



The Role of Job Satisfaction as Mediator in between Perceived Integrity in Leadership and Work Engagement in Teacher Profession at Johor Bahru, Johor.

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ABSTRACT

Headmasters significantly impact teachers' work engagement through their daily leadership practices. Research indicates a correlation between perceived integrity in leadership and work engagement within professional environments. Job satisfaction serves as a crucial factor influencing an individual's level of work engagement. Nevertheless, the literature regarding the headmasters' integrity practices in leadership and their impact on teachers' work engagement, potentially mediated by job satisfaction, remains ambiguous at this point. This study aimed to examine the perceived integrity in leadership and work engagement, mediated by job satisfaction, within a population of 1,358 primary school teachers at Johor Bahru, Johor. This quantitative and non-experimental correlation study employed the probability sampling method to gather research data through a questionnaire administered to 338 selected teacher respondents. The data was subsequently analysed using SPSS and PLS-SEM. The findings of the study revealed that job satisfaction plays a positive and significant mediating role between the perceived integrity in leadership of headmaster and work engagement among primary school teachers at Johor Bahru. The findings of this study indicate that primary school teachers at Johor Bahru perceive a high level of integrity in leadership, particularly towards their headmaster, and also demonstrate a high level of work engagement among themselves.

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1. Introduction

Because of his assigned duty, high standing status in the school, and positional capacity to influence the behaviors of other teachers in order to achieve schoolwork-related objectives, the headmaster is a key and potential source of role model in primary schools. Headmasters must focus teachers' attention on what is vital and not allow them to be diverted or sidetracked by initiatives that will have an influence on students' achievement and school's performance (Day & Sammons, 2014).

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The concept of integrity in the educational context is of paramount relevance for the flourishing of schools. The trait of integrity can be considered fundamental and essential for any organization aiming to enhance performance and sustainability by operating successfully and efficiently. Therefore, the headmaster's paramount responsibility is to ensure the efficacy of his leadership and the success of the school. An effective headmaster who exemplifies integrity and principles within the school can significantly influence the cultivation of positive school cultures.

This is due to the headmaster's application of integrity in his leadership, able to foster job satisfaction among the teachers. The integrity of the headmaster holds significant importance for teachers, as perceptions of integrity provide critical insights that inform essential judgements regarding the headmaster's probable conduct, values, and ethical stance. Teachers will determine the headmaster whom they will support, the headmaster in whom they will place their trust, the headmaster to whom they will pledge their loyalty and commitment, and ultimately for whom they will strive to excel within the school environment. Moreover, the integrity of a headmaster in his leadership role is essential for the positive impacts that can be realized in the leadership process and the successful results that the school can achieve.

The engagement of teachers in their work has been associated with numerous favorable job outcomes, such as job satisfaction, performance, adaptive coping styles, and creativity (Ugwu et al., 2013). Consequently, engaged school teachers can be characterized as those who exhibit a sense of vitality and commitment, fully immersed in their professional responsibilities. The dedicated teachers demonstrate a vigorous work ethic, exhibit a profound dedication to their roles, and experience a deep sense of absorption in their professional endeavors. Work engagement exhibits a strong and positive correlation with the performance of both teachers and students within the classroom environment. The effectiveness of a teacher's performance is inherently linked to their level of engagement and their capacity to sustain a teaching career that resonates with their professional inclinations.

On the other hand, the level of positive affect that an employee has towards the organization is known as job satisfaction. It could be a broad sense of contentment with the work or with particular aspects of the job or workplace. Job satisfaction is influenced by a wide range of factors, including the work itself, supervision, relationships with coworkers, opportunities for growth, financial advantages, the social environment, and workload.

The foremost factor influencing an employee's performance, effectiveness, and contribution to the organization is their level of job satisfaction. For example, within the educational setting, the conduct of the headmaster as a supervisor plays a pivotal role in influencing teachers' job satisfaction. A conducive workplace environment can be cultivated by examining the elements that affect teacher job satisfaction and subsequently devising interventions that headmasters can implement to incorporate and elevate those elements (Munyewende et al., 2014).

