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## WHAT ABOUT NOW? TALENT MANAGEMENT IN EDUCATION: THE FUTURE WE CREATE

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### Abstract:

Talent management involves identifying, developing, and retaining talent, which is crucial for the longevity of organizational excellence. In the context of the Malaysian Independence Chinese Secondary School (MICSS), it is apparent that not all teachers and administrators possess the necessary skills or have undergone training from the Malaysian Ministry of Education (MOE) regarding the identification and cultivation of teachers' talent. The primary objective of the research is to examine the extent of talent management methods among MICSS educators, focusing on talent identification, talent development, and talent culture. This inquiry will examine the function of talent development as a mediator between teachers' identification of talent and culture, highlighting the relationship between these characteristics and teacher retention at MICSS. The present study employs a quantitative methodology that integrates stratified random sampling and cluster sampling. A total of 357 participants from various locations in Malaysia contributed to this survey investigation. This research verifies that MICSS teachers exhibit substantial proficiency in talent identification, talent development, and talent culture. This study found that the talent development of MICSS educators in Malaysia entirely mediated the identification of teacher talent and the cultural elements affecting retention. This study constitutes the first empirical inquiry in Malaysia that specifically analyses the talent management of teachers within MICSS, covering the entire Malaysian setting.

### Keywords:

Talent Identification, Talent Development, Talent Culture, MICSS (Malaysian Independent Chinese Secondary School), Talent Management

## Introduction

In today's secondary school setting, change is unavoidable due to societal demands for inclusive and significantly effective educational results. Educational institutions must improve management efficiency and increase accountability to bolster the sustainability of education. To realise aims and vision in the education sector, schools must be endowed with exceptional teaching talent by identifying, nurturing, and cultivating a talent-orientated culture within the educational environment. When school administrators use the talent management approach, learning outcomes and school effectiveness will inevitably enhance (Liechti García & Sesé, 2024). Therefore, the implementation of talent management is crucial in the educational sector to ensure accountability and maintain a distinguished reputation in private institutions such as MICSS (Mohammad & Borkoski, 2024).

The necessity arises from the scarcity of published publications, particularly those analysing talent management at MICSS throughout Malaysia (Shamsudin et al., 2024). Numerous recent studies examine talent management and its subcomponents, including talent identification, talent development, and talent culture (Groenewald et al., 2024; Kalim, 2024; Y. Song et al., 2024; Sousa et al., 2024; Tusquellas et al., 2024). Too little or less evaluation of teachers, like the lack of standard tests, makes it challenging for the education system to identify talented teachers (Qian et al., 2024; White & Maher, 2024). Teacher evaluation is essential for teachers' involvement in professional development (Ziyi, 2024), as it identifies their weaknesses and enhances their competencies and professionalism through development programs.

Their pedagogical proficiency will be enhanced to prevent the misplacement of talented teachers in positions that may not be suitable for them (Alexeev et al., 2024; Liu & Zhang, 2025). In other words, teachers classified as talented will demonstrate lower turnover rates and fewer intentions to change schools compared to those classified as just talented (Sousa et al., 2024). This research is crucial for examining the talent management of MICSS educators, as it aims to bridge the population and knowledge gaps and provide a more precise and persuasive explanation. Furthermore, the research initiated a process for Malaysian educational institutions to discover optimal talent management strategies that may be employed by school principals and administrators to improve the working environment for teachers.

However, several challenges exist within Malaysia's educational landscape, particularly concerning the Malaysian Independent Chinese Secondary School (MICSS), which functions as a private, vernacular institution. The insufficiency of MICSS in providing professional training and development for educators is due to its classification as a non-government-funded institution under the Ministry of Education Malaysia (Wang & An, 2023). Moreover, certain in-service educators exhibit reluctance to change, and educational institutions possess constrained resources for the implementation of professional development initiatives for MICSS teachers. Nevertheless, school administrators in Malaysia, including those at MICSS, frequently neglect the influence of cultural factors on teachers' well-being, including training opportunities, remuneration, and health conditions, so leaving these matters unaddressed (Thien & Lee, 2023). When a teacher encounters anxiety stemming from institutional workload, it may result in diminished occupational health and well-being, adversely affecting the school environment and potentially leading to considerations of resignation or turnover, as observed in certain secondary schools in Malaysia, including MICSS (Hamer et al., 2024). A robust and affirmative school culture and environment can improve teachers' emotional intelligence and conduct. Employment at private institutions, particularly MICSS, involves complex

administrative responsibilities and bureaucratic procedures, potentially causing anxiety and leading some educators to abandon the field (Gundlach et al., 2024).

This research's significance serves as a guideline for school administrators, particularly principals, to execute the most suited approaches connected to teachers' everyday tasks. Developing nations like Malaysia are experiencing a talent crisis due to a limited supply of skilled workers (Baharin et al., 2023), particularly within the MICSS teaching workforce, which is typically defined by short-term contracts (Groenewald et al., 2024). Therefore, the MICSS school administrator must initiate the involvement of teachers in training or talent development programs that align with daily school requirements and the national education system (Alzoraiki et al., 2023). Malaysian teachers tend to favour staying in schools that offer a constructive working environment (Leong & Said, 2024), characterised by comfort, training opportunities, and competitive salaries. This study may serve as a guideline for school administrators or policymakers to implement optimal talent management strategies, including standard teacher evaluation requirements, tailored teacher development programs, and retention strategies through the cultivation of a talent-centric culture at MICSS. This study also applies to other educational institutions such as primary schools and government-funded secondary schools. This investigation seeks to examine how various elements of educational institutions, including talent identification, teacher development, and the cultivation of a talent culture among educators, facilitate the creation of an effective and diverse environment in Malaysian Independence Chinese Secondary Schools (MICSS) (Sun & Huang, 2024).

In addition to their academic tasks assigned by the school administration, the MICSS teachers are also responsible for managing non-academic duties. This issue results in substantial workload and extended working hours, causing fatigue, apathy, and emotional instability among numerous educators. Consequently, educators encountering these emotional limitations sometimes opt for early retirement or pursue positions at alternative educational institutions (Sia et al., 2022). The primary aim of this study is to examine the relationship between talent identification, the development of teacher competencies, and the establishment of a talent-centric culture that fosters their sustained dedication to the educational institution. Consequently, the aims of the inquiry are as follows:

- RO 1.** The aim is to measure the extent of talent identification, development, and cultural factors in MICSS teachers.
- RO 2.** To investigate talent development of MICSS teachers in Malaysia act as a mediator in the identification of teachers' talents and contribute to a cultural environment that enhances teacher retention.

Additionally, the aims of this investigation are outlined as follows:

- RQ1.** What is the extent of talent identification, talent development, and talent culture among MICSS teachers?
- RQ2.** Does the talent development of MICSS teachers in Malaysia act as a mediator in the identification of teachers' talents and contribute to a cultural environment that enhances teacher retention?

