 51–78. http://www.jstor.org/stable/40376158.
- Ministry of Education and Culture. 2013. Overview of the Education Sector in Indonesia 2012 Achievements and Challenges. Jakarta: Ministry of Education and Culture of the Republic of Indonesia.
- Morrison, R. S., L. Jones, and B. Fuller. 1997. "The Relation Between Leadership Style and Empowerment on Job Satisfaction of Nurses." *The Journal of Nursing Administration* 27 (5): 27–34.
- Muenjohn, N. 2010. "Transformational Leadership: A New Force in Leadership Research." Paper presented at the 12th International Conference on Business and Information, Melbourne, Australia.
- Muenjohn, N., and A. Armstrong. 2007. "Transformational Leadership: The Influence of Culture on the Leadership Behaviours of Expatriate Managers." International Journal of Business and Information 2 (2): 265–283.
- Ngimbudzi, F. W. 2009. "Job Satisfaction among Secondary School Teachers in Tanzania: The Case of Njombe District." Unpublished master's thesis, University of Jyvaskyla. http://urn.fi/URN:NBN:fi:jyu-201010152985.
- Nguni, S., P. Sleegers, and E. Denessen. 2006. "Transformational and Transactional Leadership Effects on Teachers' Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behavior in Primary Schools: The Tanzanian Case." *School Effectiveness and School Improvement* 17 (2): 145–177. doi:10.1080/09243450600565746.
- Nielsen, K., J. Yarker, R. Randall, and F. Munir. 2009. "The Mediating Effects of Team and Self-efficacy on the Relationship Between Transformational Leadership, and Job Satisfaction and Psychological Well-Being in Healthcare Professionals: A Cross-sectional Questionnaire Survey." International Journal of Nursing Studies 46 (9): 1236–1244.
- Northouse, P. G. 2007. Leadership: Theory and Practice. 4th ed. Thousand Oaks, CA: SAGE.
- Odhiambo, G., and A. Hii. 2012. "Key Stakeholders' Perceptions of Effective School Leadership." *Educational Management Administration and Leadership* 40 (2): 232–247. doi:10.1177/ 1741143211432412.
- Pallant, J. 2007. SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 15). 3rd ed. Crows Nest, NSW: Allen and Unwin.
- Parker, L., and R. Raihani. 2011. "Democratizing Indonesia Through Education? Community Participation in Islamic Schooling." *Educational Management Administration and Leadership* 39 (6): 712–732. doi:10.1177/1741143211416389.
- Pashiardis, P. 1993. "Group Decision Making: The Role of the Principal." International Journal of Educational Management 7 (2): 8–11. doi:10.1108/09513549310026921.
- Pont, B., D. Nusche, and H. Moorman. 2008. *Improving School Leadership, Volume 1: Policy and Practice*. OECD.
- Raihani. 2007. "Successful School Leadership in Indonesia: A Study of the Principals' Leadership in Three Successful Senior Secondary Schools in Yogyakarta." Doctoral dissertation, University of Melbourne, Faculty of Education (not available electronically).
- Raihani. 2008. "An Indonesian Model of Successful School Leadership." Journal of Educational Administration 46 (4): 481–496. doi:10.1108/09578230810882018.