In light of our nation, education is regarded as a significant factor in the advancement of Malaysian society and economic capital. The significance of education to our nation and society can be articulated as follows: 1) it stimulates creativity and nurtures innovation; 2) it equips our youth with essential knowledge and skills required to thrive in the contemporary labor market; and 3) it serves as a fundamental catalyst for economic growth (MOE, 2013).

The Malaysia Education Blueprint 2013-2025 (MOE, 2013) set clear target that needs to be achieved by Ministry of Education (MOE) in terms of quality, equity and access within these 13 years of duration since 2013. Meticulous planning within this duration is essential to include transformation of human resource management and finance, and the designation of key initiatives which result in students' outcome at long last. On that account, school needs to ensure to be able to provide quality teaching, guidance, and support for the students, and complies with the high-performance standards as prescribed by the MOE.

Studies indicate that, in addition to teachers, the headmaster serves as the most significant school-based element in enhancing school performance and student achievement. It is widely acknowledged that an effective headmaster serves as the cornerstone of a thriving educational institution, considering the multitude of roles and responsibilities undertaken by a headmaster within the school environment. The headmaster serves as a public figure whose

professional and personal conduct must consistently maintain the confidence of stakeholders in his leadership (Hanover Research, 2019).

Teachers are viewed as responsible for improving student achievement and ensuring school success. Teachers are essential in executing curriculum transitions to develop culturally literate, virtuous individuals with strong social values, as well as an optimistic and forward-thinking mindset, necessary for success in an evolving world. In this case, it is essential to enhance teacher engagement and enthusiasm to improve student excellence and the overall effectiveness of the school (Khun-Inkeeree et al., 2022).

Because the leadership style used by the headmaster determines the efficiency of his leadership at school and influences teacher performance, the headmaster's integrity is critical. This is considering the behaviors demonstrated by the headmaster in his leadership will influence the teacher's satisfaction with their job and, in turn, the teacher's work engagement. This will eventually have an impact on the school's performance and achievement of students, as the teacher is primarily responsible for carrying out the school's goals.

Nonetheless, to the best of the researchers' understanding, there appeared to be no recent studies that offered a comprehensive overview of the integrity in leadership exhibited by headmasters and its potential impact on teachers work engagement within primary schools in Johor Bahru. Conventionally, a greater effectiveness in leadership within an organization correlates with an elevated level of job satisfaction among its employees (Khairani & Samsudin, 2019). Organizations that exhibit elevated levels of job satisfaction among employees tend to experience correspondingly higher levels of engagement in their work (Baumruk, 2006; Halbesleben, 2010; Juhdi et al., 2013; Shuck et al., 2014). Consequently, researchers posited that the perceived integrity of a headmaster's leadership within a school may impact teachers' work engagement, with job satisfaction serving as a mediating factor.

For that reason, the objectives of this study were: 1) To examine the level of perceived integrity in leadership among primary school teachers to their headmasters at Johor Bahru; 2) To examine the level of work engagement among primary school teachers at Johor Bahru; 3) To identify the direct effect of perceived integrity in leadership towards work engagement among primary school teachers at Johor Bahru; 4) To identify the direct effect of perceived integrity in leadership towards job satisfaction among primary school teachers at Johor Bahru; 5) To identify the direct effect of job satisfaction towards work engagement among primary school teachers at Johor Bahru; and 6) To identify the mediating effect of job satisfaction in between the perceived integrity in leadership and work engagement among primary school teachers at Johor Bahru.

The aligned research questions in this study were: 1) What is the level of perceived integrity in leadership among teachers to their headmasters in primary schools at Johor Bahru?; 2) What is the level of work engagement among primary school teachers at Johor Bahru?; 3) Is there any significant direct effect of perceived integrity in leadership towards work engagement among primary school teachers at Johor Bahru?; 4) Is there any significant direct effect of perceived integrity in leadership towards job satisfaction among primary school teachers at Johor Bahru?; 5) Is there any significant direct effect of job satisfaction towards work engagement among primary school teachers at Johor Bahru?; and 6) Is there any significant mediating effect of job satisfaction in between perceived integrity in leadership and work engagement among primary school teachers at Johor Bahru?