In addition, this investigation significantly contributes to the development of teacher talent by guaranteeing the competency of teachers, which in turn reduces turnover and employment changes, particularly in the MICSS private school and education sector of Malaysia. Teachers would likely opt to stay in their current positions if provided with educational opportunities to enhance their skills. Teachers experience greater comfort when the school culture recognizes and values their competencies (Liu, 2023). The setting of teacher professional development focuses on the instructive responsibilities of teachers within the classroom. Nonetheless, an important aspect frequently overlooked is that this research primarily examines teachers in MICSS schools who serve as organizational stakeholders within the school environment (Coppe *et al.*, 2024) and possess cultural talent for teacher retention, which is deemed vital for professional development.

### **Malaysian Independence Chinese Secondary Schools (MICSS)**

Malaysian Independence Chinese Secondary Schools (MICSS) operates as a private, non-government-funded, and vernacular secondary school in Malaysia. The enactment of the Educational Act of 1961 in the nation has resulted in the transformation of numerous Chinese vernacular secondary schools into English secondary schools. However, Chinese secondary schools that chose not to convert to English became independent institutions and, as a result, received no operational funding. In the wake of this transformation of schools, the conditions for the operation of independent Chinese secondary schools reached a historical low. The cessation of funding from the government has led to significant financial challenges for these independent Chinese secondary schools, resulting in a sharp decrease in student enrollment and jeopardizing their ongoing viability and growth in the initial stages. Currently, MICSS functions under Dong Zong, a non-governmental organization that operates independently from the Malaysian Ministry of Education. It provides MICSS students with the Unified Examination Certificate (UEC) in a standard examination.

## **Literature Review**

### ***Path-Goal Theory***

This study will employ Path-Goal theory (House, 1971) to analyse the context and relationships among the three primary variables: talent management, teacher personal quality, and teacher competency for MICSS in Malaysia. The Path-Goal theory highlights the principal's leadership from the perspective of followers, specifically MICSS teachers, who observe the principal's actions (Kalangi *et al.*, 2021). This theory examines the impact of a leader's behaviour on staff motivation, job satisfaction, and performance achievements. This model will examine the influence of MICSS principals on teachers in achieving desired goals, the attainment of self-development targets among MICSS teachers, and the identification of efforts to realise all planned objectives. The Path-Goal theory comprises three primary concepts: attractiveness or goodness, expectations, and the quality of service that an agency can deliver (Kalangi *et al.*, 2021)

### ***Talent Identification***

According to Tusquellas *et al.* (2024), talent refers to the potential and competence of existing personnel that can enhance institutional performance. Accordingly, institutions, including educational settings, must implement a standard and specific teacher performance assessment procedure to assess and identify teachers' talents and abilities (Ziyi, 2024), as teacher evaluation for talent identification is a vital talent management strategy within the education sector

(Davies & Davies, 2011). Scholars (Anderson et al., 2024; García, 2024; Qian et al., 2024; Yan Song et al., 2024) have described several contemporary research studies that evaluate talent identification among educators through teacher assessments. Teacher assessment functions as an approach to identify teachers' prospective abilities and assess their work performance, which determines their level of efficiency (Alzoraiki *et al.*, 2023). This condition also enables teachers who may not yet meet those specific service requirements to participate in professional development courses, thereby strengthening their competencies and talents consistently.

But the evaluation process was flawed, making it harder to find the best teachers. These included not giving teachers enough constructive feedback (Alwaely et al., 2023; Flamand et al., 2024; García, 2024; Mydin et al., 2024) and teachers being worried about the fairness of the evaluators (Mistry et al., 2025; Ng, 2024; Sousa et al., 2024). This is because not all evaluators possess adequate knowledge, which could potentially lead to the dissemination of false or misleading information (Bass *et al.*, 2022). Therefore, we must meticulously craft the evaluation methodology by incorporating formative observations to maximize the effectiveness of skilled educators. Evaluators must be capable of delivering precise, constructive feedback to teachers, thereby fostering an encouraging work atmosphere and enhancing learning opportunities (White & Maher, 2024). Within the framework of MICSS, an educational institution that requires substantial monthly fees, the teacher assessment report and professional development chances might enhance teachers' abilities to ensure optimal learning progress (Kalim, 2024).

### ***Talent Development***

Talent development is essential in organizational settings, especially within academic institutions, as it enables teachers to achieve their objectives (Kaliannan et al., 2023; Oppong, 2023; Shen, 2022). However, despite their limited duration and objectives, the training methodologies used in MICSS do not enable educators to achieve lasting and substantial professional growth (An *et al.*, 2022). A Malaysian investigation (Kaliannan *et al.*, 2023) has indicated that the volume of impactful talent development studies remains constrained. This occurs because when teachers participate in continuous professional development, the learning needs and growth of their pupils are addressed (Langelaan et al., 2024; Mgaiwa & Milinga, 2024). This is why educators should prioritize the advancement of professional talent inside the academic setting.

Regular engagement in pertinent talent development training yields high-quality teachers, particularly for MICSS instructors (Wang & An, 2023). Wang and An (2023) have concurrently confirmed that teachers in MICSS schools must enhance their expertise and capability when conducting educational assessments. This included seasoned teachers with restricted access to professional development chances (Coppe *et al.*, 2024). This mission presents a challenge for MICSS, as the majority of its teachers struggle to apply their knowledge effectively enough to conduct assessments (Wang & An, 2023). School administrators and educators possess a constrained comprehension of teacher adversity within the Chinese environment (Sun & Huang, 2024), encompassing MICSS. This situation can be elucidated by the presence of MICSS teachers who do not possess diplomas or bachelor's degrees, yet are required to participate in education-related training (Sia *et al.*, 2022). Concurrently, it is imperative to assess the professional growth of educators at MICSS (Wang & An, 2023).



### ***Talent Cultural For Retention***

Furthermore, cultivating a culture that emphasizes talent is crucial for establishing an encouraging workplace that values and develops skilled educators, hence motivating them to continue their tenure at the institution (Liu, 2024; Mohammad & Borkoski, 2024; Zhang et al., 2024). Recently conducted research by many scholars has revealed multiple elements that influence teacher retention and ongoing service within schools culturally. The determinants encompass salary (Fekih-Romdhane et al., 2024; Straková & Simonová, 2024), well-being, as well as health (Straková & Simonová, 2024; Thien & Lee, 2023). Functioning within an inclusive talent environment, like an educational institution, requires the implementation of appropriate strategies to prevent such circumstances and guarantee the expertise and retention of a skilled staff (Montero Guerra *et al.*, 2023). Educational institutions ought to cultivate a favorable and supportive culture of talent, as recognizing the abilities of educators would provide several benefits.

