

## Effect of Principal's Authentic Leadership Practices on Training Transfer: Proactive Personality as a Mediator

By

**Mohd Sukri Zainol\***

Faculty of Education, National University of Malaysia

Email: [sukri.zainol@gmail.com](mailto:sukri.zainol@gmail.com)

**Mohd Izham Mohd Hamzah**

Faculty of Education, National University of Malaysia

**Bity Salwana Alias**

Faculty of Education, National University of Malaysia

### Abstract

Leadership is a process in which one person influences others to achieve a common goal. This study aims to investigate the effect of authentic leadership practices on training transfer with proactive personality as the mediator. A sample of 420 participants out of 461 (response rate=91.1%) completed the survey that addresses authentic leadership, proactive personality and transfer of training. Out of the 420 participants, 385 clean data were used in the study after 35 data outliers were identified and removed to prevent distortion of statistical tests and inferences. The sample was selected by combining both proportional stratified random sampling and systematic random sampling among ordinary daily national secondary school teachers in Peninsular Malaysia. The study used Structural Equation Modelling in IBM-SPSS-AMOS 24.0 to model and estimate the relationship between the constructs in this study. The results illustrate that a proactive personality mediates the relationship between authentic leadership and training transfer. These findings also suggest that teachers are more likely to be proactive and are able to implement training more effectively when principals engage in authentic leadership. This study provides valuable insight that can help improve the effectiveness of leadership training programs. For example, principals need to understand how to build trust with their teachers so that they are willing to share their knowledge and skills. In addition, leaders should foster a collaborative environment where teachers feel more comfortable to share ideas. This study provides valuable insights that can help to improve the effectiveness of leadership and teacher training programs.

**Keywords:** authentic leadership; proactive personality; transfer of training; teacher training; principal

### Introduction

The effectiveness of leadership practices in schools has been studied in recent years. In particular, authentic leadership is shown to be related to positive outcomes such as increased employee satisfaction, productivity, and a better organisational culture (Ma, 2016; Semedo et al., 2018; Walumbwa et al., 2008). A principal's choice of leadership practices that are based on moral values are believed to encourage teachers to adapt to the work environment better and build a more transparent relationship in any situation with teachers. Srivastava and Dhar (2016) referred to the principal's authentic leadership as a leader who prioritises high moral values and

assists teachers to fully commit to their duties because of their trust and confidence in the principal's instructions, guidance and decisions. Previous studies in the field of leadership describe the role of leaders as an individual that can help improve teachers' ability to use skills and knowledge from the training received at work (Starks, 2019; Wills, 2017). Therefore, the principal's authentic leadership is essential in encouraging teachers to transfer training into work.

A proactive personality is a change-oriented individual. While quality teachers will always renew their knowledge, skills and attitudes (KSA) to enable themselves to meet the challenges in the field education, the state of education that is constantly changing due to the current world development and global technological progress has contributed to schools facing immense challenges to produce quality education. Therefore, teachers with a proactive personality are believed to be able to identify the best methods and adapt to them to create opportunities to act with the confidence that they can produce better work (Atula, 2014). Another research added that individuals with a proactive personality also tend to engage in problem-solving activities and are consistently interested in developing their abilities through learning (Noe et al., 2014).

Training transfer has a higher rate of effectiveness when the knowledge, skills and attitudes (KSA) acquired through training are fully transferred in the job (Noe, 2017). More significant transfer effects occur when leaders are involved in the employee activities (McCrae, 2018). Additionally, increased training transfer is believed to be found in teachers with a proactive personality because teachers create a comfortable position and can influence the environment.

Although previous studies support the effect of a principal's authentic leadership that affects proactive personality (Liu et al., 2018) and the transfer of training (Gil et al., 2021), the findings of Kasa et al. (2020) on the principal's authentic leadership practices showed that some dimensions of authentic leadership such as self-awareness and relationship transparency were found to not affect teachers' dedication to work, continuous contribution and willingness to do work. Likewise, the study of Kulophas et al. (2018) on teachers summarised that a principal's authentic leadership only moderately affects teacher work engagement. While, Govaerts and Dochy (2014) meta-analysis of articles from 1988 to 2014 that is related to training transfer showed that previous studies only used the leader support construct in general. They suggested the need for leadership support to be measured multi-dimensionally. The results of previous authentic leadership studies were found to lack the ability to show a consistent influence on the results and impacts of teachers' work. Therefore, the findings of these previous studies have encouraged and motivated this research to fill the knowledge gap.

Several studies on proactive personality have shown significant positive results on one's career (Azman et al. 2018) and creativity (Jiang & Gu, 2015). However, Han et al. (2019) and Roberts et al. (2018) found that more studies to explain the effect of leadership response on proactive personality need to be done. Dreer et al. (2017) found that teachers with proactive personalities who perceive that they can change and improve their work do not affect the transfer of training. Likewise, in previous studies, the problem of transfer of training is often

associated with the waste of high allocations for teacher training but still needs tonnes to provide returns in the form of high student achievement globally (Jackson et al., 2019; Wills, 2017). With that being said, the transfer of teacher training needs to be researched further as it is crucial to ensure that after the following training, teachers can apply the KSA acquired to their full extent in their work with the support of the principal's authentic leadership practices and proactive personality.

This research aims to achieve these objectives which are:

1. To determine the effect of the principal's authentic leadership practices on teachers' proactive personality and transfer of training.
2. To identify the influence of proactive personality as a mediator on principals' authentic leadership practices and the transfer of training.

## 2. Literature review

### 2.1 Authentic leadership

Luthans and Avolio (2003) authentic leadership theory explains that leaders who practice authentic leadership are optimistic, confident, resilient and practice high moral values. This leadership formation process comes from a positive psychological ability and in the context of advanced organisations that highlight the leaders positively. Avolio et al. (2004) developed this theory further through a conceptual model that illustrates the relationship between authentic leadership and employee's behaviour. The emphasis of a leadership style that is based on moral principles can influence employees' performance, extra effort, and job retention.

Walumbwa et al. (2008) presented an authentic leadership model in detail based on the theory theorised by Luthans and Avolio (2003); the model consists of self-awareness, balanced processing, relationship transparency, and internal moral perspective. Self-awareness is defined as the leader having to ability to know himself, being aware of his strengths and weaknesses to make an impact, having the ability to influence someone over time, and caring about how others see him. Balanced processing is the seriousness and sincerity shown in listening and paying attention to employees' views, opinions and ideas, even when they are challenge the holding to one's role as a leader and his beliefs on how to face problems (Walumbwa et al., 2008). Relationship transparency is defined as a behaviour that builds open relationships between leaders and employees that are based on trust and communication through information sharing. These leaders also provide personal views based on self-worth that create more meaningful relationships (Penger & Èerne, 2014; Walumbwa et al., 2008). The internal moral perspective is an appreciation and integration of self-control that are guided by rules and laws. The leader's self-control is based on the standards for any decision they make, even if it is pressured or opposed by the stakeholders (Walumbwa et al., 2008). Most scholars who conduct recent research on authentic leadership utilised the model of Walumbwa et al. (2008) as the basis for their further studies (Hamilton, 2018; Isharae & Azlin, 2019; Kristin, 2018; Penger & Èerne, 2014; Siti Noor et al., 2019; Xiong et al., 2016).