In line with the research questions, the related research hypotheses were: 1) H1: Perceived integrity in leadership significantly affects work engagement among primary school teachers at Johor Bahru; 2) H2: Perceived integrity in leadership significantly affects job satisfaction among primary school teachers at Johor Bahru; 3) H3: Job satisfaction significantly affects work engagement among primary school teachers at Johor Bahru; and 4) H4: Job satisfaction significantly affects between perceived integrity in leadership and work engagement as mediator among primary school teachers at Johor Bahru.

This study was noteworthy due to its evaluation of the correlation between the perceived integrity in the headmaster's leadership and the level of teacher engagement in primary schools at Johor Bahru. In their endeavors to establish a competitive and successful educational organization, headmasters may consult this literature. Headmasters will be able to motivate and treat their teachers to engage in work, attain the school's objectives, and

enhance students' achievement by comprehending the relationships between job satisfaction, work engagement, and perceived integrity in leadership. Through the adoption of integrity in leadership, besides the enhancement of teacher engagement, and the enhancement of job satisfaction, headmasters can also enhance the quality, effectiveness, and efficacy of their leadership.

2. Literature Review

2.1 Past Studies

The concept of integrity in leadership is a complex construct that encompasses the perceptions regarding a leader's moral values, as well as their commitment to both professing and embodying those values with remarkable consistency (Moorman et al., 2012). Employees may view their leader as possessing integrity in leadership to the degree that the leader behaves in accordance with the values, beliefs, and principles that he professes to uphold (Schöttl, 2015).

Suryadi et al. (2016) asserted that the enduring integrity of a leader is a crucial element for the individual in fulfilling their duties and responsibilities. A leader exhibiting a profound commitment to integrity typically manifests ethical conduct, characterized by honesty, trustworthiness, and a disciplined approach to his duties and responsibilities. A leader exhibiting a deficiency in integrity is likely to engage in unethical conduct, such as dishonesty, greed, corruption, and a disregard for regulations or legal obligations in the execution of their duties and responsibilities.

To cultivate integrity, it is essential that it resonates deeply within oneself, aligning with core beliefs centered on honesty and trustworthiness. Shahid (2014) posited that integrity serves as a hallmark of a leader who exemplifies robust moral and ethical principles in the workplace. A leader who exemplified integrity in his leadership naturally drew employees towards him, as he embodied reliability and dependability. A leader characterized by integrity in his leadership is deemed ethical and can be depended upon to act in reputable and righteous manners, even in the absence of observation. The characteristics of a leader often include being accommodating, compassionate, clear-minded, kind, ethical, and supportive of fairness, justice, and respectability.

As a result, employees can profoundly influence the evaluation of a leader's integrity in leadership through multiple methods. Understanding a leader's values and the expectations associated with leadership, demonstrating those values, and guiding through them allows a leader to embody and practice integrity, ultimately fostering enhanced organizational effectiveness and cultivating enduring trust (Christie & Fellow, 2014).

While work engagement represents a psychological state deeply embedded in the professional environment, characterized by enthusiasm, energy, immersion, and a profound commitment to one's tasks. Work engagement fosters a profound mental and emotional connection between employees and their tasks, enabling them to effectively navigate the challenges of their roles while inspiring a proactive approach to devising innovative solutions for organizational issues (Abbrow et al., 2018).

Carmona-Halty et al. (2019) articulated that work engagement constitutes a psychological state rooted in the workplace, characterized by passion, immersion, energy, and an abiding dedication to one's work. Due to the findings that work engagement significantly influences employee behaviors and outcomes, Kuok and Taormina (2017) posited too that engaged employees exhibit superior performance compared to those who are merely motivated or satisfied with their work.