Conversely, adverse cultural factors such as organizational conflict and politics, along with job-related stresses like professional instructional expectations, educational institution evaluations, workloads, and teacher-leader interactions, can hinder teacher retention in educational environments (Mohammad & Borkoski, 2024). In a privately owned, fee-paying secondary educational institution such as MICSS in Malaysia, the principal or administration is responsible for holding instructors accountable to guarantee that pupils attain superior academic achievement and uphold an exemplary institutional reputation (Ewulley *et al.*, 2023). Moreover, this issue persists since researchers assert that Southeast Asian emerging nations, such as Malaysia, have inadequately prioritized school culture and the welfare of educators (Thien & Lee, 2023). Consequently, a novel strategy is essential to explore, understand, and apply professional stress management, mentor novice educators, and establish policies that alleviate superfluous bureaucratic burdens and impediments (Fekih-Romdhane et al., 2024; Gundlach et al., 2024; Zhang et al., 2024), thereby fostering an improved school culture and guaranteeing retention of teachers.

### **Methodology**

The study utilized quantitative research methods to collect survey responses from 357 MICSS teachers. This study utilizes a questionnaire and a stratified random sampling approach to determine the required sample size. The talent management model was established by Davies and Davies (2011), providing the foundation for the integrative instrument used in this research. Figure 1 illustrates the proposed conceptual framework for this research. The conceptual framework comprises three sub-constructs of talent management: Talent Identification, Talent Development, and Talent Culture. In this research, talent identifications functioned as exogenous variables. The proposed model represents Talent Development as a mediator and Talent Culture as an endogenous variable, as illustrated in Figure 1.

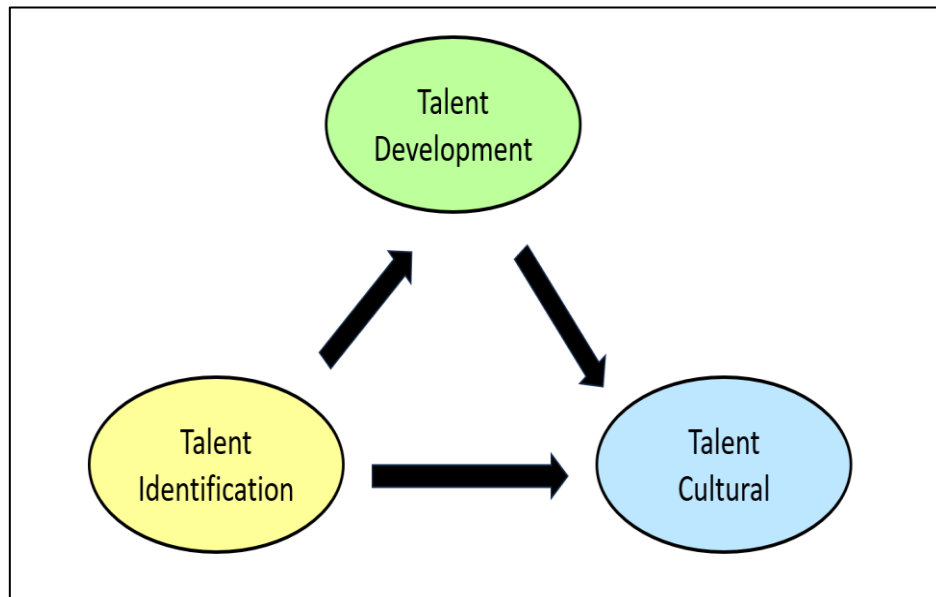
### ***Participants***

The study investigates the scope of talent management, encompassing three elements: talent identification, talent development, and talent culture among MICSS educators across Malaysia. This investigation was approved by the university's ethical council and 16 principals of MICSS. This study employed quantitative, printed questionnaires to collect data from 357 MICSS teachers. A total of 357 educators were chosen randomly through cluster and stratified random sampling, comprising 152 male educators and 225 female educators from 16 MICSS across five provinces: North Province (Penang, Perak, Perlis, Kedah), East Coast Province

(Terengganu, Kelantan, Pahang), Central Province (Kuala Lumpur, Selangor), South Province (Melaka, Johor, Negeri Sembilan), and Borneo Province (Sabah, Sarawak). This study exclusively examines MICSS educators in metropolitan areas, including Kuala Lumpur and Johor Bahru, because of the higher density of MICSS students in these urban centers (An *et al.*, 2022).

The selection criteria for the targeted respondents are restricted to full-time teachers who conduct classes according to the timetable at MICSS. In other words, respondents were excluded if they were staff members solely engaged in administrative tasks without teaching in the classroom. This research employed a combination of stratified and cluster random sampling due to the presence of multiple subpopulations (Piaw, 2020). Initially, researchers employed the cluster sampling method to divide the entire Malaysian context into five provinces, as previously mentioned. Secondly, a stratified random sampling method stratifies the MICSS for each province into categories of large, medium, and small student populations. Thus, both sampling methods will ensure generalisability and representativeness for the targeted MICSS population in the Malaysian context.

Permission was received from the university's Research Ethics Committee, as well as consent from 16 principals of the selected secondary schools to participate in the study. Teachers at selected schools voluntarily participated in a quantitative questionnaire (Amzat *et al.*, 2021) that was administered. Before initiating the questionnaire procedure, the researcher makes sure that all teachers are thoroughly informed about the study's objectives and their freedom of choice regarding their involvement. The researcher provided signed permission forms and informed the teachers who participated in their right to withdraw from the investigation at any time without incurring negative repercussions. The survey required approximately twenty to thirty minutes for access and participation. The researcher informed participants that they might contact them for any enquiries regarding the study following the submission of their questionnaire. The questionnaire was constructed using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to determine that the final model meets the necessary criteria. The instrument is thereafter presented to selected subject matter experts and language specialists for evaluation of its appropriateness for the Malaysian context.



**Figure 1: Conceptual Framework Talent Development As Mediators For Talent Identification Enhanced Talent Cultural In MICSS Malaysia**

**Note(s):** Exogenous variables (Talent Identification); Mediator variable (Talent Development); Endogenous variables (Talent Cultural).

**Source(s):** Author's work

### Research Instruments and Measures

The questionnaire integration was delegated to two local experts with more than 10 years of experience to assess the suitability of the wording for each construct within the Malaysian context. The questionnaire is then sent to a local language expert with over 10 years of experience to ensure that the terms are clear and comprehensible to the respondent. Informed by the feedback obtained through the content validity evaluation form (Lawshe, 1975) from the evaluator, the researcher implemented multiple alterations to the questionnaire. For example, within the mediator construct, a teacher's personal attributes may prompt a transition from declaring, "I am a sensitive teacher," to stating, "I am a concerned teacher," as the term "sensitive" can encompass diverse interpretations and potentially negative implications. This research adapted the items to fit the Malaysian context while preserving the original meaning of each construct. The researcher executed a pilot test involving 180 participants. The Research Ethics Committee of the University, along with all sixteen principals of MICSS, granted authorisation for this research.