## ***2.2 Proactive personality***

Proactive personality theory explains the tendency of an individual to actively seek and take advantage of opportunities, to persevere in implementation, able to overcome obstacles and improve the current situation, and to influence and change the environment (Bateman & Crant, 1993). According to Bateman and Crant (1993), individuals with a proactive personality often try to adapt to the environment to be more effective and ready to go against the status quo when met with any challenges or changes. In addition, individuals with a proactive personality often increase their ability in the work environment until the changes made have a meaningful impact on them.

The proactive personality theory was developed into the Three-Dimensional Proactive Personality Model namely perception, implementation, and perseverance. A proactive personality is defined by Belwalkar and Tobacyk (2018) as an individual who has a higher tendency to realise the opportunity to change by making it an action that can be implemented. This realisation is later accompanied by perseverance to implement the opportunity despite the obstacles faced. This individual gives a good perception of the leader on the initiative used in solving problems.

## ***2.3 Transfer of training***

The theory of goal setting explains the setting of specific and complex goals that encourage teachers to improve their work performance through learning, which later contributes to the transfer of training (Locke et al., 1981). By setting goals, the teacher will make what is needed as the achievement target that changes their behaviour towards the goal setting. Based on the theory of goal setting, the Training Transfer Model by Baldwin and Ford (1988) is able to explain the situation of teacher training transfer further. Transfer of training is defined as the tendency of individuals to apply knowledge, skills, and attitudes (KSA) received from training into work through the retention process, which is the individual's response to use KSA at work. This learning process is the effect of increasing KSA and maintenance, which is with continuous application and generalisation as the adaptation of KSA to work (Baldwin & Ford, 1988).

Previous studies have shown a positive relationship between authentic leadership and proactive employees. For example, the findings of Zhang et al. (2021) on 982 teachers in 38 primary schools in China found a direct effect of a principal's authentic leadership on the teachers' voice behaviour, which is known as the teachers' proactive personality. The element of high interpersonal trust is built through the principal's authentic leadership practices, which later transforms into improvement in the teacher's proactivity. Through trust, school leaders can communicate effectively with teachers in which an environment where proactive behaviour thrives is created.

In addition, studies have consistently proven that authentic leadership can increase the proactive efforts of employees. Smithikrai and Suwannadet (2018) researched 375 teachers in northern Thai schools and found that authentic leadership directly impacts proactive behaviour. The findings of their study highlight the transparency of relationships and the internal moral perspective of leaders that contribute to teachers' job satisfaction, which later prompts them to

be more willing to make changes and give high commitment to work.

Cerit (2017) indicated that the practice of leader and follower exchange (LMX) positively and significantly affects teachers' proactive personality. He obtained the perceptions of 264 primary school teachers in the Black Sea Region, Turkey. Although studied with the LMX construct, this leadership characteristic pays attention to communication and two-way cooperation that facilitates building relationships with teachers. This close relationship further encourages teachers to cooperate and reciprocate the work done as a result of the support of school leaders. This feature is closely related to authentic leadership practices through the transparency of relationships that build trust with teachers to produce better work in the organisation. The results of this Cerit study provides an impression that authentic leadership practices can positively affect the teacher's proactive personality through the relationship built. Therefore, based on the relationship shown, the research hypothesis is formed as followed:

**H1:** Authentic leadership has a positive and significant effect on a proactive personality

The findings of Haslina and Norhasni (2014) that were collected and analysed from 197 graduate teachers from 38 schools in Selangor, Malaysia, studied the relationship between individual factors and transfer of training. The individual constructs used in their study consisted of motivation to transfer, self-confidence, personal ability, and performance expectations. The study results indicated that their personalities themselves are critical in transferring training at school because they have the strength or desire that motivates them to deepen and master new knowledge when training is transferred into work. In addition, this individual also has self-confidence, which is the ability and willingness to apply the acquired knowledge in work settings. They were also found to have the competence and potential to perform well at their tasks in a job.

Similarly, the study by Er (2021) that was conducted on 438 primary school teachers in 24 schools in Istanbul, Turkey, showed a positive and significant relationship between proactive personality and transfer of training. Proactive personalities are found to aid transfer of training when they attempt to adopt learning with high initiative and confidence. When learning takes place effectively, the maintenance process, i.e. new KSA, can be used consistently at work.

A number of research findings support the results of teachers' proactive personality in schools. A study by Li et al. (2017) which involved 352 primary and secondary school teachers in China revealed a positive and significant relationship between teachers' proactive personality and innovative work behaviour. Innovative behaviour aims to generate, promote, and realise new ideas in the organisation. A proactive personality is found to provide significant benefits in educational organisations. Proactive teachers have a positive perspective and a high level of creative self-efficacy in daily life to consistently improve the quality of work. Therefore, the positive and significant relationship in these studies serves as a guide to form the research hypothesis as followed:

**H2:** Proactive personality has a positive and significant effect on the transfer of training

A research illustrated that authentic leadership has a significant impact on the transfer of training. [Corner \(2015\)](#) study on 200 high schools in Arizona, USA, through the principal's perception, confirmed how the importance of authentic leadership practices contributed to and affected the transfer of teacher training. The principal's self-awareness and balanced processing component encourages teachers to improve their self-efficacy through learning from the training. In the aspect of an internal moral perspective, principals can produce actions that align with the organisation's needs, especially in determining the training needs that teachers receive to be transferred into work. These principals also establish transparent relationships with teachers based on high trust. Next, the principal promotes an open dialogue with teachers that facilitates the process of transferring teacher training when feedback and views are discussed to overcome problems encountered during the transfer process.

A study by [Gil et al. \(2021\)](#) also illustrated and tabulated a significant relationship between leadership practices and training transfer. The data of the study were collected from 116 teachers from 17 secondary schools in 6 regions of Spain. Gil and colleagues found that when principals provide support for the teachers, these teachers are able to apply the skills learned from the training received. The factor of direct intervention by the principal in the transfer of teacher training has supported their learning process. The study stipulated further that leader intervention was provided through goal setting, decision making and providing of insight that helps to support the transfer of teacher training. However, the principal's direct intervention in training transfer activities requires a foundation of trust with the teachers to strengthen the teachers' confidence in improving their work by adopting the KSA received from the training in their work performance.

[Govaerts and Dochy \(2014\)](#) identified specific behaviours and attitudes that leaders can adopt to support training transfer before, during, and after training. A meta-analysis approach to studies that adopted the [Baldwin and Ford \(1988\)](#) Training Transfer Model from 1988 to 2014 showed that the leader support is closely related to the components of authentic leadership practices. Leader support classified by Govaerts and Dochy includes clarifying the selection of trainees, discussing the use of training, giving feedback, and setting goals that can be linked to the transparency dimension of authentic leadership relationships.