Wood et al. (2020) also stated that work engagement encompassed three dimensions, which are: 1) the willingness to discuss the organization's positive aspects; 2) a strong desire to be a member of the organization; and 3) the willingness to exert effort and exhibit strong behavior in order to contribute. Additionally, in the realm of human resource management, organizational commitment and work engagement are the two critical components that contribute to the retention of high-performing and potential employees (Manalo et al., 2020).

Since teacher's work engagement is thought to be a multifaceted factor that includes things like buoyancy, low absenteeism, positive future career aspirations, participation in the workplace, and enjoyment of work, learning more about it can help headmasters improve the work environment for teachers and encourage positive changes in the setting where teachers directly affect students' academic performance (Sokolov, 2017).

Conversely, job satisfaction represents a positive (or negative) evaluative judgement that individuals form regarding their job or job circumstances (Brief & Weiss, 2022). The employee's favorable emotional condition can be viewed as a consequence of his job contentment. Furthermore, job satisfaction is a condition that can be influenced and altered by the interactions among employees, personal characteristics, the work environment, and the organization in which an employee is engaged.

In essence, the personal characteristics of individuals, the surrounding work environment, the organization they are part of, and their interactions with colleagues can significantly influence employees' job satisfaction levels (Anisa & Herman, 2020). In addition to income adequacy, Smith and Shields (2013) noted that a positive experience with a supervisor can influence an employee's job satisfaction. Milanović and Talić (2021) further emphasized that a positive relationship with the leader serves as a significant predictor of employee job satisfaction.

In contemporary management, employee's job satisfaction is regarded as a key driver for organizations in fostering quality, enhancing customer satisfaction, and boosting productivity. It is believed that employees with a high level of job satisfaction will exhibit strong motivation, good morals, and will perform effectively and efficiently in their work (Brunetto et al., 2000). Job satisfaction among employees can be assessed through either a global approach or a facets approach. The global approach assesses an employee's overall job satisfaction, whereas the facets approach evaluates satisfaction across various factors (Dhamija et al., 2018).

Concurrently, the aspect of interpersonal relationships between an employee and his leader, colleagues, and the organization is crucial, as this aspect can determine employee's satisfaction in his job. The presence of a harmonious interpersonal relationship leads to enhanced performance, increased job satisfaction, a stronger sense of organizational commitment, and more positive role cognition, especially when contrasted with employees who lack such relationships with their supervisors, colleagues, and the organization (Sanders, 2019).

2.2 Theoretical perspective

This study was anchored on the theories of behavioral integrity theory and Herzberg's two factor theory.

Behavioral integrity theory, rooted in social cognition and trust literature, elucidates the process by which employees develop perceptions regarding the alignment between their leader's words and actions, as well as the implications these perceptions hold for employees. The conceptual model illustrates that leader behavioral integrity fosters employees' trust in leadership, subsequently leading to positive effects on their attitudes, behaviors, and performance. Later empirical studies largely confirmed the notion that a leader's behavioral integrity positively influences employee performance by promoting trust and facilitating clear communication (Palanski & Yamamarino, 2009).

While behavioral integrity reflects on the past, trust on the other hand anticipates future decisions. According to this theory, behavioral integrity is anticipated to be a primary antecedent of trust. Way et al. (2022) asserted that behavioral integrity refers to the perceived consistency between an individual's statements and behaviors. It involves both the perceived alignment between stated and actual values, and the perceived fulfillment of promises. Behavioral integrity refers to the degree to which employees believe that their leader's authentically convey his identity and core principles in his interactions with staff.

Consequently, as employees within the organization regularly engage in daily interactions with their leaders, their emotions and behaviors largely hinge on these exchanges. This dynamic allows them to intuitively grasp the implications of their leaders' words and actions, thereby reflecting the qualities inherent in effective leadership. The perception of management by employees, their emotional commitment, overall job satisfaction, attachment to the

organization, and their intention to remain in the organization can all be significantly shaped by the integrity of leadership behaviors. Consequently, the behavioral integrity theory posits that a leader's behavioral integrity will significantly influence leadership effectiveness within the workplace, yielding a diverse array of implications for employees, teams, and the organization as a whole (Li et al., 2021).