**Talent Management.** Davies and Davies (2011) suggested the talent management framework, which founded the combination of talent identification, talent development, and talent culture. The internal reliability and validity of this framework are highly commendable, with scores such as 3.49 for chi-squared, 0.96 for CFI, 0.08 for RMSEA, 0.04 for SRMR, and 0.95 for TLI (Kline, 2023). Additionally, Cronbach's alpha ranges from 0.88 to 0.92 throughout all three categories. This research evaluated all three variables using a 7-point Likert scale, where 1 represents never and 7 represents always. Talent development (C.R. = 0.88), talent identification (C.R. = 0.90), and talent culture (C.R. = 0.92) all showed satisfactory levels of dependability in their construct reliability ratings (Hair *et al.*, 2020).



## Data Analysis

This study utilised SPSS Version 24 to analyse descriptive statistics. This research used AMOS SEM Version 24 for model validation. This study aims to assess the factors related to talent identification, teacher talent development, and cultural influences on the retention of MICSS teachers in Malaysia. To make sure that each variable is correct and to reduce concerns about multicollinearity, Table 1's three sub-constructs show that all VIF values are below the 10 threshold, ranging from 2.269 to 2.633. The three subconstructs of talent management exhibited no issues of multicollinearity or redundancy.

**Table 1: Full-collinearity Test (VIF) for Talent Management**

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		VIF
	B	Std. Error	Beta	t	Sig.	Tolerance	
1 (Constant)	3.553E-15	.000		.	.		
TIidentification	.333	.000	.404	.	.	.380	2.633
TDdevelopment	.250	.000	.279	.	.	.319	3.135
TCultural	.417	.000	.427	.	.	.441	2.269

a. Dependent Variable: Talent Management

*Exploratory Factor Analysis (EFA).* The execution of EFA yielded the following findings: The Kaiser-Meyer-Olkin value for the instrument was 0.855, exceeding the requisite threshold of 0.60. Bartlett's test of sphericity ( $p < 0.05$ ) confirmed that the dataset met the requirements for factor analysis, as shown by exploratory factor analysis (EFA). The talent management variable, containing talent identification, talent development, and talent culture, accounts for roughly 75.954% of the range in the eigenvalues, which is essential for identifying retention factors. Besides that, the study eliminates items with factor loading below 0.6.

*Confirmatory Factor Analysis (CFA).* To determine how effectively the combination of the structural equation model (SEM) fits the case in this investigation, the following model fit indices were utilised: chisq/df, TLI, CFI, RMSEA, and SRMR. Hair *et al.* (2019) and Kline (2023) have established the optimum threshold parameters for the model. The following values are presented:  $SRMR < 0.08$ ,  $RMSEA < 0.08$ ,  $CFI > 0.90$ ,  $TLI > 0.90$ ,  $\chi^2/df < 5.0$ . The research examined talent identification, talent development among educators, and the culture of talent retention. Also, reliability thresholds are usually set at Cronbach's alpha above 0.70, construct validity above 0.60, and average variance extracted above 0.50 (Hussain & Husain, 2022). The Cronbach's alpha values for talent identification, talent development, and talent cultural retention range from 0.88 to 0.92, above the set criteria of 0.70 for internal dependability. Furthermore, effective construct dependability (CR) values range from 0.88 to 0.92. The average variance extracted (AVE) fluctuated among variables in the next phase, spanning from 0.68 to 0.72. The instruments' Composite Reliability (CR) and Average Variance Extracted (AVE) criteria have been satisfied.

## Result

This segment will outline the analysis results of the research, identifying the extent of talent management variables and their subconstructs among MICSS teachers. Below, we will demonstrate the role of talent development as a mediator between talent identification and talent culture for MICSS teachers' retention.

**RQ1.** *What is the extent of talent identification, talent development, and talent culture among MICSS teachers?*

**Table 2: The Level of Talent Identification, Talent Development, And Talent Culture Among MICSS Teachers In Malaysia**

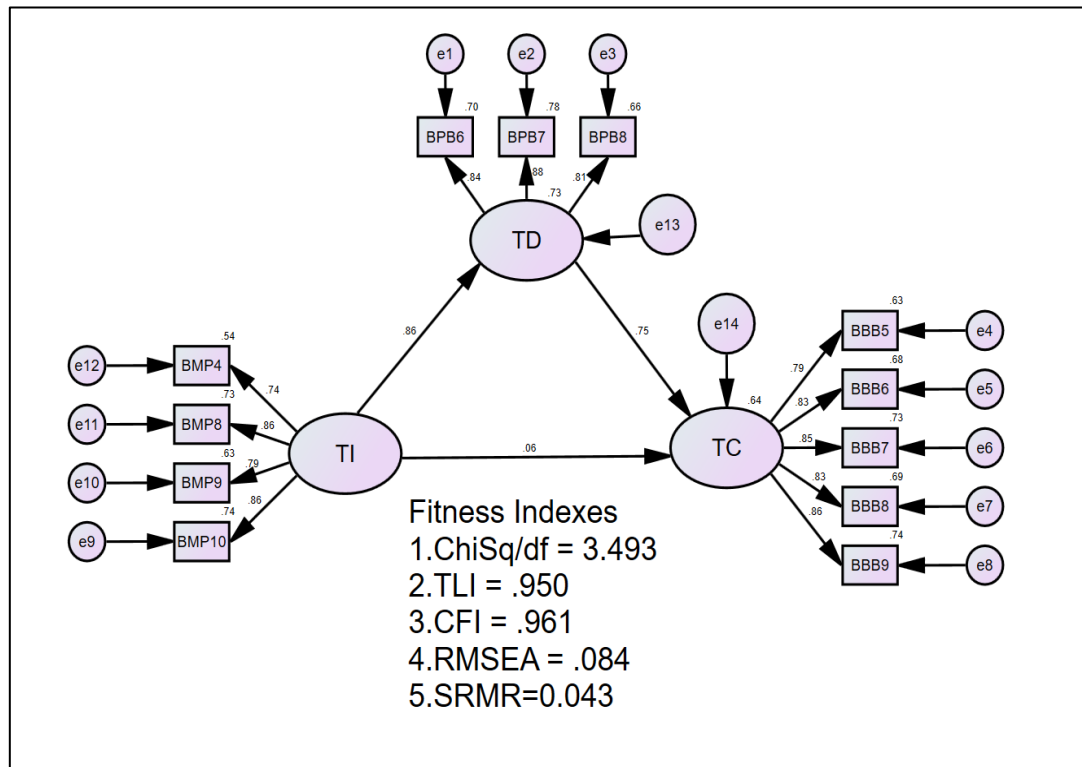
Constructs	N	Missing	M	SD	Interpretation
Talent Management	357	0	5.08	0.97	High
Talent Identification	357	0	4.74	1.18	High
Talent Development	357	0	5.23	1.08	High
Talent Cultural	357	0	5.27	1.00	High

**Table 2** elucidates the extent of talent management and the constructs comprising these variables. The description of the seven-point Likert scale is based on Pimentel (2019) rationale. This analysis demonstrates that MICSS teachers exhibit a high level of talent management behavior ( $M = 5.08$ ,  $SD = 0.97$ ). Furthermore, the three subconstructs—talent identification ( $M = 4.74$ ,  $SD = 1.18$ ), talent development ( $M = 5.23$ ,  $SD = 1.058$ ), and talent culture ( $M = 5.27$ ,  $SD = 1.00$ ), indicate that MICSS teachers exhibit a high degree of proficiency across each of the subconstructs. MICSS educators perceive talent culture as the most efficient practice, while talent identification is the least effective approach.