[John \(2020\)](#) conducted a study on 76 teachers in Myanmar. He found that supervisory support is the most crucial component that significantly affects training effectiveness compared to assessing training needs, training content, and self-efficacy. The outcome of the interviews with teachers led the researcher to identify several important themes, such as principals who provide support, feedback, and guidance are linked to the effectiveness of teachers in using KSA in their work. Researchers believe that the aspects of support, feedback, and guidance highlighted in the study are closely related to authentic leadership practices. The transparency of relationships practised by authentic leaders can improve employee relationships when receiving feedback that has a positive effect and encourage teachers to cooperate more closely ([Isharae & Azlin, 2019](#)). This relationship's transparency will also impact teachers, thus increasing their involvement in whatever the organisation wants to implement ([Jiang & Men, 2017](#)). The findings of John Paul's study can be related to the fact that the principal's authentic leadership practices can impact the transfer of training among teachers. John found that transfer

of training occurs when the leader becomes a role model who encourages teachers to apply the training outcomes at work. With that, they are more confident and committed to apply the new knowledge and skills received from the training to improve their quality of work. The situation helps them to always be ready to adapt in the face of the challenges of changing the current educational environment. Therefore, the relationship shown in the previous study forms the research hypothesis as followed:

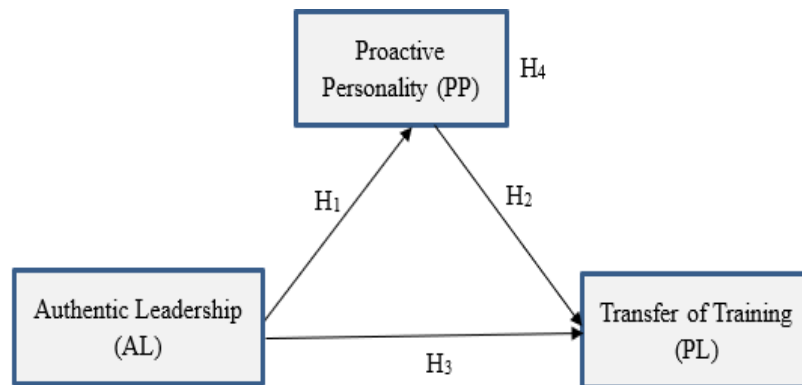
**H3:** Authentic leadership has a positive and significant effect on the transfer of training

Previous research had adopted the proactive personality variable in studies as the mediating variable that explains the relationship between dependent and independent variables. [Ghitulescu \(2018\)](#) study of 170 teachers in a large public school in the United States examined the effect of proactive teachers on collaborative behaviour at work and the study found that teachers with a proactive personality positively affect work performance, which is the effort and commitment to achieve goals based on the initiatives that drive performance and changes at work. The findings illustrated the correlation that proactive behaviour drives their willingness to use the new KSA from training to work more effectively. A positive organisational work environment that supports collaboration between teachers further increases the determination of a proactive personality to achieve work goals. When the work environment promotes cooperative relationships among teachers, this situation encourages those with proactive personality to be more resilient and strive to transfer training effectively. The results of this study provide the groundwork that a proactive personality will result in a more effective transfer of training based on one's ability to use initiative to make changes. In addition, supports received from authentic leaders also form a work environment that supports and encourages positive change.

Previous research, such as by [Grossman and Burke-Smalley \(2018\)](#), [Ford et al. \(2018\)](#) and [Ghosh et al. \(2015\)](#), acknowledged that leadership practice factors were found to motivate individuals to perform change in their actions which later impacted training transfer. Concerning the findings, the role of individuals with high confidence in implementing change, such as those proactive personality, are believed to be able to use their initiative to apply and realise the training received into work more effectively. Individuals with proactive personality are also highly capable of maintaining their newly acquired and learned KSA through more effective actions. [Wan Aishah \(2018\)](#) stipulated that a proactive personality is an important mediator that explains the relationship between leadership style and work autonomy. Principals provide trust and insight to teachers to implement ideas to improve their work performance. In turn, this situation has shaped the freedom and work power given to the leader to make choices and decisions about the work done and further contribute to the teacher's proactive improvement. Thus, the findings of previous studies form the research hypothesis as followed:

**H4:** Proactive personality acts as a mediator of authentic leadership and transfer of training

The literature review above was used as the basis to build the study's conceptual framework, as shown in [Figure 1](#).



**Figure 1.** *Conceptual framework of the study*

### 3. Methodology

This study adopted a quantitative approach to test the relationship between constructs, as shown in [Figure 1](#). The study's target population is ordinary national secondary school teachers in Peninsular Malaysia. The analysis of the study was carried out by using the Structural Equation Modelling (SEM) with the IBM-SPSS-AMOS software. The advantage of SEM is that it can estimate variance, covariance, test hypothesised mediator constructs and model research constructs more easily ([Zainudin, 2015](#); [Zainudin et al., 2018](#)).

#### 3.1 Sample

A sample of 420 participants out of 461 (response rate=91.1%) completed the survey that was distributed to measure authentic leadership, proactive personality and transfer of training. Out of the number, 385 clean data were used in the study after 35 data outliers were identified and removed to avoid distortion of statistical tests and inferences, according to [Tabachnick and Fidell \(2013\)](#). Respondents involved in this study were randomly selected by combining proportional stratified random sampling and systematic random sampling. Proportional stratified random sampling is used to ensure that each respondent can be involved in the study when the number of the population is found to be imbalanced. In addition, this sampling design is more efficient, and each critical segment of the population is more represented. At the same time, the advantage of systematic random sampling is used for large sample sizes, and the list of population is already available. Systematic sampling procedures make it easy and fast to carry out the sample selection process ([Sekaran & Bougie, 2016](#)). In the final stage of sampling, a sample of teachers was selected at an odd number position in the list of teachers' names obtained from the school. The research questionnaire instrument was provided online for respondents to answer using the URL address (Uniform Resource Locator) generated from the Google Form application. According to [Sekaran and Bougie \(2016\)](#), the advantage of conducting surveys online helps researchers make the most of the capabilities of internet technology for access to individuals who are located very far away. In addition, usage of internet and online survey also provides comfort for respondents to answer questions either at home or according to the respondent's schedule (flexible).

#### 3.2 Measurement tools

The instrument development was done was based on the research needs and adaptation



in Malaysia's education context. In this study, the researcher used a self-developed questionnaire instrument after sifting through and analysing a literature review of operational definitions in previous studies. The authentic leadership questionnaire instrument was built with 30 items based on the Authentic Leadership Model (Walumbwa et al., 2008). At the same time, the Proactive Personality Instrument was developed with ten items based on the Three-Dimensional Proactive Personality Model (Belwalkar & Tobacyk, 2018). The training transfer instrument is based on the Baldwin & Ford (1988) Training Transfer Model with 26 items. All the three instruments use a 10-point Likert scale to measure the agreement of the study's respondents, according to Zainudin et al. (2016), because the 10-point scale is the optimal and relevant value to confirm the measurement of a research construct and provide a more accurate analysis results using SEM. In addition, this research instrument had been validated by experts to ensure that the constructs used were accurate to measure.