While the two-factor theory, formulated by Herzberg, Mausner, and Snyderman in 1959, draws significant influence from Maslow's hierarchy of needs (Tan, 2013). In this theory, Herzberg recognized that motivators and hygiene factors influenced distinct dimensions of job satisfaction. This perspective diverged from the conventional understanding of job satisfaction and dissatisfaction as merely two opposing points on a singular continuum. Hygiene factors serve to avert dissatisfaction; however, they do not contribute to the attainment of satisfaction. They serve merely to prevent negative sentiments in the workplace, whereas true motivators are the fundamental elements that inspire employees in their professional environment. Furthermore, hygiene factors may avert dissatisfaction among employees, yet they do not inherently foster positive motivation (Tan, 2013).

In addition, in contrast to Maslow's motivation theory, Herzberg's two-factor theory posits that job satisfaction and dissatisfaction stem from distinct factors. Herzberg characterized motivators as inherent to the role, while hygiene factors were identified as external to the role (Hilmi et al., 2016). Herzberg also succinctly delineated the factors contributing to job satisfaction from those that result in job dissatisfaction (Osemeke & Adegboyega, 2017).

According to Herzberg's two-factor theory, motivators are inherent to the work itself and foster a positive disposition among employees towards their roles, as they fulfil the need for personal growth and self-actualization. Conversely, hygiene factors represent external elements of the job that serve to mitigate job dissatisfaction, as they address the environmental and workplace conditions necessary to avert discomfort (Achim et al., 2013).

Consequently, to achieve superior performance, productivity, and long-term organizational viability, a leader ought to incorporate hygiene factors alongside motivators. Motivators have the potential to enhance satisfaction while concurrently reducing discomfort within the organization (Tuliao & Chung, 2022). Employee satisfaction in job is enhanced through opportunities, favorable working conditions, effective organizational policies, job security, and employee retention. To enhance employee performance, motivation plays a crucial role, contributing to their prolonged tenure within the organization and ultimately elevating the organization's reputation (Palaniammal, 2013).

3. Method

This study employed a quantitative research approach. This study adopted a non-experimental, correlational research design. This research put the focus on the study of perceived integrity in leadership and teacher work engagement that mediating by job satisfaction among primary school teachers at Johor Bahru. Thus, this study been taken place in Johor Bahru district in the state of Johor. The primary school that underneath the management of Johor Bahru District Education Office (PPDJB) would involve in this study.

As there were total 3,218 primary school teachers at Johor Bahru, subsequently, there would be at least 344 respondent teachers needed in this study as the research samples (given the confident level of 95%, margin of error 5% and 50% of the population proportion), based on the calculation by using the formula of sample size determination by Krejcie and Morgan (1970).

In this study, researcher used the questionnaire as the instrument to collect the data from the selected respondents in the research population to yield statistical data. There were overall 29 items consisted in the Respondent Questionnaire that would allow researcher to examine the level of perceived integrity in leadership on teacher to headmaster at school, the level of teacher work engagement, as well as the level of teacher job satisfaction at school. The items in the questionnaire were adapted and modified from Perceived Leader Integrity Scale (PLIS) by Craig and Gustafon (1998), Minnesota Satisfaction Questionnaire (MSQ) by Weiss et al. (1967), and Utrecht Work Engagement

Scale (UWES) by Schaufeli et al. (2002). The validity of the research instrument was assessed by experts, and its reliability was confirmed with a Cronbach's alpha of 0.9235 in the pilot test.

Researchers granted the written permission by the Education Planning and Policy Research Division (EPRD), Johor State Education Department (JPNJ) and PPDJB respectively, in order to conduct the study and to collect the data from the primary school teachers that underneath in the management of PPDJB.