**RQ2.** *Does the talent development of MICSS teachers in Malaysia act as a mediator in the identification of teachers' talents and contribute to a cultural environment that enhances teacher retention?*

**Figure 2** shows the talent management measurement model, which has model goodness-of-fit indices of  $\chi^2/df < 5.0$ ,  $CFI > 0.90$ ,  $TLI > 0.90$ ,  $RMSEA < 0.08$ , and  $SRMR < 0.08$  (Hair et al., 2019; Kline, 2023) when they are met. The measurement model demonstrates favorable fit indices with the following values:  $\chi^2/df = 3.49$ ,  $TLI = 0.95$ ,  $CFI = 0.96$ ,  $RMSEA = 0.08$ , and  $SRMR = 0.04$ .

**Table 3** shows that the talent development of MICSS teachers in Malaysia facilitates teachers' talent identification and creates a talent culture that helps them retain their careers as teachers, with a 64% indirect effect (Hussain & Husain, 2022). In the MICSS educational setting, talent development plays a crucial role in identifying talent and fostering the cultural aspects of talent within the school. Conversely, 26% of the remaining variables impact the culture of talent retention and teacher talent identification, indicating the need for further investigation to provide a more compelling and detailed explanation to support the talent management strategies in MICSS.



**Figure 2: Measurement Model Talent Development As Mediators For Talent Identification Enhanced Talent Cultural In MICSS Malaysia**

**Note(s):** Exogenous variables TI (Talent Identification); Mediator variable: TD (Talent Development); Endogenous variables TC (Talent Cultural).

Source(s): Author's work

**Table 3: Result of Talent Development of MICSS Teachers In Malaysia Serve As A Mediator For Teachers' Emotional Stability And Enhance Talent Cultural For Teacher Retention**

Variables	Regression Weights	Indirect Effects	p	Interpretation
TI ---> TD	$a = .857$	.000	***	Significant
TD ---> TC	$b = .750$	.000	***	Significant
TI ---> TC	$c = .058$	.643	.569	Not Significant
Conclusion	A full mediator with indirect effects 64%			

**Note(s):** Exogenous Variable TI (Talent Identification); Mediator Variable: TD (Talent Development); Endogenous Variable TC (Talent Cultural).

Source(s): Author's Work

## Discussion

The present investigation seeks to examine the degree of talent identification, talent development, and talent culture retention among teachers at MICSS. The aim of this study is to determine if talent development served as a mediator in the identification of teachers' talents and whether it enhanced the talent culture, thereby aiding in teacher retention. The structural model study with AMOS SEM has indicated teachers at MICSS will predominantly retain

school talent. Moreover, talent development served as a mediator for the identification of teacher talent and enhanced the talent culture, thereby promoting teacher retention at MICSS.

The findings of this analysis indicate commonalities with current studies on talent identification (Alwaely et al., 2023; Fischer-Schöneborn & Ehmke, 2023; Kutnick et al., 2022) and talent development (Jerrim, 2024; Österholm et al., 2024; Straková & Simonová, 2024). School principals or administrators must provide professional development opportunities for in-service teachers, including senior educators, as all teachers require engagement with tailored competency-building prerequisites (Mgaiwa & Milinga, 2024) in accordance with their interests to enhance retention and proficiency in the field of teaching. School policies that emphasize and promote teacher participation in professional development activities may enhance teachers' competencies and work resilience in a talented work environment, thereby retaining skilled educators (Huang & Yin, 2024; Silalahi & Panjaitan, 2023).

Nonetheless, several recent studies have shown varying outcomes compared to this research, indicating that teachers are opting to resign due to restricted opportunities for professional development activities within schools (Flamand et al., 2024; Silalahi & Panjaitan, 2023). Additionally, the school culture or environment is often less conducive (Groenewald et al., 2024; Leong & Said, 2024; Roshid & Haider, 2024). This issue could lead to a shortage of teaching personnel, especially in rural areas and schools with low student enrolment (Lefebvre & Thomas, 2024; Ziyi, 2024). This issue will have a significant impact on developing countries such as Malaysia, potentially leading to a talent crisis (Baharin *et al.*, 2023). A possible rationale for this circumstance is that all private schools, such as MICSS, are not funded by the government as educational institutions. As a result, local funding or alumni contributions, limited by resources, provide the majority of the financial backing (Langelaan et al., 2024; Mgaiwa & Milinga, 2024). Insufficient funds and financial support are resulting in fewer opportunities for in-service teachers to engage in and participate in talent development initiatives.

Moreover, limited funding leads to a decrease in opportunities for service teachers to participate in targeted professional talent development (Coppe et al., 2024; Gundlach et al., 2024), particularly in contrast to the more abundant opportunities accessible to novice teachers. It is important to highlight that younger educators tend to resign more often (Straková & Simonová, 2024), while experienced teachers exhibit less enthusiasm for engaging in professional development operations (Kalim, 2024). Consequently, effective talent management is crucial in school settings (Mohammad & Borkoski, 2024) to cultivate an encouraging, supportive atmosphere that can enhance the retention of skilled and experienced teachers within schools. The difficulties of attracting new teachers are more difficult and complex (Quiroz Ávila & Fernández, 2025) because maintaining a stable teacher workforce in schools is crucial, as there will be a need for 44.4 million secondary education teachers by 2030, as stated by UNESCO.

Furthermore, the present study reveals that talent development activities will enhance the talent culture in the MICSS school setting, contributing to teacher retention as the school appreciates and encourages teachers' talents (Edwards et al., 2024; Gundlach et al., 2024). The development of talented personnel (Zhao *et al.*, 2024), including teachers, is a comprehensive initiative within the Malaysian context that enables teachers to engage in professional development programs tailored to specific needs (Alzoraiki *et al.*, 2023) in MICSS. This is particularly important as many MICSS teachers have limited involvement in pre-service

training, which may not adequately address the actual demands of their teaching scenarios (Diao & Qu, 2024). Equipped with the necessary skills, MICSS teachers are more likely to stay in schools that provide a comfortable and supportive working environment (Leong & Said, 2024). In conclusion, effective talent management in education serves as the solution for a sustainable and better tomorrow for MICSS school in Malaysia.

