
TREND OF USING SITUATIONAL JUDGEMENT TEST ON SCHOOL TEACHERS: A SYSTEMATIC LITERATURE REVIEW

'Azad Iqram Nadmilail

Faculty of Education, Universiti Kebangsaan Malaysia
azad.iqram@moe.gov.my(First author)

Mohd Effendi Ewan Mohd Matore

Faculty of Education, Universiti Kebangsaan Malaysia
effendi@ukm.edu.my (Corresponding author)

Abstract

Situational Judgement Tests (SJTs) have become progressively famous instruments that have been utilized in various fields, especially for personnel selection, promotion, and recruitment. There have been several research studies conducted on school teachers. However, there is an absence of attention in such studies regarding the analysis of the country-of-origin and time trends of SJTs in research. This review will turn out to be more gainful for the educational researcher to enhance their insight and comprehension of the research trend for further studies. Hence, this study aims to review country-of-origin trends and time trends of SJTs research on school teachers. This study employed a Systematic Literature Review (SLR) as a research method which comprises a review protocol that specifies the topic to be investigated and the method customized in conducting the review. It has significant benefits to detect relevant literature review and how information is acquired from the primary study. Planning, conducting, and reporting the review are phases of the SLR method. This study found that the SJTs on school teachers are most widely utilized in European countries and have grown dramatically by 27.78 percent for over the past ten years throughout the world. This study recommends several active researchers as an expert and their research practices that can be referred to. Detailed empirical studies should be conducted to see the purpose of the studies practiced and the characteristics of the attributes and competencies being measured. Sifting articles can be improved the research by using non-common languages, utilizing a more extensive database, and exploring other research features through in-depth research.

Keywords: Situational Judgement Tests; School Teachers; Country-of-origin; Time Trends; Systematic Literature Review

1.0 INTRODUCTION

Situational Judgment Tests (SJTs) are popular and widely used in many fields such as medical, defense, and others. SJTs are often used in selection, recruitment, and promotion (Whetzel, Sullivan & McCloy, 2020). The medical field always determines that the selection methods used by recruiters are robust as the selection is the first assessment to enter medical education and training (Patterson et al., 2016). In addition, the admission of medical schools at the international level is very competitive. In other fields, The Armed Forces were facing a high attrition rate among newly hired officers (Filip Lievens et al., 2008). SJTs have implemented wherein potential applicants for officer jobs requested to choose a response based on the choice of answers given. Moreover, SJTs were implemented to notify promotion decisions. Thus, SJTs are designed to measure “leadership judgment” beyond the Armed Forces Qualification Test (AFQT) which accounted for an incremental variance (Whetzel, Sullivan & McCloy, 2020).

Since SJTs have increased in popularity as a predictor of performance, multi-organization around the world has practiced the use of SJTs as a measuring tool of psychology and employability (Weekley & Ployhart, 2013). Based on the minimal information acquired during the selection process, the fundamental task is to make accurate prognoses about a person and future job performance. Besides, predictions are also important information especially in explaining the success of undergraduate students and important in educational psychology research (Breen & Lindsay, 2020). These predictions are very important, especially for higher educational institutions to predict certain things such as to predict the success of students and their latent talents. Such predictions may allow them to identify students likely to experience problems assimilating into the college environment as well as at risk of academic failure (Matošková & Kovářik, 2017).

SJTs also present work-related situations and a list of selection plausible courses of action (Whetzel & McDaniel, 2009). Therefore, in certain circumstances SJTs are designed to

assess individual assessments in a contextual workplace environment (Ryan & Ployhart, 2014). In order to link to work-related, a collection of critical incidents and response options assembled. Then, these collections will target attributes and competencies from the job description analysis provided. Thus, the selected response will provide a prediction of the action taken. Some circumstances found that achievement-related work scenarios may provide additional criterion-relevant information as well as contextualized measures of personality (Golubovich et al., 2020). In a nutshell, SJTs are increasingly accepted worldwide in various professions as well as used for many purposes. It has also attracting an increasing amount of attention by researchers in recent years.

2.0 DEFINITION OF SJTS

SJTs are measurement methods of assessing opinions or interpretation of the respondents in work-related settings, which reflects the actual working conditions (Lievens & Coetsier, 2002), aim to capture job-related competencies and skills (Lievens, Peeters & Schollaert, 2008) and methodology designed to assess non-academic attributes relevant to a target role (Patterson & Driver, 2018). Essentially, SJTs are psychological measurement instrument that contribute ideas and knowledge which allows the researchers to decide and evaluate any decisions based on the responses given by the test-takers. Critically, SJTs are best considered as an estimation strategy as the organization and presence of a particular test itself can differ essentially as indicated by explicit components of SJTs plan. Commonly, SJTs present up-and-comers with theoretical content or video-based situations portraying a work-significant circumstance. For each scenario, candidates are approached to show the adequacy of comparing reaction choices from a predefined rundown of choices.

SJTs are also known as a simulation method (O'Connell et al., 2007), that requires respondents to make judgments in problematic work-related situations (Al Hashmi & Klassen, 2019). The simulation tests utilized for determination contain sets of assignments that current circumstances and requests that members react like they were doing the work. The reactions are deciphered as an expected pointer of candidates' future conduct.

Generally, simulation tests fluctuate as per the manner by which they are introduced or what is known as the 'fidelity' of the test. Tests introduced as an accurate guess of genuine occupation circumstances are 'high-fidelity simulation test'. Most studies conducted by using SJTs lead to measuring psychology that presents test-takers with hypothetical situations that often reflect constructs that may be interpersonal (e.g., communication, teamwork), intrapersonal (e.g., emotional stability, adaptability), or intellectual (e.g., technical knowledge, continuous learning) in nature (National Research Council, 2015).