The statistical data that collected via the research instrument been analyzed by the analyzing tools later. In this study, the analysis tools that involved were the Statistical Package for Social Science (SPSS) for the collected descriptive data, and the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique through Smart PLS 4.0 for the collected inferential data. The suitability of the model in this study also been examined in the aspects of measurement and structural by using the Smart PLS 4.0.

4. Results

4.1 Measurement model assessment

Table 1

Assessment result of measurement model

Assessment	Testing Result
Constructs Factor Loading	Greater than 0.70 in all indicators
Cronbach's Alpha	All greater than 0.80
Composite Reliability (CR)	All greater than 0.80
Average Variance Extracted (AVE)	All greater than 0.50
Heterotrait-Monotrait ratio of correlations (HTMT)	All less than 0.90
Fornell-Larcker	Accepted

The testing result of measurement model (Table 1) in current study indicated that the model was validated and reliable.

4.2 Structural model assessment

Table 2

Assessment result of structural model

Assessment	Testing Result
Q Square Predictive Relevance (Q^2)	All greater than 0.50
Standardize Root Mean Square Residual (SRMR)	0.063
Normed Fit Index (NFI)	0.874
Coefficient of Determination (R^2)	In between 0.80 to 0.995
F-square (F^2)	All greater than 0.35
Variance Inflation Factor (VIF)	All below than 3.0

The testing result of structural model (Table 2) in current study indicated that the model was accepted to be used.

4.3 Analyzing of research questions

4.3.1 Descriptive data

Table 3*Descriptive data analysis result*

Assessment	Testing Result
Level of perceived integrity in leadership among primary school teachers to their headmaster	Average mean 4.02 out of 5.00
Level of work engagement among primary school teachers	Average mean 4.02 out of 5.00

4.3.2 Inferential data

Table 4*Inferential data analysis result*

Path	Path Coefficient	P-value	T-statistic	Testing Result
Perceived integrity in leadership → Work engagement	0.550	0.000	7.326	Significant
Perceived integrity in leadership → Job satisfaction	0.491	0.000	5.822	Significant
Job satisfaction → Work engagement	0.097	0.040	2.056	Significant
Perceived integrity in leadership → Job satisfaction → Work engagement	0.047	0.000	2.881	Significant

5. Discussion

Research question 1 in this study aimed to examine the extent of perceived integrity in leadership among teachers to their headmasters in primary schools at Johor Bahru. The finding of present study revealed that the level of perceived integrity in leadership among primary school teachers to their headmaster at Johor Bahru was in high level (which attained average mean 4.02 out of 5.00) (Table 3).

Despite that perceived on an individual teacher is regarded as subjective, may vary from time to time, as well as may different from individual teacher to individual teacher; however, teachers can perceive their headmaster through teachers' daily observations, interpretations and interactions with their headmaster at school (Schöttl, 2015). Teachers will evaluate a headmaster as having integrity if he demonstrated integrity in his leadership, and a headmaster who demonstrated unethical behaviors would be seen as having low integrity. In light of the teachers perceive of the headmaster's everyday tasks of managing and leading the school, this finding indicated that the headmasters of Johor Bahru's primary schools are acting with integrity in their leadership.

While research question 2 intended to examine the level of work engagement among primary school teachers at Johor Bahru. As the value of the average mean for the items for work engagement was in 4.00 (Table 3), thus this indicated that the level of work engagement among primary school teachers at Johor Bahru was high.

The current study indicated that when primary school teachers at Johor Bahru immersed themselves in their work, they tended to experience greater job satisfaction and more positive emotions towards both their roles and the school environment. This engagement led them to exceed their formal responsibilities and align closely with the school's goals and values (Bakker et al., 2023). They might also exhibit a commitment to offering sustainable discretionary effort to contribute to their school's success, driven by their own willingness and capability. Furthermore, these dedicated teachers have the ability to develop their own job resources as time progresses (Wood et al., 2022).