### ***3.3 Pilot study and pilot data analysis***

To ensure confidence in the built questionnaire instrument, the researcher carried out a process of validity and reliability. This research instrument went through a strict content validity process by using the Content Validity Index (CVI) and expert reviews. The items were then altered and improved based on the expert's opinion and the results of the CVI analysis according to Waltz et al. (2010) and Polit et al. (2007). The process was then followed by the face validity process. After completing the validation process, the researcher conducted a pilot study that involved 82 teachers.

The data gathered from the pilot study were processed and analysed to explore the usefulness of the items in measuring each construct through the Exploratory Factor Analysis (EFA) procedure and the Rasch Measurement Model. The EFA procedure helps to arrange the items in a group of variables studied by Tabachnick and Fidell (2013). At the same time, the Rasch model also converts ordinal data to ratio data to enable more in-depth analysis (Bond & Fox, 2015). There, the combination of the EFA and Rasch Measurement Model were found to complement each other to perform a comprehensive analysis of the validation process of a measurement (Bond & Fox, 2015). The combination of classical measurement theory, such as the EFA, and the modern (Rasch model) is believed to form a more stable and objective instrument. The results of the pilot data analysis through the EFA and the Rasch model presented three components of authentic leadership: self-awareness, balanced processing, and internal moral perspective and relationship transparency. For the proactive personality construct, two components were formed: perception and perseverance, and implementation. The training transfer component is divided into two components: (1) retention and generalization and, (2) learning and maintenance.

### ***3.4 Respondent demographics***

Respondents were asked to provide demographic information such as gender, age, teaching experience and academic qualifications.

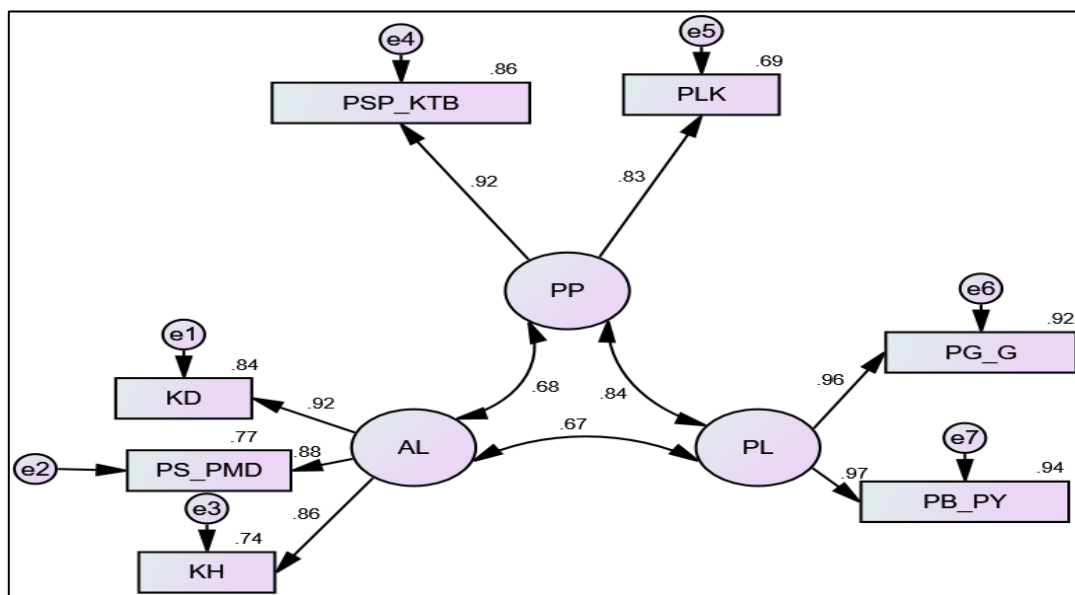
## **4. Results and discussion**

**4.1 Confirmatory Factor Analysis (CFA)**

Confirmatory Factor Analysis (CFA) was conducted to confirm the measurement model for the research construct before implementing the Structural Equation Modelling (SEM) process. The CFA results were utilised as the pre-condition to determine further analysis in SEM to test the research hypothesis. Four conditions must be followed in implementing the CFA procedure, according to Zainudin (2015) and Zainudin et al. (2018), namely (1) unidimensionality: all items that measure the construct have a factor weight value above 0.6. (items should be removed if less than 0.6), (2) validity: the instrument's ability to measure what should be measured for a construct based on the 3 conditions, (3) reliability: the extent to which the research measurement model is consistent in measuring the construct with composite reliability (CR) for the items that measure the construct have a CR value > 0.6 as well as the AVE of the item that measures the construct with an AVE value > 0.5, and (4) the data must be normally distributed.

First, the construct validity with fitness indexes reaches the required level (RMSEA < 0.08, CFI > 0.90, TLI > 0.90 and Chisq/df < 5.0). Second, the convergent validity shows a minimum value of the Average Variance Extracted (AVE) of 0.5. Third, discriminant validity shows the extent to which the measurement model is independent of overlapping items through a diagonal value greater than the construct correlation value.

The study's results, as shown in Figure 2, which is the result of the analysis through IBM-SPSS-AMOS, show that unidimensionality has been achieved with all factor weighing at values exceeding 0.6. The fit index RMSEA=0.062, CFI=.992, TLI=0.988 and Chisq/df=2.488 meet the fit index conditions. Table 1 shows CR value above 0.6 and AVE above 0.5. Likewise, all diagonal values of the study constructs are higher than other values in rows and columns. The discriminant validity for all constructs is achieved.



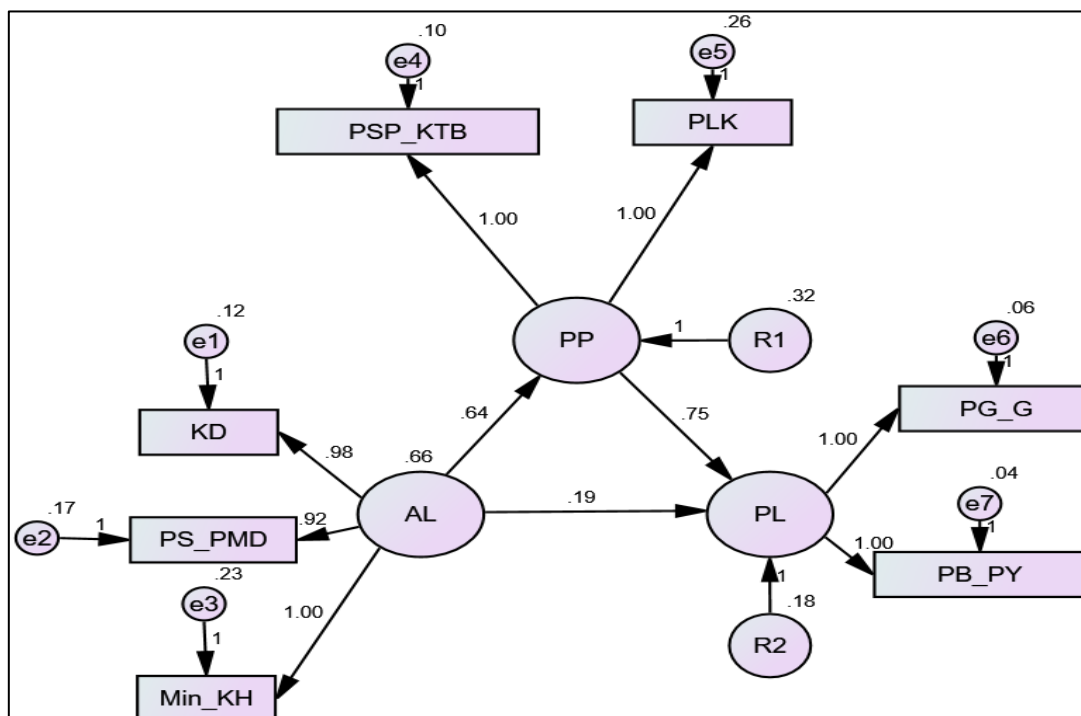
The analysis of the study also shows that the data are normally distributed with skewness values ranging from -0.395 to -0.710 and kurtosis located between -0.037 to -0.576, meeting the regulations suggested by Hair et al. (2014) and Kline (2016).