- 60 👄 H. HARIRI ET AL.
- Sargent, T., and E. Hannum. 2005. "Keeping Teachers Happy: Job Satisfaction among Primary School Teachers in Rural Northwest China." *Comparative Education Review* 49 (2): 173–204. http://www. jstor.org/stable/10.1086/428100.
- Scott, S. G., and R. A. Bruce. 1995. "Decision-Making Style: The Development and Assessment of a New Measure." Educational and Psychological Measurement 55 (5): 818–831. Associated undated web site: http://www.sjdm.org/testdmidi/General%20Decision%20Making%20Style.html.
- Seco, G. M. d. S. 2002. "Teacher Satisfaction: Some Practical Implications for Teacher Professional Development Models." Paper presented at the European Conference on Educational Research, University of Lisbon, September. http://www.leeds.ac.uk/educol/documents/00002339.htm.
- Siegrist, G. 1999. "Educational Leadership Must Move Beyond Management Training to Visionary and Moral Transformational Leaders." *Education* 120 (2): 297–303.
- Skaalvik, E. M., and S. Skaalvik. 2010. "Teacher Self-efficacy and Teacher Burnout: A Study of Relations." *Teaching and Teacher Education* 26 (4): 1059–1069. doi:10.1016/j.tate.2009.11.001.
- Spector, P. E. 1985. "Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey." American Journal of Community Psychology 13 (6): 693–713.
- Spector, P. E. 1994. "Interpreting Satisfaction Scores with the Job Satisfaction Survey." http://shell.cas. usf.edu/~pspector/scales/jssinterpretation.html.
- Sumintono, B., E. Y. Sheyoputri, N. Jiang, I. H. Misbach, and Jumintono. 2015. "Becoming a Principal in Indonesia: Possibility, Pitfalls and Potential." Asia Pacific Journal of Education 35 (3): 342–352.
- Tatum, B. C., E. Richard, K. Carin, and B. Travis. 2003. "Leadership, Decision Making, and Organizational Justice." Management Decision 41 (10): 1006–1016. doi:10.1108/00251740310509535.
- Thunholm, P. 2009. "Military Leaders and Followers Do They Have Different Decision Style?" Scandinavian Journal of Psychology 50: 317–324. doi:10.1111/j.1467-9450.2009.00714.x.
- Walumbwa, F. O., B. Orwa, P. Wang, and J. J. Lawler. 2005. "Transformational Leadership, Organizational Commitment, and Job Satisfaction: A Comparative Study of Kenyan and US Financial Firms." *Human Resource Development Quarterly* 16 (2): 235–256. doi:10.1002/hrdq.1135.
- Wanzare, Z. 2012. "Instructional Supervision in Public Secondary Schools in Kenya." Educational Management Administration and Leadership 40 (2): 188–216. doi:10.1177/1741143211427977.
- Ward, C. J. 2013. "Why Leadership Matters: One School's Journey to Success." Educational Leadership and Administration: Teaching and Program Development 24: 62–74.
- Williams, R. 2006. "Leadership for School Reform: Do Principal Decision-Making Styles Reflect a Collaborative Approach?" Canadian Journal of Educational Administration and Policy 53. http:// www.umanitoba.ca/publications/cjeap/articles/williams.html.
- Witt, L. A., M. C. Andrews, and K. M. Kacmar. 2000. "The Role of Participation in Decision-Making in the Organizational Politics–Job Satisfaction Relationship." *Human Relations* 53 (3): 341–358.
- Wong, P.-M., and C.-S. Wong. 2005. "Promotion Criteria and Satisfaction of School Teachers in Hong Kong." *Educational Management Administration & Leadership* 33 (4): 425–447. doi:10.1177/ 1741143205056216.

Appendix

Details of the first three regression analyses undertaken for Research Question 1.

The first standard regression analysis was performed and the model (the eight predictor variables) produced an R^2 of 0.508, and an adjusted R^2 of 0.500 (see Table A1), with F(8, 466) = 60.155, p = .000 (see Table A2).

Table A1. Model summary of geacher job satisfaction with eight predictor variables.

Model	R ²	Adjusted R ²	SE of estimate
1	0.508	0.500	16.410

SCHOOL LEADERSHIP & MANAGEMENT 🛞 61

Model		SS	df	MS	F	р
1	Regression	129,599.650	8	16,199.956	60.155***	.000
	Residual	125,494.779	466	269.302		
	Total	255,094.429	474			

ble A2. ANOVA of teacher job satisfaction with eight predictor variables.

****p < .001.

The second regression analysis was performed by excluding the lowest non-significant regression coefficient (spontaneous decision-making style). The seven predictor variables produced an R^2 of 0.508 and an adjusted R^2 of 0.501 (see Table A3), with F(7, 467) = 68.888, p = .000 (see Table A4).

Table A3. Model summary of	geacher job	satisfaction with s	even predictor variables.
----------------------------	-------------	---------------------	---------------------------

Model	R ²	Adjusted R ²	SE of estimate
1	0.508	0.501	16.393

pble A4. ANOVA of teacher job satisfaction with seven predictor variables.