2.1 Theory Underpinning SJTs

SJTs have several theories that underlying instrument development. Previous research showed that the researchers had various views and opinions on theories related to SJTs. To date, there is a relatively clear view related to the theoretical underpinning of SJTs and there are two theories proposed and strongly suggested by scholars. First, Behavioural Consistency Theory is a theory identified underlying SJTs which suggest behaviour in the past is the best predictor of future behaviour. This shows that the central principle is that eliciting a sample of current behaviour allows the prediction of future behaviour (Motowidlo, Hooper & Jackson, 2006; Wernimont & Campbell, 1968). Moreover, SJTs have proven as effective predictors of job performance because SJTs measure procedural understanding about effective behavior in a given situation (Lievens & Patterson, 2011). Thus, the predictions shown by the test-takers contribute clearer view to the authorities as indicators for decision making in selection, promotion, and professional development requirements.

Second, Implicit Trait Policies (ITPs) is another theory that grows consensus and attention among the scholars in the literature research. ITPs are implicit beliefs about the causal effect of traits expressed by various actions on the effectiveness of those actions (Weekley & Ployhart, 2013). Those actions measured as a joint function of the behavioural traits of response options and individuals' judgement about their behavioural effectiveness. However,

it depends on certain area such as the level of employment, knowledge of employment and job description(Motowidlo & Beier, 2010; Patterson, Zibarras & Ashworth, 2016). In any situation given, evaluation in the benefits that expressing the traits will be guided behavior based on these beliefs (Golubovich et al., 2017). Furthermore, the tendencies or traits that have been patterned will contribute some ideas of the behaviours and characteristics that will become permanent. Therefore, human individually has different beliefs about the effectiveness of behaviours which are related to inherent tendencies or personality traits.

2.2 SJTs on School Teachers

In teacher education, there are numerous studies have been conducted by many scholars and researchers around the world who apply and use the SJTs for various purposes such as personnel selection, recruitment, promotion, and professional development. Studies involving the selection of personnel to become teachers in pre-service education are very rapid in various countries. The main interest in international policies of education is to promote teacher quality and quality teaching (Beauchamp et al., 2013). The emphasis on this teacher recruitment policy is highly emphasized and given special attention to attract the interest of many candidates and produce the best teacher candidates(Feuer et al., 2013; Schleicher, 2014). In addition, the development and use of SJTs also involve research on professional development. The study was successfully conducted not only involved teachers in service, but also involved teachers in pre-service. Teachers experience various interpersonal dilemmas or conflicts either inside or outside the classroom(Pavlidou & Alevriadou, 2020).

In order to understand in-depth, it is important to know further about the research trend of using SJTs on school teachers. Therefore, this study will attempt to identify and analyse the research trend of using SJTs on school teachers based on previous research studies in terms of country-of-origin and time trends. It is also wished that this study will contribute to the knowledge and strategies of future research of SJTs on school teachers.

3.0 METHODOLOGY

Based on the above discussion, this study employed a Systematic Literature Review (SLR) as a research method which comprises a review protocol that specifies the topic to be investigated and the method customized in conducting the review. It is a systematic and explicit method for the purpose of identifying, selecting, critically evaluating, collecting and analysing data from pertinent past research (Moher et al., 2009). This method was picked in light of the fact that it assists to synthesize all relevant academic literature in depth. It is the fundamental procedure of recognizing a significant literature review and how data is gotten from the primary study. Planning, conducting, and reporting the review are phases of the SLR method. The systematic literature review that has been conducted is based on the method proposed by Ryan (2006). In this study, all articles are identified with “situational judgement tests on school teachers”. The method should allow us to obtain a comprehensive overview about the trend and use of the SJTs on school teachers based on a systematic analysis of related publications.