## Implications

### *Theoretical Implication*

According to the results, the research reveals that professional talent identification during the evaluation highlights the theoretical framework that encourages school principals or administrators to enhance teachers' abilities through developmental programs, thereby ensuring improved teacher retention within a healthy school culture. Teachers who have been identified will be given opportunities to engage in professional growth opportunities that are suitable and relevant to their daily tasks. This research finding supports theories that highlight the significance of teacher evaluation in preventing the misallocation of talented teachers and reducing teacher turnover. The mediator enhances the theoretical framework and demonstrates that teacher development is crucial for novice and in-service teachers. This development ensures that all educators within educational institutions contribute to a better and more constructive school culture, thereby supporting teachers in remaining and continuing their service in environments where they feel comfortable. This research supports the theories suggesting that teacher development will reduce the turnover rate in schools. Therefore, the research suggests that further investigation into theoretical models or frameworks for teacher development and positive school talent culture should be conducted in other educational settings, including primary and international educational institutions, to gain an improved understanding of the Malaysian education context.

### *Policy and Practical Implication*

Policymakers should prioritise talent identification to enhance the implementation of talent management within the Malaysian educational framework. It is essential for policymakers and school administrators to possess the necessary skills in professional ability identification and evaluation of teachers. This will enable them to effectively recognise and appropriately allocate the best talent within the school environment and avoid talent misallocation (Alexeev *et al.*, 2024). To alleviate the burden on teachers and minimize distress associated with non-teaching-related tasks, it is advisable to implement national or school policies aimed at reducing unnecessary bureaucracy. This could lead to increased levels of burnout among educators and potential resignations.

Moreover, it was essential for educational institutions or universities engaged in teacher preparation to integrate the most pertinent and suitable talent management practices into the curricula offered. For example, a teacher education institute might integrate community engagement (Zhang *et al.*, 2025) especially in rural regions, within the teacher training program to improve the professional skills of preservice teachers. On the other hand, the development of in-service teachers should also focus on improving professional skills to nurture valuable talent in the educational setting. Moreover, it is essential for school leaders or mid-level administrators to cultivate a cooperative and supportive work atmosphere to keep skilled and experienced teachers engaged. Enhancing teacher well-being through rewards or raises in



salaries can ensure teacher retention and continued service to the school, particularly in Malaysia.

### Limitation and Future Research Recommendations

This inquiry, like any other kind of research endeavour, has limitations and constraints. Limiting the inquiry to MICSS represents a notable constraint. The study used empirical research and AMOS-SEM analyses. A limitation of this research is that it exclusively employs quantitative and survey methods to examine the talent management approach in MICSS. Future studies should employ hybrid methodologies that integrate qualitative and quantitative techniques to provide more comprehensive and persuasive explanations. The researcher may also conduct longitudinal or cross-sectional studies to obtain a more precise justification for these variables, thereby ensuring universal generalisation. In conclusion, data obtained from relevant fieldwork can be analysed using MPlus or NVivo software.

### Conclusion

The main focus of this study is on the talent management practices of Malaysian MICSS educators. The findings suggest a new perspective and insight on how MICSS teachers implement effective talent management practices within the school environment. Nonetheless, the findings suggested that there is a need for improvement in talent identification among MICSS principals and teachers. Even with the challenging duties present in private school settings, a significant number of teachers retain their roles, as evidenced by the favorable aspects of the school culture highlighted in this report. Ultimately, it is clear that a school principal or administrator needs to be well qualified to manage teachers with varying talents.

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### References

- Alexeev, M., Natkhov, T., & Polishchuk, L. (2024). Institutions, abilities, and the allocation of talent: Evidence from Russian regions. *Journal of Comparative Economics*, 52(1), 271-296. <https://doi.org/10.1016/j.jce.2023.11.003>
- Alwaely, S. A., El-Zeiny, M. E., Alqudah, H., Alamarnih, E. F. M., Salman, O. K. I., Halim, M., & Khasawneh, M. A. S. (2023). The Impact of Teacher Evaluation on Professional Development and Student Achievement. *Revista de Gestão Social e Ambiental*, 17(7). <https://doi.org/10.24857/rgsa.v17n7-022>
- Alzoraiki, M., Ahmad, A. R., Ateeq, A. A., Naji, G. M. A., Almaamari, Q., & Beshr, B. A. H. (2023). Impact of Teachers' Commitment to the Relationship between Transformational Leadership and Sustainable Teaching Performance. *Sustainability*, 15(5). <https://doi.org/10.3390/su15054620>
- Amzat, I. H., Kaur, A., Al-Ani, W., Mun, S. P., & Ahmadu, T. S. (2021). Teacher Burnout and Coping Strategies to Remain in Teaching Job in Malaysia: An Interpretative Phenomenological Analysis. *European Journal of Educational Research*, volume-10-2021(volume-10-issue-3-july-2021), 1075-1088. <https://doi.org/10.12973/eu-jer.10.3.1075>
- An, B. G., Zakaria, A. R., & Leng, C. H. (2022). Working Life of Malaysian Independent Chinese Secondary School Teacher during COVID-19 Pandemic. *International Journal of Education and Humanities*, 2(2).