**Figure 2.** Results of Confirmatory Factor Analysis (CFA)

**Table 1.** Construct Summary Discriminant Validity Index, Construct Reliability, and Average Variance Extracted (AVE)

Construct	Average Variance Extracted (AVE)	Construct Reliability (CR)	Authentic Leadership	Proactive Personality	Transfer of Training
Authentic Leadership	.787	.917	<b>0.887</b>		
Proactive Personality	.768	.868	0.68	<b>0.876</b>	
Transfer of Training	.931	.964	0.67	0.84	<b>0.965</b>

**4.2 Structural Equation Modelling (SEM)**



Once the conditions of the CFA procedure for unidimensionality, validity, reliability and normal distribution were met, further analysis of the data was continued with the Structural Equation Modelling (SEM) procedure. The SEM procedure was conducted to test the research hypothesis by modelling the relationships and causes between the constructs simultaneously and statistical analysis for direct effects and mediator effects. The results of the SEM procedure using IBM-SPSS-AMOS are shown in [Figure 3](#).

**Figure 3.** Estimated Regression Coefficients between Constructs in the Model

**4.3 Results**

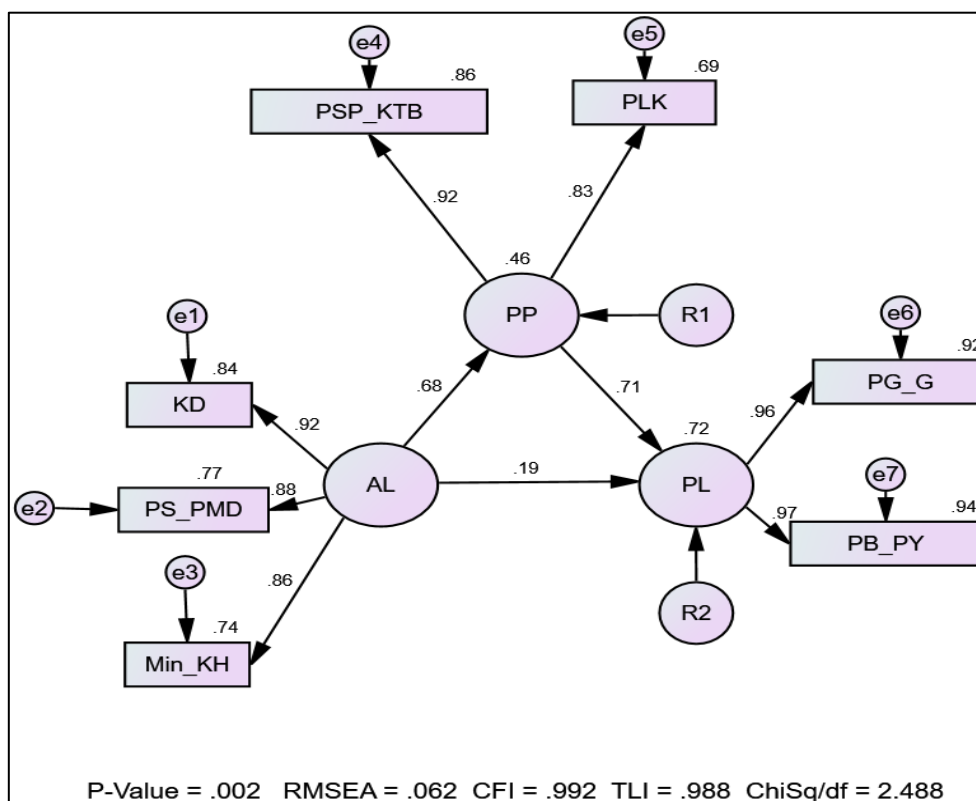
The results showed a direct effect of authentic leadership on proactive personality that is positive and significant: H1 is supported. In addition, H2 is also supported whereby the data of the pilot study showed a positive and significant direct effect of proactive personality on

training transfer. The direct effect of authentic leadership on the transfer of training is positive and significant, showing that H3 is supported. The SEM analysis results are shown in Table 2.

**Table 2.** Regression Coefficient Value and significance level (P-Value)

Construct	path	Construct	Beta Value	Std. error	Critical Region	P Value	Result
Proactive Personality	<---	Authentic Leadership	.637	.046	13.829	0.001	Supported
Transfer of Training	<---	Proactive Personality	.752	.056	13.470	0.001	Supported
Transfer of Training	<---	Authentic Leadership	.194	.050	3.871	0.001	Supported

Thus, it can be summarised that the results of H1 and H2 show a significant and indirect effect that confirms the existence of a mediator effect on authentic leadership and training transfer. Partial Mediator types are identified when direct and indirect relationships occur significantly in the study model formed, as shown in Table 2.



**Figure 4.** Structural Equation Modelling (SEM) Analysis Findings: Standard Regression Model

#### 4.4 Discussion

The first hypothesis that suggests that authentic leadership positively and significantly affects a proactive personality is supported: authentic leadership has a positive and significant direct effect on proactive personality. This finding is in line with the findings in Zhang et al. (2021), which showed a significant and moderate relationship between principals' authentic leadership and teachers with proactive personality. For Zhang and colleagues, the higher the

interpersonal trust built through the principal's authentic leadership practices, the higher the teacher's ability to be proactive in every action. Authentic leadership encourages teachers to have a proactive personality through relationship transparency, trust, and a balanced decision process to carry out actions efficiently. Teachers have more faith and trust in principals who practice authentic leadership; this, in turn, leads to a situation that promotes teachers with a proactive personality to be more confident in their work performance. In addition, the study's findings also support the findings of [Smithikrai and Suwannadet \(2018\)](#): their study stipulated that authentic leadership significantly impacts proactive personality. The leader's internal moral perspective was found to encourage people with proactive personality to be ready to implement change and have a high commitment towards their career. The leader determines the decision on the action by the beliefs he holds. With this belief, the principal consistently supports the teacher's proactive personality behaviour to make changes based on their ideas to achieve their work goals, which later indirectly encourage them to make more effort and creatively implement actions. In addition, authentic leadership shows respect for those around them. This leadership encourages teachers to be more proactive and take the initiative. Authentic leadership also improves teachers' morale because it makes teachers feel valued and respected by their leaders. The findings of the pilot study showed that the principal's authentic leadership greatly influences teachers with proactive personality to implement ideas and changes to improve their work performance and quality. The study's results also support the findings of [Cerit \(2017\)](#), showing that leadership practices that prioritise teacher relationships and collaboration (LMX) positively affects proactive personality. LMX leadership characteristics are closely related to authentic leadership practices through relational transparency. The transparency of the relationship encourages teachers to establish a closer relationship with the leader based on the confidence and trust built by the principal.