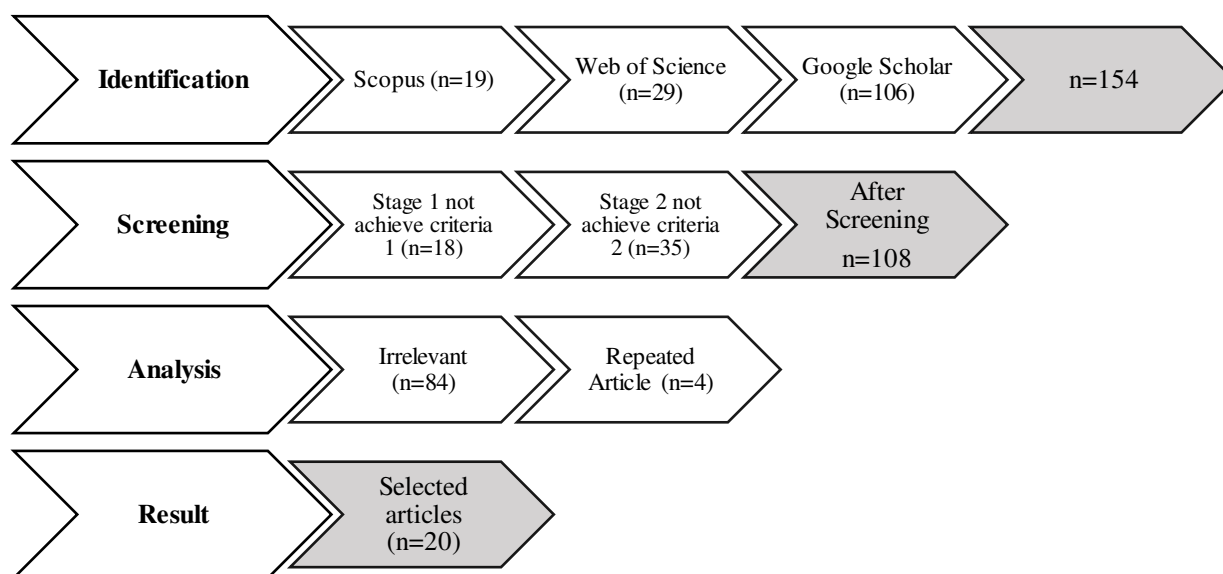
3.1 Search Strategy

This phase consisted of searching strategy and the search databases for this study has zeroed on three major databases in the scholarly world namely SCOPUS, Web of Science (WoS) and Google Scholar. WoS was selected because it has developed into one of the world's premier scientific citation search, discovery, and analytical information platforms as it is utilized as both an academic library research tool as well as a rich dataset for enormous scope information escalated concentrates across myriad academic fields (Li et al., 2017). Meanwhile, SCOPUS selection is considering that it is progressively utilized in academic papers (only a bit less than the contender WoS) and is challenging the overwhelming part of WoS (Zhu & Liu, 2020). Besides, Google Scholar could develop significant resource of openly accessible archives covering a huge array of disciplines and languages which implies it appears to be unparalleled in the efficient and effective provision of scholarly

documents online (Gusenbauer, 2019). Figure 1 shows the article selection process adapted from(Karabulut-Ilgu, Jaramillo Cherez & Jahren, 2018).

The keywords “situational judgement tests” and “school teachers” have been used and searched. The appropriate keywords were selected based on the objective to be achieved for the searching process. The author additionally utilized the phrase searching function and the Boolean operator OR or/and AND to combine keywords in their advance searching process. This study used three fundamental techniques for manual searching, namely handpicking, backward tracking, and forward tracking(Shaffril et al., 2020). Then, to get the recent articles, we have added our searching strategy and selected the relevant articles by restricting the publication year from January 2011 to December 2020.

Figure 1. Article selection process adapted from Karabulut-Ilgu et al. (2018)



3.2 Selection Criteria

In order to get the right and suitable articles, a few stages of filtering over the original articles were obtained (Figure 1). The primary screening is led dependent on a few criteria for acknowledgment and dismissal. The two criteria for acknowledgment were 1) articles journal only and 2) timeframe between January 2011 until December 2020. Dismissal criteria were 1) not systematic literature review articles or and 2) articles that were in other than English. The subsequent advance is to eliminate articles and previous studies that are rehased through the perusing of titles and abstracts each. The final analysis is done by a full and profundity perusing of the remaining articles in order to take out the articles that are irrelevant to the research needs. As a result of the search and filtering process, 20 articles were chosen as demonstrated in Table 1.

Table 1. Overview of the included studies

Author & Year	Country	Topic
Aldrup et al. (2020)	Germany	Measuring teachers' social-emotional competence: development and validation of a situational judgment test.
Bardach et al. (2020)	England	Using video-and text-based situational judgement tests for teacher selection: A quasi-experiment exploring the relations between test format, subgroup

		differences, and applicant reactions.
Gold, Pffirman & Holodynski (2020)	Germany	Promoting Professional Vision of Classroom Management Through Different Analytic Perspectives in Video-Based Learning Environments.
Klassen et al. (2020)	England	Can we improve how we screen applicants for initial teacher education?
Pavlidou & Alevriadou (2020)	Greece	An Assessment of General and Special Education Teachers and Students Interpersonal Competences and Its Relationship to Burnout.
Pavlidou, Alevriadou & Antoniou (2020)	Greece	Professional burnout in general and special education teachers: the role of interpersonal coping strategies.
Al Hashmi & Klassen (2019)	Oman	Developing a situational judgement test for admission into initial teacher education in Oman: An exploratory study.
Chao, Sung & Huang (2019)	Taiwan	Construction of the situational judgment tests for teachers.
Scully, Pitsia & Karakolidis (2019)	Ireland	Exploring the interpersonal dimension of teaching in an Irish post-primary context.
Sheridan, Durksen & Tindall-Ford (2019)	Australia	Understanding the reasoning of pre-service teachers: a think-aloud study using contextualised teaching scenarios.
Durksen & Klassen (2018)	Australia	The Development of a Situational Judgement Test (SJT) of Personal Attributes for Quality Teaching in Rural and Remote Australia
Erickson & Herbs (2018)	USA	Will Teachers Create Opportunities for Discussion when Teaching Proof in a Geometry Classroom?
Kim & Klassen (2018)	England	Teachers' cognitive processing of complex school-based scenarios: Differences across experience levels.
Klassen et al. (2018)	England, Finland, Malawi, Oman	National context and teacher characteristics: Exploring the critical non-cognitive attributes of novice teachers in four countries
Feranchak & Deiger (2017)	USA	Development of a Situational Judgment Task for Assessing Teacher Leadership in Mathematics.
Gold & Holodynski (2017)	Germany	Using digital video to measure the professional vision of elementary classroom management: Test validation and methodological challenges.
Klassen et al. (2016)	England	Developing a Proof-of-Concept Selection Test for Entry into Primary Teacher Education Programs.
Gold & Holodynski (2015)	Germany	Development and Construct Validation of a Situational Judgment Test of Strategic Knowledge of Classroom Management in Elementary Schools.
Klassen et al. (2014)	England	Applicant reactions to a situational judgment test used for selection into initial teacher training.
Elliott et al. (2011)	England	The socially skilled teacher and the development of tacit knowledge.