Model		SS	df	MS	F	р
1	Regression	129,591.549	7	18,513.078	68.888***	.000
	Residual	125,502.881	467	268.743		
	Total	255,094.430	474			

****p < .001.

Table A5 reports the coefficients that resulted from the second regression analysis. Two predictor variables (transactional leadership style and dependent decision-making style) still did not produce significant regression coefficients ($\beta = 0.093$, t(473) = 1.772, p = .077 and $\beta = 0.067$, t(473) = 1.936, p = 0.054, respectively) at a significance level of .001.

Table A5. Coefficients with sev	en predictor variables.
---------------------------------	-------------------------

Variable	В	SE B	β	t	р
Total teacher job satisfaction (Constant)	114.784	7.701		14.905***	.000
Transformational	7.312	2.306	0.177	3.171**	.002
Transactional	4.415	2.492	0.093	1.772	.077
Laissez-faire	-4.033	1.239	-0.117	-3.254***	.001
Rational	1.798	0.285	0.246	6.306***	.000
Intuitive	-0.640	0.159	-0.150	-4.019***	.000
Dependent	0.373	0.193	0.067	1.936	.054
A 390ant	-1.326	0.207	-0.247	-6.398***	.000

p < .01. *p < .001

The third regression analysis was then performed by removing the lowest non-significant regression coefficient (transactional leadership style). The six predictor variables produced an R^2 of 0.505 and an adjusted R^2 of 0.498 (see Table A6), with F(6, 468) = 79.482, p = .000 (see Table A7).

Table A6. Model summary of acher job satisfaction with six predictor variables.

Model	R^2	Adjusted R ²	SE of estimate
1	0.505	0.498	16.431

62 👄 H. HARIRI ET AL.

Model		SS	df	MS	F	p
1	Regression Residual Total	128,747.702 126,346.728 255,094.430	6 468 474	21,457.95 269.972	79.482***	.000

The A7. ANOVA of teacher job satisfaction with six predictor variables.

*****p* < .001.

Table A8 reports the coefficients that resulted from the third regression analysis. One predictor variable (dependent decision-making style) still did not produce a significant regression coefficient ($\beta = 0.072$, t(473) = 2.089, p = .037) at a significance level of .001.

Table A8. Coefficients with six predictor variables.

В	SE B	β	t	р
115.293	7.713		14.948***	.000
10.316	1.567	0.249	6.585***	.000
-3.921	1.241	-0.114	-3.161**	.002
1.808	0.286	0.248	6.327***	.000
-0.622	0.159	-0.146	-3.903***	.000
0.402	0.193	0.072	2.089*	.037
-1.340	0.208	-0.250	-6.456***	.000
	10.316 3.921 1.808 0.622 0.402	115.293 7.713 10.316 1.567 -3.921 1.241 1.808 0.286 -0.622 0.159 0.402 0.193	115.293 7.713 10.316 1.567 0.249 -3.921 1.241 -0.114 1.808 0.286 0.248 -0.622 0.159 -0.146 0.402 0.193 0.072	115.293 7.713 14.948*** 10.316 1.567 0.249 6.585*** -3.921 1.241 -0.114 -3.161** 1.808 0.286 0.248 6.327*** -0.622 0.159 -0.146 -3.903*** 0.402 0.193 0.072 2.089*

Leaderdship Styles_DMS and TJS

ORIGINALITY REPORT

1	7%	
-		
PRIMA	ARY SOURCES	
1	scotteacott.com	112 words — 1 %
2	es.scribd.com Internet	58 words — 1%
3	Ira.le.ac.uk	44 words — 1 %
4	www.ias.ac.in	40 words — 1 %
5	researchbank.rmit.edu.au	37 words - < 1%
6	gradworks.umi.com	35 words - < 1%
7	www.tfzr.rs	35 words — < 1%
8	Fauzia Jabeen, Adrienne A. Isakovic. "Examining the impact of organizational culture on trust and career satisfaction in the UAE public sector", Em Relations, 2018 Crossref	
9	etheses.whiterose.ac.uk	29 words $- < 1\%$
10	web.ed.ntnu.edu.tw	26 words $- < 1\%$
11	pdfs.semanticscholar.org	26 words - < 1%