- Anderson, S. K., Ozsezer-Kurnuc, S., & Jain, P. (2024). Judging Student Teacher Effectiveness: A Systematic Review of Literature. *British Journal of Educational Studies*, 72(5), 553-585. <https://doi.org/10.1080/00071005.2024.2374070>
- Baharin, N. L., Kelana, B. W. Y., Sanny, L., Teo, P.-C., Ho, T. C. F., & Ramliy, M. K. (2023). The Mediating Effect of Emotional Intelligence on the Relationship between Talent Management Practices and Leadership Skills in Malaysian GLCs. *Sustainability*, 15(13). <https://doi.org/10.3390/su151310727>
- Bass, I., Bonawitz, E., Hawthorne-Madell, D., Vong, W. K., Goodman, N. D., & Gweon, H. (2022). The effects of information utility and teachers' knowledge on evaluations of under-informative pedagogy across development. *Cognition*, 222, 104999. <https://doi.org/10.1016/j.cognition.2021.104999>
- Coppe, T., Parmentier, M., Kelchtermans, G., Raemdonck, I., März, V., & Colognesi, S. (2024). Beyond traditional narratives about teacher professional development: A critical perspective on teachers' working life. *Teaching and Teacher Education*, 139. <https://doi.org/10.1016/j.tate.2023.104436>
- Davies, B., & Davies, B. J. (2011). *Talent Management in Education*. SAGE Publications Ltd.
- Diao, J., & Qu, Y. (2024). Teaching competence of TVET teachers in the digital age: Implementation and evaluation of a training program in China. *Eval Program Plann*, 103, 102402. <https://doi.org/10.1016/j.evalprogplan.2024.102402>
- Edwards, W., Kirksey, J. J., Burden, K. Q. L., & Miller, A. (2024). Teaching close to home: Exploring new teachers' geographic employment patterns and retention outcomes. *Teaching and Teacher Education*, 145. <https://doi.org/10.1016/j.tate.2024.104606>
- Ewulley, F., Anlimachie, M. A., Abreh, M. K., & Mills, E. E. (2023). Understanding the nexus of school types, school cultures and educational outcomes and its implication for policy and practice. *International Journal of Educational Research*, 121. <https://doi.org/10.1016/j.ijer.2023.102237>
- Fekih-Romdhane, F., Shebly, A., Daoud, T., Gedeon, R., Hallit, R., Obeid, S., Malaeb, D., & Hallit, S. (2024). Mediating and moderating factors between economic pressure and turnover intention among school teachers in Lebanon during the ongoing crisis era. *Heliyon*, 10(14), e34443. <https://doi.org/10.1016/j.heliyon.2024.e34443>
- Fischer-Schöneborn, S., & Ehmke, T. (2023). Evaluating boundary-crossing collaboration in research-practice partnerships in teacher education: Empirical insights on co-construction, motivation, satisfaction, trust, and competence enhancement. *Studies in Educational Evaluation*, 79. <https://doi.org/10.1016/j.stueduc.2023.101305>
- Flamand, P., Tuytens, M., Vekeman, E., & Devos, G. (2024). The alignment of induction and evaluation of beginning teachers in secondary education: A strategic human resource management perspective. *Teaching and Teacher Education*, 143. <https://doi.org/10.1016/j.tate.2024.104543>
- García, E. C. (2024). Peer feedback for teaching professional development: conditions for it to take effect. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186x.2024.2391577>
- Groenewald, E. S., Groenewald, C. A., Kilag, O. K. T., Andrin, G. R., Pernites, M. J. F., & Macapaz, M. K. S. (2024). Talent Management in the 21st Century: A Comprehensive Review and Prospects for Innovation. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence*, 1(3).
- Gundlach, H. A. D., Slemph, G. R., & Hattie, J. (2024). A meta-analysis of the antecedents of teacher turnover and retention. *Educational Research Review*, 44. <https://doi.org/10.1016/j.edurev.2024.100606>

- Hair, F., J., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (EIGHTH ed.). CENGAGE Learning EMEA.
- Hair, F., J., Celsi, M., Money, A., Samouel, P., & Page, M. (2020). *The Essentials of Business Research Methods* (FOURTH ed.). Routledge.
- Hamer, L., Ross, W., & Holland, A. (2024). The whole thing needs a shake-up: A mixed method study examining teachers' perspectives on social and emotional skills in schools. *Teaching and Teacher Education*, 148. <https://doi.org/10.1016/j.tate.2024.104708>
- House, R. J. (1971). A Path Goal Theory of Leader Effectiveness. *Administrative Science Quarterly* 16(3).
- Huang, S., & Yin, H. (2024). The relationships between paternalistic leadership, teachers' emotional labor, engagement, and turnover intention: A multilevel SEM analysis. *Teaching and Teacher Education*, 143. <https://doi.org/10.1016/j.tate.2024.104552>
- Hussain, A., & Husain, H. (2022). *AMOS Graphic: Pemodelan Persamaan Berstruktur*. Dewan Bahasa dan Pustaka (DBP).
- Jerrim, J. (2024). Are satisfied teachers better teachers? International evidence from the TALIS video study. *Teaching and Teacher Education*, 148. <https://doi.org/10.1016/j.tate.2024.104687>
- Kalangi, S., Weol, W., Tulung, J., & Rogahang, H. (2021). Principal Leadership Performance: Indonesian Case. *The International Journal of Social Sciences World*, 3(2), 74-89. <https://doi.org/10.5281/zenodo.5152467>
- Kaliannan, M., Darmalinggam, D., Dorasamy, M., & Abraham, M. (2023). Inclusive talent development as a key talent management approach: A systematic literature review. *Human Resource Management Review*, 33(1). <https://doi.org/10.1016/j.hrmr.2022.100926>
- Kalim, U. (2024). Evaluating teacher competencies in Pakistan's public schools: Enhancing the impact of professional development programs. *Eval Program Plann*, 106, 102467. <https://doi.org/10.1016/j.evalprogplan.2024.102467>
- Kline, R. B. (2023). *Principles and Practice of Structural Equation Modeling* (Fifth ed.). The Guilford Press.
- Kutnick, P., Gartland, C., & Good, D. (2022). Evaluating a programme for the continuing professional development of STEM teachers working within inclusive secondary schools in the UK. *International Journal of Educational Research*, 113. <https://doi.org/10.1016/j.ijer.2022.101974>
- Langelaan, B. N., Gaikhorst, L., Smets, W., & Oostdam, R. J. (2024). Differentiating instruction: Understanding the key elements for successful teacher preparation and development. *Teaching and Teacher Education*, 140. <https://doi.org/10.1016/j.tate.2023.104464>
- Lawshe, C. H. (1975). A QUANTITATIVE APPROACH TO CONTENT VALIDITY. *Personnel Psychology*, 28(4), 563-575. <https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>
- Lefebvre, E. E., & Thomas, M. A. M. (2024). "I knew I had to leave": A Bourdieusian analysis of why Teach For America teachers quit early. *Teaching and Teacher Education*, 142. <https://doi.org/10.1016/j.tate.2024.104520>
- Leong, S. Y., & Said, H. (2024). Revisit Attraction–Selection–Attrition Model for Teacher Retention in International Schools. *European Journal of Educational Research*, volume-13-2024(volume-13-issue-2-april-2024), 865-876. <https://doi.org/10.12973/eu-jer.13.2.865>