4.0 RESULT AND DISCUSSION

The main objective of this study is identifying and analysing the country-of-origin and time-trends development of SJTs on school teachers through a systematic literature review. In general, we distinguished an absolute 20 of research articles which have a significant related to the topic of SJTs and school teachers. Country-of-origin research has pulled in an elevated level of interest from both scholars and researchers(Dinnie, 2004). This literature review has a valuable contribution to scholars and researchers by providing them a critical appraisal of the existing research on the related topic. Our outcomes that we set forth could cast a light on more critical review of the impact of SJTs on the country-of-origin as an indicator which can be considered continuous and useful. Nonetheless, this study will zero on the study of SJTs in the country-of-origin apparently, no previous research has reviewed this specific topic. Time-trends are often used by public health professionals to assist in healthcare needs assessments, service planning, and policy development (Carneiro, Howard & Bailey, 2011). Analysis on time-trends may help professionals, scholars or researcher to anticipate paces of event just as future frequencies. Thus, the gained findings from this review will focus to unravel the patterns of scholars' and researchers' interests of research topics by year.

4.1 *Country-of-origin*

There are several countries that have conducted research using the SJTs on school teachers as shown in Graph 1. Based on the said graph, the countries of origin were identified and analysed to show the country ranks with the number of publications in high quality standard journals. We have identified 8 countries namely England (6), Germany (4), Greece (2), Australia (2), USA (2), Ireland (1), Taiwan (1) and Oman (1). The number inside bracket indicate the total number of publications for the aforesaid countries respectively. However, our result found that there is one study conducted a comparative research between 4 different countries namely England, Malawi, Oman and Finland.



Graph 1. Number of Research Articles by Countries

Country-of-origin indicates England appeared in the first ranking and contributed most of the published articles (Bardach et al., 2020; Elliott et al., 2011; Kim & Klassen, 2018; Klassen et al., 2014, Klassen et al., 2016; Klassen et al., 2020). It is worth noting that Robert M. Klassen has led three studies collaboratively with other researchers in England (Klassen et al., 2014, Klassen et al., 2016; Klassen et al., 2020). Although England recorded most of the published articles, some scholars or researchers from England likewise conducted the research collaboration with other scholars from other countries. Robert M. Klassen also joined collaborative research in Oman (Al Hashmi & Klassen, 2019), Australia (Durksen & Klassen, 2018) and mixed countries (Klassen et al., 2018). Besides him, Lisa E. Kim also led a study (Kim & Klassen, 2018) and other 4 studies in joint collaboration (Bardach et al., 2020; Klassen et al., 2016, Klassen et al., 2018; Klassen & Kim, 2019). Germany also one of the countries that conducts many SJTs studies on teachers other than England. A total of four studies have been recorded and among the scholars who conducted these studies in Germany were Bernadette Gold and Manfred Holodyski. It is evident that three out of four studies were conducted collaboratively (Gold, Pfirman & Holodyski, 2020; Gold & Holodyski, 2015; Gold & Holodyski 2017).

Recently, Greece through two scholars namely Kyriaki Pavlidou and Anastasia Alevriadou, both have recorded two studies together including a study with another scholar named Alexander-Stamatios Antoniou (Pavlidou, Alevriadou & Antoniou, 2020; Pavlidou & Alevriadou, 2020). In Ireland, we found one study was conducted (Scully, Pitsia & Anastasios, 2020). In total, 13 studies were conducted in Europe namely England (6), Germany (4), Greece (2) and Ireland (1). Besides, there are also studies conducted on continents other than Europe, namely the continents of Oceania, Asia and North America. In Oceania, Australia is the only country led the study in the said continent with a total of two studies were identified (Durksen & Klassen, 2018; Sheridan, Durksen & Tindall-Ford, 2019). For the record, Tracy L. Durksen is the most active researcher in Australia where the study of SJTs were conducted because there were three more studies conducted in collaboration with other researchers (Klassen et al., 2014; Klassen et al., 2016; Klassen et al., 2018). In Asia, there are two countries that have conducted SJTs study on school teachers, namely in Oman (Al Hashmi & Klassen, 2019) and Taiwan (Chao, Sung & Huang, 2019) respectively. In fact, Waleed Al Hashmi participated in a collaborative study involving four countries (Klassen et al., 2018). On the other hand, North America recorded two studies which were conducted mainly in the United States (Feranchak & Deiger, 2017; Erickson & Herbst, 2018). Last but not least, one research was conducted collaboratively in four countries namely England, Finland, Malawi and Oman. However, no official studies in Malawi and Finland have been identified.

As mentioned previously, England showed up in the first ranking and contributed to the vast majority of the published articles. In England, SJTs have been used together with other measurements to select doctors for UK Foundation training since 2013 and for postgraduate training in public health, psychiatry, ophthalmology and Dental Foundation Training (Al Hashmi & Klassen, 2019). The current situation shows that the use of SJT in England is widespread due to the rapid development in various fields. The Government of England has additionally made SJTs as one of the assessments in the Foundation Training, for

example, clinical and dentistry, which likewise to use the SJTs in the teaching and educational fields. Thus, those researchers and scholars reacted to the government's encouragement to utilize SJTs as instruments in the Initial Training Education Program (ITEP) as well as the professional development of school teachers. Internationally, SJTs likewise have been used in postgraduate recruitment in Australia (Patterson et al., 2016). This is related to a venture led by Robert Klassen at the University of York was investigating the utilization of SJTs or entry into ITEP (Klassen et al., 2014). The project started in the UK with a sample of practising teachers, teacher educators, and ITEP applicants. The work with the members brought about the development of an SJT focusing on three non-cognitive domains; namely, organisation and planning, resilience and auditability, and empathy and communication. The SJTs developed in the UK has also been revised, developed, and piloted in Australia. Since SJTs also utilized in postgraduate recruitment in Australia, they encourage the development of SJTs in the field of education and teaching. The findings from Australia show the advantage by adding a fourth domain that was focused on applicants in the New South Wales (NSW) Department of Education in Australia; specifically, culture and context. This new domain is viewed as vital for selecting teachers who will be working in rural and remote settings (Durksen & Klassen, 2018). Moreover, the study conducted by Klassen et al., (2014) also led the study conducted by (Sheridan et al., 2019).