12	Sapna Popli, Irfan A. Rizvi. "Leadership style and service orientation: the catalytic role of employee engagement", Journal of Service Theory and Prac Crossref		1%
13	International Journal of Educational Management Volume 26, Issue 7 (2012-09-15) Publications	23 words — <	1%
14	essay.utwente.nl	22 words — $<$	1%
15	Francis Uzonwanne. "Leadership styles and decision-making models among corporate leaders in non-profit organizations in North America", Jour Affairs, 2015 Crossref		1%
16	dspace1.isd.wordpress.com	19 words $-<$	1%
17	aip.scitation.org	18 words $-<$	1%
18	content.lib.utah.edu	18 words — <	1%
19	ibave.weebly.com	18 words $-<$	1%
20	etd.lib.fsu.edu	17 words $-<$	1%
21	Ilene K. Winokur, Jill Sperandio. "Leadership for effective teacher training transfer in Kuwaiti secondary schools", Teacher Development, 2016 Crossref	17 words — <	1%
22	Kristin Vanlommel, Jan Vanhoof, Peter Van Petegem. "Data use by teachers: the impact of motivation, decision-making style, supportive rela- reflective capacity", Educational Studies, 2016 Crossref	16 words — <	1%
00	Timethy P. Mettet, Steven A. Reebe, Paul C. Paff	old Amondo I	

	Medlock. "The effects of student verbal and nonverbal responsiveness on teacher self- efficacy and job satisfaction", Communication Education, 2004 Crossref	16 words — <	1%
24	repositorio.unesp.br Internet	15 words $-<$	1%
25	researchportal.port.ac.uk	15 words — $<$	1%
26	Policing: An International Journal of Police Strategies & Management, Volume 34, Issue 1 (2011-03-20) Publications	15 words — <	1%
27	Shanique G. Brown, Catherine S. Daus. "The influence of police officers' decision-making style and anger control on responses to work scenarios Applied Research in Memory and Cognition, 2018 Crossref		1%
28	files.transtutors.com	14 words — $<$	1%
29	Neha Verma, Santosh Rangnekar. "General decision making style: evidence from India", South Asian Journal of Global Business Research Crossref	13 words — < n, 2015	1%
30	James Griffith. "Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance Educational Administration, 2004 Crossref	13 words — <	1%
31	Pihie, Zaidatol Akmaliah Lope, Amir Sadeghi, and Habibah Elias. "Analysis of Head of Departments Leadership Styles: Implication for Improving Rese University Management Practices", Procedia - So Behavioral Sciences, 2011. Crossref	earch	1%
			40/

13 words - < 1%

33	commons.lib.jmu.edu Internet	12 words — $<$	1%
34	Na Jiang, Bambang Sumintono, Corinne J. Perera, Alma Harris, Michelle S. Jones. "Training preparation and the professional development of Henan Province, China: formal and informal learn Pacific Education Review, 2017 Crossref		1%
35	eprints.qut.edu.au	12 words — $<$	1%
36	Mary Gunther, Ginger Evans, Linda Mefford, Thomas R. Coe. "The relationship between leadership styles and empathy among student nu Outlook, 2007 Crossref	12 words — < rses", Nursing	1%
37	Lorenzo Tonetti, Marco Fabbri, Michele Boreggiani, Pietro Guastella, Monica Martoni, Noelia Ruiz Herrera, Vincenzo Natale. "Circadian and decision-making styles", Biological Rhythm R Crossref	•	1%
38	uir.unisa.ac.za	12 words $-<$	1%
39	www120.secure.griffith.edu.au	11 words — $<$	1%
40	www.emerald.com	11 words — $<$	1%
41	Kristy Trautmann, Jill K. Maher, Darlene G. Motley. "Learning strategies as predictors of transformational leadership: the case of nonprofit Leadership & Organization Development Journal, Crossref	· · · · · · · · · · · · · · · · · · ·	1%
42	"Encyclopedia of Education and Information Technologies", Springer Science and Business Media LLC, 2020 Crossref	11 words $-<$	1%