- Liechti García, N., & Sesé, A. (2024). Measuring the teachers' talent management. *International Journal of Educational Management*, 38(2), 568-586. <https://doi.org/10.1108/ijem-08-2023-0380>
- Liu, H. (2024). Uncovering the mediating role of resilience between EFL teacher turnover intention and wellbeing: A conservation-of-resources theory perspective. *System*, 124. <https://doi.org/10.1016/j.system.2024.103394>
- Liu, K. Z., & Zhang, X. (2025). Discretion, talent allocation, and governance performance: Evidence from China's imperial bureaucracy. *Journal of Development Economics*, 172. <https://doi.org/10.1016/j.jdeveco.2024.103391>
- Liu, Y. (2023). An innovative talent training mechanism for maker education in colleges and universities based on the IPSO-BP-enabled technique. *Journal of Innovation & Knowledge*, 8(4). <https://doi.org/10.1016/j.jik.2023.100424>
- Mgaiwa, S. J., & Milinga, J. R. (2024). Teacher preparation and continuous professional development: A review of 'missing links'. *Social Sciences & Humanities Open*, 10. <https://doi.org/10.1016/j.ssaho.2024.100990>
- Mistry, T. G., Cain, L., Dogan, S., & Gunduz Songur, A. (2025). Should I stay or should I go?: The impact of socially responsible human resources management practices on hospitality employees. *International Journal of Hospitality Management*, 124. <https://doi.org/10.1016/j.ijhm.2024.103962>
- Mohammad, A., & Borkoski, C. (2024). Organizational conditions and teacher turnover in private schools of United Arab Emirates. *Social Sciences & Humanities Open*, 9. <https://doi.org/10.1016/j.ssaho.2023.100801>
- Montero Guerra, J. M., Danvila-del-Valle, I., & Méndez-Suárez, M. (2023). The impact of digital transformation on talent management. *Technological Forecasting and Social Change*, 188. <https://doi.org/10.1016/j.techfore.2022.122291>
- Mydin, A.-A., Xia, Y., & Long, Y. (2024). Professional learning communities and their impact on teacher performance: Empirical evidence from public primary schools in Guiyang. *Teaching and Teacher Education*, 148. <https://doi.org/10.1016/j.tate.2024.104715>
- Ng, K. (2024). The effects of teacher tenure on productivity and selection. *Economics of Education Review*, 101. <https://doi.org/10.1016/j.econedurev.2024.102558>
- Oppong, N. Y. (2023). The seven myths of global talent management: A reflection. *Social Sciences & Humanities Open*, 8(1). <https://doi.org/10.1016/j.ssaho.2023.100633>
- Österholm, M., Bergqvist, T., Liljekvist, Y., & van Bommel, J. (2024). Professional development at national scale: Effects on teacher knowledge and practice. *Studies in Educational Evaluation*, 83. <https://doi.org/10.1016/j.stueduc.2024.101381>
- Piaw, C. Y. (2020). *Mastering Research Methods* (3rd ed.). Mc Graw Hill.
- Pimentel, J. L. (2019). Some Biases in Likert Scaling Usage and its Correction. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 45(1), 183-191.
- Qian, J., Zhou, G., He, W., Cui, Y., & Deng, H. (2024). Optimization of teacher evaluation indicator system based on fuzzy-DEMATEL-BP. *Heliyon*, 10(13), e34034. <https://doi.org/10.1016/j.heliyon.2024.e34034>
- Quiroz Ávila, J. P., & Fernández, M. B. (2025). Evaluation of a teacher pipeline program: Choosing teacher education based on self-confidence and support. *Teaching and Teacher Education*, 153. <https://doi.org/10.1016/j.tate.2024.104842>
- Roshid, M. M., & Haider, M. Z. (2024). Teaching 21st-century skills in rural secondary schools: From theory to practice. *Heliyon*, 10(9), e30769. <https://doi.org/10.1016/j.heliyon.2024.e30769>



- Shamsudin, S. B., Abdul Razak, A. Z. B., & Koh, A. S. (2024). Systematic Literature Review: What Factors Influence Talent Management Among Secondary School Teachers in Malaysia? *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 9(3). <https://doi.org/10.47405/mjssh.v9i3.2746>
- Shen, G. (2022). AI-enabled talent training for the cross-cultural news communication talent. *Technological Forecasting and Social Change*, 185. <https://doi.org/10.1016/j.techfore.2022.122031>
- Sia, G. C., Hamid, A. H. A., & Othman, N. (2022). The Relationship of Principal Transformational Leadership with Teacher's Work Commitment in Chinese Independent High School in Johor. *Jurnal Dunia Pendidikan*. <https://doi.org/10.55057/jdpd.2022.4.1.4>
- Silalahi, R. Y. B., & Panjaitan, D. (2023). The role of talent management in creating a competitive advantage for vocational high school teachers in the era of globalization. *Journal of Management Science (JMAS)*, 6(3), 263-268.
- Song, Y., Jin, Y., Wang, S., Liu, J., Duan, Y., Chen, H., & Wu, H. (2024). Global research trends in the teacher evaluation of medical college: a bibliometric and visualized study. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e39370>
- Song, Y., Jin, Y., Wang, S., Liu, J., Duan, Y., Chen, H., & Wu, H. (2024). Global research trends in the teacher evaluation of medical college: A bibliometric and visualized study. *Heliyon*, 10(23), e39370. <https://doi.org/10.1016/j.heliyon.2024.e39370>
- Sousa, B., Ferreira, J. J. M., Jayantilal, S., & Dabic, M. (2024). Global talent management – talents, mobility and global experiences – a systematic literature review. *Journal of Global Mobility: The Home of Expatriate Management Research*, 12(3), 444-501. <https://doi.org/10.1108/jgm-03-2023-0018>
- Straková, J., & Simonová, J. (2024). Why do teachers leave schools? Evidence from lower secondary schools in the Czech Republic. *International Journal of Educational Management*, 38(5), 1444-1458. <https://doi.org/10.1108/ijem-07-2023-0361>
- Sun, X., & Huang, J. (2024). Thriving or surviving? Emotional resilience development among Chinese rural beginning teachers from a social-ecological perspective. *International Journal of Educational Research*, 125. <https://doi.org/10.1016/j.ijer.2024.102359>
- Thien, L. M., & Lee, H. C. (2023). The effects of school culture dimensions on teacher well-being across under-enrolled and high-enrolment schools. *Social Sciences & Humanities Open*, 7(1). <https://doi.org/10.1016/j.ssaho.2023.100396>
- Tusquellas, N., Palau, R., & Santiago, R. (2024). Analysis of the potential of artificial intelligence for professional development and talent management: A systematic literature review. *International Journal of Information Management Data Insights*, 4(2). <https://doi.org/10.1016/j.jjime.2024.100288>
- Wang, N., & An, B. G. (2023). Improving teachers' professional development through professional learning community: Voices from secondary school teachers at Malaysian Chinese independent schools. *Heliyon*, 9(6), e17515. <https://doi.org/10.1016/j.heliyon.2023.e17515>
- White, M., & Maher, B. (2024). What value do standardized observation systems add to summative teacher evaluation systems? *Studies in Educational Evaluation*, 83. <https://doi.org/10.1016/j.stueduc.2024.101414>
- Zhang, J., Chen, Y., Xu, Y., & Li, Y. (2024). Hindrance stressors and turnover intentions among preschool teachers: The mediating role of work engagement and the moderating effect of meaningful work. *Heliyon*, 10(15), e35366. <https://doi.org/10.1016/j.heliyon.2024.e35366>



- Zhang, P., Wei, H., & Gao, Y. (2025). China's Far West Program: An ecological exploration into student teachers' emotion labor in voluntary rural teaching practices. *Teaching and Teacher Education*, 153. <https://doi.org/10.1016/j.tate.2024.104815>
- Zhao, J., Xiang, C., Kamalden, T. F. T., Dong, W., Luo, H., & Ismail, N. (2024). Differences and relationships between talent detection, identification, development and selection in sport: A systematic review. *Heliyon*, 10(6), e27543. <https://doi.org/10.1016/j.heliyon.2024.e27543>
- Ziyi, Z. (2024). Application of neural network algorithm based on sensor networks in performance evaluation simulation of rural teachers. *Measurement: Sensors*, 32. <https://doi.org/10.1016/j.measen.2024.101049>