Meanwhile in Germany, the studies had been initiated by Bernadette Gold and Manfred Holodynski who developed a SJT for pre-service teachers' strategic knowledge of classroom management in elementary schools (SJT-CM) and indications of content validity, construct validity, and sensitivity to differences in expertise (Gold & Holodynski, 2015). The SJT-CM developed is the first validated test for measuring strategic knowledge of pre-service teachers in elementary school education that covers classroom management as a multifaceted construct. Then, another study also conducted by them to conceptualize and develop a standardized instrument using digital video as stimuli to assess the professional vision of classroom management (PVCM) in elementary pre-service teachers as well as to

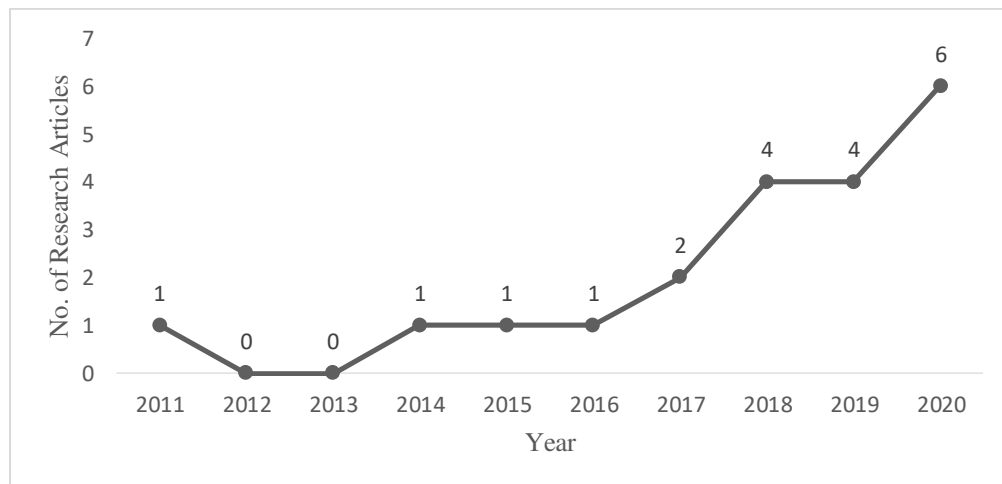
explore its internal structure and several aspects of its validity (Gold & Holodynski, 2017). These studies are continuing with another study which investigated how taking different perspectives in teacher training courses influences the learning of professional vision, multiperspectivity, and strategic knowledge of classroom management (Gold et al., 2020). There are continuity and congruity among these three studies. The coherence of these three studies shows these scholars are effectively and actively conducting research of SJTs on school teachers. Nonetheless, two studies led in Greece (Pavlidou et al., 2020; Pavlidou & Alevriadou, 2020) show that the study on the use of SJT on school teachers just began in 2020, which carried out study on Special Education teachers.

Out of the 20 article studies published, 15 studies were conducted in western countries with six each in England, four in Germany, two in USA and Greece, and one in Ireland, while only four studies were led in eastern countries, specifically two in Australia and respectively each one in Taiwan and Oman. We can see this significant gap from the aspect of the practice of the use of SJTs on school teachers which was before executed in western countries in various fields. According to Whetzel & McDaniel (2009), the primary instrument professed to be the earliest instrument that applied the SJTs item was in the civil service examinations in the USA around 1873. At that point, SJTs showed its significance in World War Two in 1939 when utilized by psychologist of USA military in assessing the ability of the army on general knowledge, experience and level of rational thought. In 1940, SJTs was utilized to quantify the potential of an individual as a supervisor. SJTs kept on acquiring its notoriety in the late 1950s till the early 1960s when it was utilized by large organizations in the selection of employees. In the 1980s, the Office of Human Resource Management, USA utilized SJTs to evaluate the potential of job applicants at both officer and supervisor levels (Whetzel & McDaniel, 2009). Its actualized history demonstrates that the practice of using SJTs in western countries earlier than in eastern countries which generally adapted and adopted the domains and constructs that had been built up by western scholars. Nonetheless, there are a few changes made by adapting the local culture according to the and locality. However, the study conducted in Taiwan by Chao et al. (2019) is based

on the original study without adapting from any previous study. Besides, the joint collaboration by multi authors, has been very common among SJsT scholars. Currently, most collaboration occurred among authors from the same country, although collaboration across cross-countries were slowly increasing.

4.2 Time Trends

Graph 2 illustrates a result of the time trends from previous studies of SJsT on school teachers. In the first 6-years period, we found only one study in each year except 2012 and 2013. Yet, in the 2017, there was two studies contributing the publications. In 2018, we found four studies as well as in 2019. In addition, six studies in the recent year of 2020 have been identified.