44	A.J. Girard, C.L. Reeve, S. Bonaccio. "Assessing decision-making style in French-speaking populations: Translation and validation of the gene making style questionnaire", Revue Européenne of Appliquée/European Review of Applied Psycholog Crossref	eral decision- de Psychologie	<	1%
45	www.manchester.ac.uk	10 words — <	<	1%
46	pt.scribd.com Internet	10 words — <	<	1%
47	journals.sagepub.com	10 words — <	<	1%
48	Radwan El Othman, Rola El Othman, Rabih Hallit Sahar Obeid, Souheil Hallit. "Personality traits, emotional intelligence and decision-making styles universities medical students", BMC Psychology, 2 Crossref	in Lebanese	<	1%
49	Hester Hulpia, Geert Devos, Hilde Van Keer. "The Influence of Distributed Leadership on Teachers' Organizational Commitment: A Multilevel Approac Journal of Educational Research, 2009 Crossref		<	1%
50	www.maseno.ac.ke	9 words — <	<	1%
51	www.abacademies.org	9 words — <	<	1%
52	www.lowyinstitute.org	9 words — <	<	1%
53	e-space.mmu.ac.uk	9 words — <	<	1%
54	Alissa Schwartz. "How Goal Orientation Match Between Social Workers and Their Supervisors	9 words — <	<	1%

Impacts Social Workers' Job Satisfaction", The Clinical Supervisor, 2007 Crossref

	01035161		
55	Roger A. Federici. "Principals' self-efficacy: relations with job autonomy, job satisfaction, and contextual constraints", European Journal of Psych Education, 2012 Crossref	9 words — <	1%
56	umexpert.um.edu.my	9 words $-<$	1%
57	psasir.upm.edu.my	8 words $-<$	1%
58	media.proquest.com	8 words $-<$	1%
59	repository.nwu.ac.za	8 words — <	1%
60	Jozef Bavolar, Maria Bacikova-Sleskova. "Psychological protective factors mediate the relationship between decision-making styles and m Current Psychology, 2018 Crossref	8 words — <	1%
61	Hugo Asencio. "Leadership, trust, and job satisfaction in the public sector: A study of US federal employees", International Review of Public Administration, 2016 Crossref	8 words — <	1%
62	"Proceedings of the Ninth International Conference on Management Science and Engineering Management", Springer Science and Business Mer Crossref		1%
63	journals.lww.com Internet	8 words — <	1%
64	ue.edu.pk Internet	8 words — <	1%

65	hdl.handle.net	8 words $-<$	1%
66	Eithne Reilly, Katie Dhingra, Daniel Boduszek. "Teachers' self-efficacy beliefs, self-esteem, and job stress as determinants of job satisfaction", Inter Journal of Educational Management, 2014 Crossref	8 words — <	1%
67	Seung-Ho An, Kenneth J. Meier. "Gender and the Effectiveness of Leadership Training: Results From a Field Experiment", Review of Public Personnel A 2020 Crossref	1	1%
68	Roy Carr-Hill, Caine Rolleston, Rebecca Schendel "The effects of school-based decision-making on educational outcomes in low- and middle-income contexts: a systematic review", Campbell Systema 2016 _{Crossref}	8 words — 🔨	1%
69	efdergi.hacettepe.edu.tr	8 words — <	1%
70	zombiedoc.com Internet	8 words — <	1%
71	mafiadoc.com Internet	8 words $-<$	1%
72	Meta L. Krüger, Bob Witziers, Peter Sleegers. "The impact of school leadership on school level factors Validation of a causal model", School Effectiveness Improvement, 2007 Crossref	•	1%
73	fedetd.mis.nsysu.edu.tw	8 words — <	1%
74	Baiocco, R "Decision-making style among adolescents: Relationship with sensation seeking and locus of control", Journal of Adolescence, 2009 Crossref	8 words — < 908	1%