The findings of the study also support the second hypothesis: proactive personality has a positive and significant effect on the transfer of training -this is in line with [Haslina and Norhasni \(2014\)](#), which proved that individuals with proactive personality have a strong desire to deepen and master training knowledge that later leads to them being able to transfer training effectively. The results are also aligned with [Er \(2021\)](#) who found that a proactive personality uses learning for continuous training transfer through initiative and high confidence. The data analysed also further provided support the findings of a previous study done by [Li et al. \(2017\)](#) that found innovative behaviour is aimed at generating, promoting and realising new ideas in the organization. A proactive personality is found to provide significant benefits in educational organisations. Teachers with a proactive personality have a positive perspective and a high level of creative self-efficacy to improve the quality of work consistently. Therefore, they can transfer the training by using the results of learning, initiative, and high confidence. When learning occurs effectively, it facilitates the KSA process to be applied continuously at work. The study results also stipulated that teachers' proactive personality plays an essential role in significantly influencing the transfer of training. This study supports the findings of [Celestin and Yunfei \(2018\)](#) that the proactive personality trait of having a firm belief in making changes to improve work performance impacts training transfer. Celestin and colleagues found that when highly confident teachers can implement change, they strive to improve the existing knowledge and skills and maintain new KSA from on-the-job training.

However, the results of this study contradict the findings of a study by [Dreer et al. \(2017\)](#) which found that teachers who have the perception of being able to change and improve their work do not affect the transfer of training because there are other contributing factors that are found to be more effective in supporting the transfer. The factors identified is work environment, which includes the leader's support and the teacher's situation regarding readiness, motivation, and training design. When teachers are prepared to improve the existing KSA at work, it is found and proven to encourage them to do a better training transfer. In addition, they are interested in using the training they received by designing training that is tailored to their current job.

The third hypothesis that suggests authentic leadership has a positive and significant effect on training transfer is valid and supported. The study's results align with the findings of [Gil et al. \(2021\)](#) which showed a positive and significant relationship between principals' leadership practices and teachers' training transfer. The principals' direct intervention in the transfer process of teacher training helps to enhance the ability of teachers to improve their quality of work. This situation can be linked to the internal moral perspective of the principals' authentic leadership, who intervene in the transfer of teacher training. For example, any decision that involves in enhancing teachers' teaching is made by the principals with high standards of moral values and confidence that teachers can deliver their expectations. This will help teachers become more courageous in implementing changes to improve teaching by optimising the transfer of training. This data of this research also supported the findings of the meta-analysis of studies by [Govaerts and Dochy \(2014\)](#) that adopted the Training Transfer Model ([Baldwin & Ford, 1988](#)) starting from 1988 to 2014. Leadership practices that provide feedback and set goals, such as authentic leadership, encourage more effective transfer of training. The results of the study are in line with the findings of [Corner \(2015\)](#) which indicated that authentic leadership impacts the transfer of training. The principal's self-awareness and balanced processing component encourage teachers to improve their self-efficacy through learning from the training. Principals who practice authentic leadership also create high trust-based relationships by promoting an open dialogue with teachers, making the transfer process of teacher training easier when feedback and views are discussed to overcome any problems encountered during the transfer process. In the aspect of an internal moral perspective, principals can produce actions that are aligned with the organisation's needs, especially in determining the training needs that teachers receive to be transferred and realised into work. In addition, the results of this study also support the findings of [John \(2020\)](#) that stipulated that the transparent aspects of the principal's supportive relationship, feedback and guidance impact the transfer of training among teachers. John found that transfer of training occurs when leaders provide inspiration that encourages teachers to apply training results to work. With that the encouragement, the teachers more confident and committed to using the new knowledge and skills received from the training to improve their quality of work. The situation helps them to always be ready to adapt in the face of the challenges of altering the current educational environment.

The fourth hypothesis suggested that a proactive personality is supported as a mediator of authentic leadership and transfer of training. This finding supports the study of [Wan Aishah \(2018\)](#) which found that a proactive personality is an essential mediator in explaining the

relationship between leadership style and work autonomy. Principals provide trust and insight to teachers to implement ideas for work improvement. The situation aids in shaping the freedom and work power given to the leader to make choices and decisions about the work done and further contribute to the teacher's proactive improvement. The study of proactive personality as a mediator shows that proactive personality has a positive effect on work and increases the effect of training transfer through the principal's authentic leadership. In addition, the proactive personality is found to assist principals who practice authentic leadership to apply the KSA learned from training to work more effectively. The results of this study are in line with the findings of [Nguyen et al. \(2016\)](#) on proactive personality which indicated that teachers could respond to environmental changes by using the resources available to adapt, overcome obstacles, and thrive. In addition, this study's results also align with the findings of [Ghitulescu \(2018\)](#) which indicated that teachers with a proactive personality have a positive effect through efforts and commitment to achieve goals based on initiatives that drive performance and changes at work. When the work environment promotes cooperative relationships among teachers, the situation encourages those with proactive personalities to be more resilient and transfer their training in a more effective manner. Through self-awareness, the principal's authentic leadership sets an example for teachers through showing high moral values behaviour and building transparent relationships to form a mutually supportive work environment. This situation encourages individuals with proactive personalities to persevere in implementing the new KSAs into their work more effectively despite the hurdles and obstacles faced.

In addition, the findings of this study also support [Grossman and Burke-Smalley \(2018\)](#). The study proved that work environment influences generalisation in the transfer of training through the leader's behaviour and the trainees' characteristics. According to Grossman and colleagues, even though the principal's leadership practices encourage changes in teachers' behaviour for the better, the proactive personality aspect needs to be paid close attention because it is believed to have a better training transfer effect. A study by [Ford et al. \(2018\)](#) explained that the success of training retention focuses mainly on the role of the individual versus the organisation. The proactive personality of a teacher is found to strive to maintain KSA through practical actions. The findings of [Ghosh et al. \(2015\)](#) in the literature analysis of previous studies showed that there is an indirect effect of leadership practices on the transfer of training through mediating variables such as the trainee's personality.

Thus, the findings of this study have expanded the current knowledge on proactive personality testing as the mediating variable that was found to play an essential role in enhancing the transfer of training when paired with principal's authentic leadership.