Graph 2. Number of Research Articles by Year

Time trends against research of SJsT on school teachers have not been investigated so far. Some studies implement time trends review factors which correlate with variables (Finger et al., 2019; Jelsma et al., 2019). However, this study only reviews on publishing research in the past ten years without examine the factors which correlate with any variables. Based on time trends over the last ten years, the publications of SJsT studies on school teachers have gradually increased by 27.78%. Although the SJsT are widely-used in selection, recruitment

and promotion (Whetzel, Sullivan & McCloy, 2020), studies of SJTs on school teachers are still under-conducted and remain limited. To sum up, only twenty studies were identified and published the topic of SJTs on school teachers. As mentioned earlier, we found that the study of SJTs were less published in the first six years period with only one study was conducted for each year (Elliott et al., 2011; Gold & Holodyski, 2015; Klassen et al., 2014; Klassen et al., 2016) except for the year 2012 and 2013 where no study was conducted at all.

In 2017, additional two studies were published (Feranchak & Deiger, 2017; Gold & Holodyski, 2017). Meanwhile in 2018, the number of research articles has been increased to four studies (Durksen & Klassen, 2018; Erickson & Herbst, 2018; Kim & Klassen, 2018; Klassen et al., 2018). Likewise, the published research articles remained at four studies in 2019 (Al Hashmi & Klassen, 2019; Chao, Sung & Huang, 2019; Scully, Pitsia & Anastasios, 2020; Sheridan, Durksen & Tindall-Ford, 2019). Surprisingly, there were six studies published in 2020. Looking at the upward trend in 2020, it shows amazing progress of the study of SJTs on school teachers, which gaining more attention by the scholars and researchers as well as resulting in substantial escalation in the number of research articles than the previous years. In particular, two published studies were conducted in Greece (Pavlidou, Alevriadou & Antoniou, 2020; Pavlidou & Alevriadou, 2020), two studies in England (Klassen et al., 2020) and two studies in Germany (Aldrup et al., 2020; Gold, Pffirman & Holodyski, 2020). With this significant improvement, the study of SJTs on school teachers pulls in much consideration from scholars and researchers to study in-depth and directly applicable research in SJTs on school teachers particularly.

The increment in SJTs research on school teachers is expanding to guarantee that the quality of education in teaching is consistently at the best level. Beginning with the selection of teachers in ITEP, the best value ought to quality be kept up in order to include the professional development of school teachers. As indicated by Klassen et al. (2014), endeavors to improve selection practices for teacher training are seen as an initial step to

improve the quality of teaching in various global settings. This is on the grounds that different issues have been raised particularly the issue of selection which incorporates parts of techniques, measured and interviewers. Along these lines, research led to improve the quality of personnel selection to ITEP is acquiring consideration in different countries such as England, Oman and Taiwan. In addition, it also gives the professional development of teachers' attention to sustaining the quality of education in teaching. It has executed different methods and approaches to assist teachers in developing teaching professionalism such as knowledge, interpersonal and interpersonal skills. SJTs are otherwise called an alternative measurement method for measuring personality and situation-people interaction (Lievens & Patterson, 2011). In spite of the fact that SJTs as an alternative method of measurement, this technique has different points of interest such as higher validity related to criteria and related to constructs, higher reliability and lower fakeability (Zakaria et al., 2014), which pull in researchers in conducting research based on SJTs. Therefore, these advantages can encourage scholars in utilizing SJTs in their research in the future as lift research based on SJTs instruments.

It can also be seen based on countries that might make SJTs' research on school teachers more vibrant and growing. Taiwan which has conducted research by building its own constructs (Chao et al., 2019) shows a good indicator to flourish as the research has built a foundation for the practice of utilizing SJTs on school teachers in the country. This phenomenon shows great potential for growth as Taiwan consistently preserves the quality of education from various viewpoints. It is undeniable that research of SJTs on school teachers remains limited in Asia country, but this study has begun in Asia in recent years by a few scholars as a promising prospect for future growth in this topic. The total of two studies were conducted in Oman and Taiwan respectively indicate that this studies still scarce in Asia especially in the field of education. The equivalent goes for Greece which published two recent kinds of research (Pavlidou et al., 2020; Pavlidou & Alevriadou, 2020). Despite the fact that it focuses on special education teachers, the commitments and reforms made in the country are viewed as potential to be a shift for scholars there to research

further on SJTs. There is no denying the development in Germany which shows that there are other scholars besides Gold and Holodynski namely Aldrup who also conducts research based on SJTs which has just recently published in 2020(Aldrup et al., 2020). On the other hand, England does not need to be disputed anymore as the pioneer of SJTs in the field of education, Klassen, consistently leads research reliably which likewise includes researchers from other countries such as Oman, Australia, Finland and Malawi(Klassen et al., 2018). This collaboration can in a roundabout way be an aid to the vibrancy of SJTs-based research on school teachers. We have shown that there are ten countries that implemented research of SJTs on school teachers. This finding indicates gradual upward trend over the time.

The significant increase in SJTs research on school teachers provides clear indicators that such research can explode in the future. The involvement of various countries and continents clarifies that a ton of research related will conduct to school teachers more vigorously in the future, which already just centred around specific fields as it were. Pioneers in the field of SJTs are likewise consistently strong and generous to assist other scholars to improve the knowledge and quality of research in this field in various mediums such as consultancy, academic writing and seminars. They have also published various academic research that can be utilized as a guide and reference for novices to acquire valuable information as well as assist in conducting research. It can be concluded that research of SJTs on school teachers gaining attention year by year and received encouraging response from scholars and researchers in the world. In the interim, a research group zeroed in on SJTs in education can likewise be fabricated involving various personnel from various countries by sharing knowledge, experience and expertise. Ultimately, SJTs research on school teachers supposedly has the potential to escalate and vivaciously by measuring various aspects of competencies such as intellectual, interpersonal and intrapersonal. Apart from that, this study is likewise expected to provide some insight into the time trend of research SJTs on school teachers. It might be helpful to some researcher in certain countries to be a pioneer and introducing SJTs in their respective regions. Among stakeholders, in

effort to improve innovation or development of instrument, this study will provide some insight into how the SJTs could be implemented in certain countries and adapt it locally.