On the other hand, to answer the research question 3, the finding of the current study revealed that there was a positive and significant direct effect of the relationship between perceived integrity in leadership and work engagement among primary school teachers at Johor Bahru. This evidenced by the analysis outcomes that indicated a P-value of less than 0.001, a T-statistic of 7.326, and a path coefficient of 0.550, which relatively demonstrated the strength relationship between perceived integrity in leadership and the work engagement among primary school teachers at Johor Bahru (Table 4). This revealed the accepted of research hypothesis 1 in current study.

The results of the current study indicated a positive correlation between the leadership behaviors of headmasters and the engagement of teachers in their work. This finding aligned with the perspective put forth by Demerouti et al. (2014), who suggesting that the dynamics between teachers and the integrity of the headmaster influence work outcomes. Additionally, it highlighted the importance of the strategies or behaviors established by the headmaster in his leadership and managerial roles within the school. When these strategies and behaviors aligned with the expectation of teachers, they will influence the efficiency and effectiveness of the teachers in their work.

The positive and significant direct effect observed in the relationship between perceived integrity in leadership and work engagement among primary school teachers at Johor Bahru can also be explained through the lens of behavioral integrity theory. The leader's behavioral integrity significantly impacts leadership efforts in the workplace and influences employees' trust in management, affective commitment, job satisfaction, emotional attachment to the organization, and their intention to remain with the organization long-term (Li et al., 2021).

While the research question 4 was to identify the direct effect of perceived integrity in leadership towards the job satisfaction among primary school teachers at Johor Bahru in this study. Research finding reported that there was a positive and significant direct effect of perceived integrity in leadership towards job satisfaction among primary school teachers at Johor Bahru in current study, which the testing results indicated that the presented of the P-value was less than 0.001, T-statistics was in 5.822 and the path coefficient was in 0.491 in between these two variables (Table 4). Thus, there was a positive and significant direct effect of perceived integrity in leadership towards the job satisfaction among primary school teachers at Johor Bahru. Research hypothesis 2 been accepted too in current study.

This was because the leadership of the headmaster in primary schools at Johor Bahru significantly influences the school environment. The reflections of the headmaster on his daily leadership practices indicated that teachers' job satisfaction can vary greatly, depending on the effectiveness of that leadership. Consequently, the integrity demonstrated in the headmaster's leadership fosters a positive working environment and harmonious interpersonal relationships when interacting with teachers. This will affect teachers' job satisfaction (Sanders, 2019).

This specific finding also aligned with what was agreed upon by Smith and Shields (2013). Smith and Shields (2013) advocated that a positive relationship with a supervisor can influence an employee's job satisfaction. This finding aligned too with the suggestion made by Milanović and Talić (2021), who indicated that a positive relationship with the leader is a significant predictor of employee job satisfaction.

Concurrently, the research question 5 in current study intended to identify the direct effect of job satisfaction towards the work engagement among primary school teachers at Johor Bahru. As the values of collected P-value was in 0.04, the T-statistic was in 2.056 and the path coefficient was in 0.097 that occurred in the relationship between job satisfaction and work engagement in present study (Table 4). Hence, there was a positive and significant direct effect of job satisfaction towards work engagement among primary school teachers at Johor Bahru in this study. Thereby, research hypothesis 3 been accepted in current study.

This was because teachers at Johor Bahru's primary schools will have a favorable work attitude and, in particular, perform better at work if they are satisfied with their jobs, which was related to having a good supervision relationship with the headmaster due to headmaster's leadership at school. In the long run, this can aid the school in many ways including increasing teacher involvement and positive attitudes (Brunetto et al., 2000). This finding also

revealed that practical of the two-factor theory in current study, which the job satisfaction on teachers will lead to their engagement in work.