75	Helene M. Kjærgård Eide, Gunn Elisabeth Søreide Norwegian policy perspective on the relation between school leadership and pupils' learning outcomes.", Policy Studies, 2014 Crossref	°.8 [™] words — <	1%
76	Wafaa Salem Al-Yaseen, Mohammad Yousef Al- Musaileem. "Teacher empowerment as an important component of job satisfaction: a compara teachers' perspectives in Al-Farwaniya District, Kur Compare: A Journal of Comparative and Internation Education, 2013 Crossref	wait",	1%
77	Robert J. Tait. "A review of the validity of the General Health Questionnaire in adolescent populations", Australian and New Zealand Journal 8/2002 Crossref	7 words — <	1%
78	"International Handbook of Career Guidance", Springer Science and Business Media LLC, 2019 Crossref	7 words — <	1%
79	Syeda Maryam Dilawar, Dilawar Khan Durrani, Xiangyang Li, Muhammad Adeel Anjum. "Decision making in highly stressful emergencies: The interact of trait emotional intelligence", Current Psychology Crossref	ctive effects	1%
80	Management Decision, Volume 54, Issue 9 (2016) Publications	7 words $-<$	1%
81	Journal of Managerial Psychology, Volume 20, Issue 2 (2006-09-19) Publications	7 words — <	1%
82	PETER THUNHOLM. "Military leaders and followers - do they have different decision styles?", Scandinavian Journal of Psychology, 08/2009 Crossref	7 words — <	1%
83	Greta G. Cummings, Kaitlyn Tate, Sarah Lee, Carol A. Wong, Tanya Paananen, Simone P.M. Micaroni, Gargi E. Chatterjee. "Leadership styles	7 words $-<$	1%

and outcome patterns for the nursing workforce and work environment: A systematic review", International Journal of Nursing Studies, 2018 Crossref

- 84 "International Handbook of Leadership for Learning", Springer Science and Business Media LLC, 2011 Crossref
 7 words — < 1%</p>
- Katherine Ravenswood, Julie Douglas, Jarrod Haar. "Physical and verbal abuse, work demands, training and job satisfaction amongst aged-care employees in the home and community sector", Labour & Industry: a journal of the social and economic relations of work, 2018 Crossref
- 86 Murad Ali, Abdullah Z. Sheikh, Imran Ali, Piao Jinji, 6 words < 1% Muhammad Saleem Sumbal. "The moderating effect of supervisor–subordinate on the relationship between transformational leadership and organizational effectiveness ", Journal of East-West Business, 2019 Crossref
- Albert Puni, Ibrahim Mohammed, Emmanuel Asamoah. "Transformational leadership and job satisfaction: the moderating effect of contingent reward", Leadership & Organization Development Journal, 2018
- Chia-Yuan Hsu, Wen-Yu Chen. "Subordinates' 6 words < 1% perception of managers' transformational leadership style and satisfaction: a comparison of electronic manufacturing companies in Mainland China and Taiwan", The International Journal of Human Resource Management, 2011 Crossref</p>
- 39 John Antonakis, Bruce J Avolio, Nagaraj Sivasubramaniam. "Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire", The Leadership Quarterly, 2003 Crossref

 $_{6 \text{ words}} - < 1\%$ Ra'ed Masa'deh, Bader Yousef Obeidat, Ali 91 Tarhini. "A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance", Journal of Management Development, 2016 Crossref Carmen Barroso Castro, Ma Mar Villegas Periñan, 6 words — < 1% 92 Jose Carlos Casillas Bueno. "Transformational leadership and followers' attitudes: the mediating role of psychological empowerment", The International Journal of Human Resource Management, 2008 Crossref $_{6 \text{ words}} - < 1\%$ Hedvig Abrahamsen, Marit Aas, Glenn Ole 93 Hellekjær. "How do principals make sense of school leadership in Norwegian reorganised leadership teams?", School Leadership & Management, 2015 Crossref

EXCLUDE QUOTES	ON	EXCLUDE MATCHES	OFF
EXCLUDE BIBLIOGRAPHY	ON		