#### ***4.5 Implications***

The results of the study have helped to provide several theoretical and practical implications. First, the discovery of the relationship and effect of the principal's authentic leadership on proactive personality and the transfer of training among teachers confirms the theory of authentic leadership ([Luthans & Avolio, 2003](#)). This theory explains that a leadership that is formed based on high moral values produce leaders who are respected and emulated by their followers. The study's findings show that principals who practice authentic leadership are modelled by teachers in carrying out their responsibilities by applying the knowledge, skills

and attitudes (KSA) acquired from training at work. Second, the findings of this study also support the theory of proactive personality to explain the study's results. Based on the theory presented by [Bateman and Crant \(1993\)](#), teachers with proactive personality have stronger belief in their ability to overcome obstacles by manipulating and controlling the environment to take advantage of opportunities. Individuals with proactive personality are found to bring changes to work using their initiative with every effort to transfer training more effectively into work despite the difficulties faced. Third, the study also supports the Theory of Goal Setting ([Locke et al., 1981](#)); setting goals for difficult and challenging tasks motivate individuals with proactive personality to improve their knowledge and skills through training and then transfer them to work. Fourth, the findings of this study are also found to support the Training Transfer Model of [Baldwin and Ford \(1988\)](#), which explains the tendency of individuals to apply knowledge, skills and attitudes (KSA) received from training into work through the process of retention, learning, maintenance, and generalisation. Fifth, the study's results also help to contribute to the current body of knowledge about the mediating role of proactive personality. Sixth, the study results show that it is essential for principals to practice authentic leadership as their leadership style if they want to encourage teachers to transfer training. Seventh, this study also helps to form a model that shows the relationship between principals' authentic leadership practices, proactive personality, and transfer of training among teachers.

## 5. Conclusion

Facing the challenges and uncertainties in the current educational change requires teachers to fully transfer the knowledge, skills, and attitudes (KSA) gained from training into work. This situation ensures that their teaching methods remain relevant and up to date, in keeping up with the changes and uncertainties in the system. Authentic leadership style can help leaders deal with individuals with proactive personality in a controlled way to not exceed the limits and work ethics, even though they can generate new ideas to implement reformation in the system. When teachers work in a positive environment created by the principal's authentic leadership practices, transfer of training occurs more effectively. In particular, through guidance and encouragement, principals use their knowledge, skills and experience to help teachers implement the new KSA more confidently. The aspect of high self-awareness becomes the main strength of the principal's authentic leadership to assist and lead teachers based on the created trust climate. In addition, teachers with a proactive personality can carry out the transfer of training more effectively through high seriousness and willingness when working under the principal's authentic leadership style.

## 6. Limitations and recommendations

This research has several limitations that should be noted for future research. The study uses a cross-sectional method that observes data only once in a period to achieve the research objective. Second, additional examinations by using longitudinal methods can and will help provide a better and more thorough insight on comprehending how leaders and proactive personalities influence the transfer of teacher training. Future studies are encouraged to



examine the period or duration of training transfer, such as after training, three months, a year or more than a year after the teacher training, which may have different effects.

This research has assisted in providing important insights to improve the transferring process between teachers and schools and highlighting the importance of leaders being wholly accessible and communicative with their teachers and subordinates. The study's findings also suggest that principals who practice authentic leadership can improve teachers' quality and development. These findings are expected to help educators understand how to create environments that support teacher development and transfer their training in a better, more improved way. Additionally, future studies can also focus on exploring how other factors, such as support from colleagues, organisations, and middle leaders, impact the transfer of teacher training.

Additionally, this study provides valuable insights that can help improve the effectiveness of leadership training programs. For example, principals need to understand how to build trust with their teachers to ensure teachers are more adamant to share their knowledge and expertise. In addition, leaders should foster a collaborative environment where teachers feel comfortable in transferring their ideas and suggestions to work.

As the education system currently focuses on developing leaders and teachers, policy makers need to develop strategies that can help assist and support the transferring process and improve the quality of teachers and principals. The findings of this study provide an important insight into how authentic leadership can play an essential role in facilitating teacher development and encouraging the transfer of their training.

## References

- Atula, J. M. (2014). *The Effect of Transformational Leadership Behavior on Followers' Affective Commitment to Change and Change-Oriented Organizational Citizenship Behavior: The Mediating Role of Psychological Capital*. Universiti Kebangsaan Malaysia.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *Leadership Quarterly*, 15(6), 801–823.
- Azman, I., Wan Aishah, W. M. N., & Raja Rizal Iskandar, R. H. (2018). Tingkah Laku Proaktif Meningkatkan Kejayaan Kerjaya Pekerja. *Sains Humanika*, 2, 53–63.
- Baldwin, T. T., & Kevin Ford, J. (1988). Transfer of Training: A Review and Directions for Future Research. *Personnel Psychology*, 41(1), 63–105.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior. *Journal of Organizational Behavior*, 14, 103–118.
- Belwalkar, B. B., & Tobacyk, J. J. (2018). Toward a Tripartite Model and Measurement of Proactive Personality. *Journal of Personality Assessment*, 100(5), 529–538.
- Bond, T. G., & Fox, C. M. (2015). *Applying the Rasch Model: Fundamental Measurement in the Human Sciences*. Routledge.
- Celestin, B. N., & Yunfei, S. (2018). The impact of learner characteristics on training transfer expectation: A survey of Thai teachers' perception of cloud computing tools. *International Journal of Training and Development*, 22(4), 256–273.

- Cerit, Y. (2017). The mediating effect of LMX in the relationship between school bureaucratic structure and teachers' proactive behavior. *Leadership & Organization Development Journal*, 38(6), 780–793.
- Corner, K. (2015). *Exploring the Reliability and Validity of Research Instruments to Examine Secondary School Principals' Authentic Leadership Behavior and Psychological Capital*. PhD thesis, The University of Arizona.
- Dreer, B., Dietrich, J., & Kracke, B. (2017). From in-service teacher development to school improvement: Factors of learning transfer in teacher education. *Teacher Development*, 21(2), 208–224.
- Er, E. (2021). Effects of Primary School Teacher Personality and Network Intentions on Change: Mediating Role of Professional Learning. *International Online Journal of Primary Education*, 10(1), 148–159.
- Ford, J. K., Baldwin, T. T., & Prasad, J. (2018). Transfer of Training: The Known and the Unknown. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 201–225.
- Ghitulescu, B. E. (2018). Psychosocial Effects of Proactivity: The Interplay between Proactive and Collaborative Behavior. *Personnel Review*, 47(2), 294–318.
- Ghosh, P., Chauhan, R., & Rai, A. (2015). Supervisor support in transfer of training: Looking back at past research. *Industrial and Commercial Training*, 47(4), 201–207.
- Gil, A. J., Mataveli, M., & Garcia-Alcaraz, J. L. (2021). Towards an analysis of the transfer of training: Empirical evidence from schools in Spain. *European Journal of Training and Development*.
- Govaerts, N., & Dochy, F. (2014). Disentangling the role of the supervisor in transfer of training. *Educational Research Review*, 12, 77–93.
- Grossman, R., & Burke-Smalley, L. A. (2018). Context-dependent accountability strategies to improve the transfer of training: A proposed theoretical model and research propositions. *Human Resource Management Review*, 28(2), 234–247.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis*. Pearson Education Limited.
- Hamilton, K. (2018). *The Relationship between Authentic Leadership and Conflict Management Styles*. PhD thesis, Our Lady of the Lake University.
- Han, S., Harold, C. M., & Cheong, M. (2019). Examining why employee proactive personality influences empowering leadership: The roles of cognition- and affect-based trust. *Journal of Occupational and Organizational Psychology*, 92(2), 352–383.
- Haslina, A. R., & Norhasni, Z. A. (2014). Hubungan Faktor Individu Dan Akauntabiliti Dengan Pemandahan Latihan Perguruan Dalam Kalangan Guru Siswazah. *Edusentris, Jurnal Ilmu Pendidikan Dan Pengajaran*, 1(1), 13.
- Isharae, A. M., & Azlin, N. M. (2019). Kepimpinan Autentik Dan Hubungannya Dengan Prestasi Kerja Pensyarah Kolej Matrikulasi KPM Zon Timur. *Jurnal Penyelidikan Pendidikan*, 20, 258–273.
- Jackson, C. B., Brabson, L. A., Quetsch, L. B., & Herschell, A. D. (2019). Training transfer: A systematic review of the impact of inner setting factors. *Advances in Health Sciences Education*, 24(1), 167–183.
- Jiang, H., & Men, R. L. (2017). Creating an Engaged Workforce: The Impact of Authentic Leadership, Transparent Organizational Communication, and Work-Life Enrichment. *Communication Research*, 44(2), 225–243.
- Jiang, W., & Gu, Q. (2015). A moderated mediation examination of proactive personality on employee creativity: A person-environment fit perspective. *Journal of Organizational Change Management*, 28(3), 393–410.
- John, P. (2020). Identifying the Factors to Enhance Training Effectiveness: A Case Study of