5.0 CONCLUSION

This study aims to identify and analyse the research trends of using SJTs on school teachers based on previous research studies specifically in the period of 10 years from 2011 to 2020 as well as presents the research trends based on the total of 20 research articles published in SCOPUS, Web of Science (WOS) and Google Scholar. More in-depth research and attention are needed since most of the scholars and researchers had been identified and their studies could be referred to in future studies. It is hoped that this study will provide some ideas for researchers to additionally build up this knowledge, especially in discovering scholars or researchers of SJTs that can be referred to. In particular, for those who are early career researchers could be benefited from the result of this study to grasp an initial understanding of this progressive research field. With rapid changes in the education system and education reform, it is important to note that the development of an instrument is an essential area for teachers to improve in order for education to remain significant in accomplishing their objectives. Last but not least, it is recommended that future studies should focus to conduct on more definite studies empirically to comprehend the purpose of the research practices and the characteristics of the competencies that being measured. Moreover, future research on SJTs could be explored more on item development, scaling, scoring, opportunities and contribution. As likewise recommended above, prospects researchers ought to explore other research highlights through in-depth research of the related experts, filtering articles in other foreign languages and using a wider database.

Acknowledgment

This work was supported by the Ministry of Higher Education (MOHE), Malaysia, and Faculty of Education, Universiti Kebangsaan Malaysia (UKM) through the Fundamental Research Grant Scheme (FRGS) under (Grant number: FRGS/1/2018/SSI09/UKM/02/1), and in part of Dana Penyelidikan FPEND (Grant number: GG-2019-034). The authors

would like to thank the anonymous reviewers for their valuable comments and suggestions, which helped them improve the content, quality, and presentation of this article.

References

- Al Hashmi, W., & Klassen, R. M. (2019). Developing a situational judgement test for admission into initial teacher education in Oman: An exploratory study. *International Journal of School and Educational Psychology*, 8(1), 187–198. <https://doi.org/10.1080/21683603.2019.1630042>
- Aldrup, K., Carstensen, B., Köller, M. M., & Klusmann, U. (2020). Measuring Teachers' Social-Emotional Competence: Development and Validation of a Situational Judgment Test. *Frontiers in Psychology*, 11, 892. <https://doi.org/10.3389/fpsyg.2020.00892>
- Bardach, L., Rushby, J. V., Kim, L. E., & Klassen, R. M. (2020). Using video- and text-based situational judgement tests for teacher selection: a quasi-experiment exploring the relations between test format, subgroup differences, and applicant reactions. *European Journal of Work and Organizational Psychology*. <https://doi.org/10.1080/1359432X.2020.1736619>
- Beauchamp, G., Clarke, L., Hulme, M., & Murray, J. (2013). Research and Teacher Education: The BERA-RSA inquiry. Policy and Practice within the United Kingdom. In *The BERA-RSA Inquiry: Vol. Taylor*. <http://www.bera.ac.uk/resources/research-and-teacher-education-bera-rsa-inquiry>
- Breen, R., & Lindsay, R. (2020). Different Disciplines Require Different Motivations for Student Success. *Research in Higher Education*, 43, 693–725. <https://doi.org/10.1023/a:1020940615784>
- Carneiro, I., Howard, N., & Bailey, L. (2011). *Introduction to Epidemiology*. United Kingdom: Open University Press.
- Chao, T. Y., Sung, Y. T., & Huang, J. L. (2019). Construction of the situational judgment tests for teachers. *Asia-Pacific Journal of Teacher Education*, 48(4), 355–374. <https://doi.org/10.1080/1359866X.2019.1633621>
- Dinnie, K. (2004). Country-of-Origin 1965-2004: A Literature Review. *Journal of Customer Behaviour*, 3(2), 165–213.
- Durksen, T. L., & Klassen, R. M. (2018). The development of a situational judgement test of personal attributes for quality teaching in rural and remote Australia. *Australian Educational Researcher*, 45(2), 255–276. <https://doi.org/10.1007/s13384-017-0248-5>
- Elliott, J. G., Stemler, S. E., Sternberg, R. J., Grigorenko, E. L., & Hoffman, N. (2011). The

socially skilled teacher and the development of tacit knowledge. *British Educational Research Journal*, 37(1), 83–103. <https://doi.org/10.1080/01411920903420016>

Erickson, A., & Herbst, P. (2018). Will Teachers Create Opportunities for Discussion when Teaching Proof in a Geometry Classroom? *International Journal of Science and Mathematics Education*, 16(1), 167–181. <https://doi.org/10.1007/s10763-016-9764-4>

Feranchak, B., & Deiger, M. (2017). Development of a Situational Judgment Task for Assessing Teacher Leadership in Mathematics. *AERA Online Paper Repository*. <https://doi.org/10.302/1181287>

Feuer, M. J., Floden, R. E., Chudowsky, N., & Ahn, J. (2013). *Evaluation of teacher preparation programs: purposes, methods, and policy options*. Washington, D.C., United States: National Academy of Education.