Finally, the finding of this study indicated that there was a positive and significant mediating effect of job satisfaction in the relationship between perceived integrity in leadership and work engagement among primary school at Johor Bahru. This was because the finding demonstrated that the value of path coefficient that involved with the mediator of job satisfaction in between the perceived integrity in leadership and work engagement (which was in 1.044), was greater than the value of the path coefficient that existing in between the perceived integrity in leadership and work engagement in this study (which was in 0.954) (Table 4). This answered the research question 6 in current study, and there was a significant mediating effect of job satisfaction in between perceived integrity in leadership and work engagement among primary school teachers at Johor Bahru. Therefore, research hypothesis 4 been accepted in this study.

In addressing the research gap, the finding of this study offered a comprehensive overview of the integrity in leadership that exhibited by headmaster in his daily routine at school able to impact on teachers work engagement within primary schools at Johor Bahru. In the setting of this study, the supervision relations in the school served as a hygiene factor. If teachers perceived that headmaster is integrity in his leadership and can be trusted, it will help in developing a positive and effective supervision relations in between headmaster and teachers. In contrast to the motivator factors according to the Herzberg's two-factor theory, which are intrinsic to the work and foster a positive attitude among employees, the hygiene factors are external factors of the job that prevent job dissatisfaction by responding to the environment and workplace that require avoidance of discomfort. These factors satisfy the need for self-implementation and growth (Achim et al., 2013).

Therefore, in the context of this study, despite that supervision relations do not directly affects the motivation of primary school teachers at Johor Bahru, however teachers are more likely to deliver better performance, services, and innovation in their daily routines and are happier, healthier, and more fulfilled as a result of the excellent hygiene factors that eliminate dissatisfaction and improve performance. Furthermore, they are less likely to have complaints (Palaniammal, 2013). When teachers are satisfied with the headmaster by trusted him in the leadership, teachers in the primary schools at Johor Bahru are likely to performed with extra dedication, vigor and absorption, by boosting their work engagement.

The result of this study indicated that the perceived integrity in leadership and work engagement positive and significantly meditating by job satisfaction among primary school teachers at Johor Bahru. This study may bring the implication to the school leader. Because integrity is a prerequisite for job satisfaction and will impact teachers' affective organizational commitment, thus the headmaster should be aware of the importance of integrity in his day-to-day leadership duties at the school. It will be easier for teachers to accept the headmaster's leadership if he can maintain his integrity, which allows him to act in a way that is consistent with his words and interacts with people in an approachable and non-defensive way. This can ensure the efficacy of the headmaster's leadership in the school and improve the headmaster's quality.

Also, like all studies, this particular study also occurred a limitation. Other mediators, moderating variables, and relationship models also could impact the connection between perceived integrity in leadership and work engagement, in addition to the mediator of job satisfaction highlighted in this study. The interplay of individual emotions, personality traits, school environment, family dynamics, and peer relationships can act as mediators nor moderators that impact teacher work engagement within educational contexts. As a result, while this study uncovered a mediation model linking perceived integrity in leadership to teacher work engagement via mediator of job satisfaction, it does not rule out the possibility of different mediated moderating models.

Likewise, researchers also suggested that a longitudinal analysis of the impact on headmaster's integrity in leadership on the development of teacher's perceive can be carry out in future research. As the perceive on an individual teacher is considered subjective, which may vary from time to time, and may different from individual teacher to individual teacher, therefore, a longitudinal study will able to check in and track the development of the perceived leadership integrity on teacher to the headmaster in effectively, neither involved in the group nor individual level.

6. Conclusion

When it comes to national development, education is regarded as both a sort of human investment and a crucial component. Education can produce humans who possess the competence, skills, attitudes, and behaviors required by the country to build the economy and provide a more dignified societal living. This is something that the nation can accomplish. To assure the school attains its goals in offering the excel education services to the children, the quality of the headmaster and the engagement of teacher are the cores.

Present study disclosed that the perceived integrity in leadership and work engagement mediated positive and significantly by job satisfaction among primary school teachers at Johor Bahru. Primary school teachers in Johor Bahru have a high level of perceived integrity in leadership towards their headmaster. The level of work engagement among Chinese primary school teachers at Johor Bahru is high, as well.

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