- KNGY Teacher Volunteers, Myanmar. *ABAC ODI JOURNAL VISION. ACTION. OUTCOME*, 7(2), 184–209.
- Kasa, M. D., Shamsuddin, M. F., Yaakob, M. F. M., Yusof, M. R., & Sofian, F. N. R. M. (2020). Exploring the influence of a principal's internalized moral perspective towards teacher commitment in Malaysian secondary schools. *Journal of Education and E-Learning Research*, 7(3), 323–333.
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*. The Guildford Press.
- Kristin, J. T. (2018). *Perceived Authentic Leadership and Organizational Commitment*. PhD thesis, Our Lady of the Lake University.
- Kulophas, D., Hallinger, P., Ruengtrakul, A., & Wongwanich, S. (2018). Exploring the effects of authentic leadership on academic optimism and teacher engagement in Thailand. *International Journal of Educational Management*, 32(1), 27–45.
- Li, M., Liu, Y., Liu, L., & Wang, Z. (2017). Proactive Personality and Innovative Work Behavior: The Mediating Effects of Affective States and Creative Self-Efficacy in Teachers. *Current Psychology*, 36(4), 697–706.
- Liu, Y., Fuller, B., Hester, K., Bennett, R. J., & Dickerson, M. S. (2018). Linking authentic leadership to subordinate behaviors. *Leadership and Organization Development Journal*, 39(2), 218–233.
- Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, 90(1), 125–152.
- Luthans, F., & Avolio, B. (2003). Authentic Leadership Development. In J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 241–258). Berrett-Koehler.
- Ma, S. A. (2016). *The impact of authentic leadership on school effectiveness: A case study of the characteristics of educational leaders in turnaround schools*. Claremont Graduate University.
- McCrae, S. (2018). *Role of the Supervisor in the Transfer of Training Prior to, During, and After Training*. PhD thesis, Capella University.
- Nguyen, Q., Kuntz, J. R. C., Näswall, K., & Malinen, S. (2016). Employee resilience and leadership styles: The moderating role of proactive personality and optimism. *New Zealand Journal of Psychology*, 45(2), 13–21.
- Noe, R. A. (2017). Employee training and development. In *McGraw-Hill Education*. The Ohio State University.
- Noe, R. A., Clarke, A. D. M., & Klein, H. J. (2014). Learning in the Twenty-First-Century Workplace. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 245–275.
- Penger, S., & Èerne, M. (2014). Authentic leadership, employees' job satisfaction, and work engagement: A hierarchical linear modelling approach. *Economic Research-Ekonomska Istrazivanja*, 27(1), 508–526.
- Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Focus on research methods: Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing and Health*, 30(4), 459–467.
- Roberts, Z., Rogers, A., Thomas, C. L., & Spitzmueller, C. (2018). Effects of proactive personality and conscientiousness on training motivation. *International Journal of Training and Development*, 22(2), 126–143.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business*. John Wiley & Sons, Ltd.
- Semedo, A. S., Coelho, A., & Neuza Ribeiro. (2018). The relationship between authentic leaders and employees' creativity: What are the roles of affective commitment and job resourcefulness? *International Journal of Workplace Health Management*, 11(2), 58–73.

- Siti Noor, I., Anis Salwa, A., & Abdul Ghani Kanesan, A. (2019). The effect of school leaders' authentic leadership on teachers' job stress in the Eastern part of peninsular Malaysia. *International Journal of Instruction, 12*(2), 67–80.
- Smithikrai, C., & Suwannadet, J. (2018). Authentic leadership and proactive work behavior: Moderated mediation effects of conscientiousness and organizational commitment. *Journal of Behavioral Science, 13*(2), 94–106.
- Srivastava, A. P., & Dhar, R. L. (2016). Authentic leadership for teacher's academic optimism: Moderating effect of training comprehensiveness. *European Journal of Training and Development, 40*(5), 321–344.
- Starks, M. P. (2019). *Impact of Transfer of Training within Organizations*. PhD thesis, The Chicago School of Professional Psychology.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*. Pearson Education, Inc.
- Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2010). *Measurement in Nursing and Health Research* (Vol. 53). Springer Publishing Company.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008a). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management, 34*(1), 89–126.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008b). Authentic Leadership: Development and Validation of a Theory-Based Measure†. *Journal of Management, 34*(1), 89–126.
- Wan Aishah, W. N. (2018). *Perhubungan Antara Pengurusan Kerjaya, Tingkah Laku Proaktif Dan Kejayaan Kerjaya Di Jabatan Agama Islam, Malaysia*. Universiti Kebangsaan Malaysia.
- Wills, K. K. (2017). *The Influence of Supervisor Support Hierarchy on College and University Faculty Training Transfer Leading to Knowledge Transfer*. PhD thesis, Capella University.
- Xiong, K., Lin, W., Li, J. C., & Wang, L. (2016). Employee trust in supervisors and affective commitment: The moderating role of authentic leadership. *Psychological Reports, 118*(3), 829–848.
- Zainudin, A. (2015). SEM Made Simple. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*.
- Zainudin, A., Asyraf, A., & Mustafa, M. (2016). The Likert scale analysis using parametric based Structural Equation Modeling (SEM). *Computational Methods in Social Sciences, 4*(1), 13–21.
- Zainudin, A., Lim, S. H., & Nur Fairuza Syahira, Z. (2018). *Pendekatan Mudah SEM - Structural Equation Modelling*. MPWS Rich Publication.
- Zhang, S., Bowers, A. J., & Mao, Y. (2021). Authentic leadership and teachers' voice behaviour: The mediating role of psychological empowerment and moderating role of interpersonal trust. *Educational Management Administration and Leadership, 49*(5), 768-785.