Finger, J. D., Busch, M. A., Heidemann, C., Lange, C., Mensink, G. B. M., & Schienkiewitz, A. (2019). Time trends in healthy lifestyle among adults in Germany: Results from three national health interview and examination surveys between 1990 and 2011. *PLOS ONE*, 14(9), 1–16. <https://doi.org/10.1371/journal.pone.0222218>

Gold, B., & Holodynski, M. (2015). Development and Construct Validation of a Situational Judgment Test of Strategic Knowledge of Classroom Management in Elementary Schools. *Educational Assessment*, 20(3), 226–248. <https://doi.org/10.1080/10627197.2015.1062087>

Gold, B., & Holodynski, M. (2017). Using digital video to measure the professional vision of elementary classroom management: Test validation and methodological challenges. *Computers and Education*, 107, 13–30. <https://doi.org/10.1016/j.compedu.2016.12.012>

Gold, B., Pfirrmann, C., & Holodynski, M. (2020). Promoting Professional Vision of Classroom Management Through Different Analytic Perspectives in Video-Based Learning Environments. *Journal of Teacher Education*, 1-17. <https://doi.org/10.1177/0022487120963681>

Golubovich, J., Lake, C. J., Anguiano-Carrasco, C., & Seybert, J. (2020). Measuring Achievement Striving via a Situational Judgment Test: The Value of Additional Context. *Revista de Psicología Del Trabajo y de Las Organizaciones*, 36(2), 157–167. <https://doi.org/10.5093/jwop2020a15>

Golubovich, J., Seybert, J., Martin-Raugh, M., Naemi, B., Vega, R. P., & Roberts, R. D. (2017). Assessing Perceptions of Interpersonal Behavior with a Video-Based Situational Judgment Test. *International Journal of Testing*, 17(3), 191–209. <https://doi.org/10.1080/15305058.2016.1194275>

- Gusenbauer, M. (2019). Google Scholar to overshadow them all? Comparing the sizes of 12 academic search engines and bibliographic databases. *Scientometrics.*, 118(1), 177–214. <https://doi.org/https://doi.org/10.1007/s11192-018-2958-5>
- Jeff A. Weekley, & Robert E. Ployhart. (2013). An Introduction to Situational Judgement Testing. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational Judgment Tests: Theory, Measurement and Application* (pp. 1–10). New Jersey: Psychology Press. <https://doi.org/10.4324/9780203774878>
- Jelsma, J. G. M., Gale, J., Loyen, A., van Nassau, F., Bauman, A., & van der Ploeg, H. P. (2019). Time trends between 2002 and 2017 in correlates of self-reported sitting time in European adults. *PLOS ONE.*, 14(11), 1–15. <https://doi.org/10.1371/journal.pone.0225228>
- Karabulut-Ilgu, A., Jaramillo Cherez, N., & Jahren, C. T. (2018). A systematic review of research on the flipped learning method in engineering education. *British Journal of Educational Technology*, 49(3), 398–411. <https://doi.org/10.1111/bjet.12548>
- Kim, L. E., & Klassen, R. M. (2018). Teachers' cognitive processing of complex school-based scenarios: Differences across experience levels. *Teaching and Teacher Education*, 73, 215–226. <https://doi.org/10.1016/j.tate.2018.04.006>
- Klassen, R. M., Durksen, T. L., Al Hashmi, W., Kim, L. E., Longden, K., Metsäpelto, R. L., Poikkeus, A. M., & Györi, J. G. (2018). National context and teacher characteristics: Exploring the critical non-cognitive attributes of novice teachers in four countries. *Teaching and Teacher Education*, 72, 64–74. <https://doi.org/10.1016/j.tate.2018.03.001>
- Klassen, R. M., Durksen, T. L., Kim, L. E., Patterson, F., Rowett, E., Warwick, J., Warwick, P., & Wolpert, M. (2016). Developing a Proof-of-Concept Selection Test for Entry into Primary Teacher Education Programs. *International Journal of Assessment Tools in Education*, 4(2), 96–114. <https://doi.org/10.21449/ijate.275772>
- Klassen, R. M., Durksen, T., Rowett, E., & Patterson, F. (2014). Applicant Reactions to a Situational Judgment Test used for Selection into Initial Teacher Training. *International Journal of Educational Psychology*, 3(2), 104–124. <https://doi.org/10.4471/ijep.2014.07>
- Klassen, R. M., & Kim, L. E. (2019). Selecting teachers and prospective teachers: A meta-analysis. *Educational Research Review*, 26, 32–51. <https://doi.org/10.1016/j.edurev.2018.12.003>
- Klassen, R. M., Kim, L. E., Rushby, J. V., & Bardach, L. (2020). Can we improve how we screen applicants for initial teacher education? *Teaching and Teacher Education*, 87, 1–11. <https://doi.org/10.1016/j.tate.2019.102949>

- Li, K., Rollins, J., & Yan, E. (2017). Web of Science use in published research and review papers 1997–2017: A selective, dynamic, cross-domain, content-based analysis. *Scientometrics*, *115*(1), 1–20. <https://doi.org/10.1007/s11192-017-2622-5>
- Lievens, F., & Patterson, F. (2011). The validity and incremental validity of knowledge tests, low-fidelity simulations, and high-fidelity simulations for predicting job performance in advanced-level high-stakes selection. *The Journal of Applied Psychology*, *96*(5), 927–940. <https://doi.org/10.1037/a0023496>
- Lievens, Filip, & Coetsier, P. (2002). Situational Tests in Student Selection: An Examination of Predictive Validity, Adverse Impact, and Construct Validity. *International Journal of Selection and Assessment*, *10*(4), 245–257. <https://doi.org/10.1111/1468-2389.00215>
- Lievens, Filip, Peeters, H., & Schollaert, E. (2008). Situational judgment tests: A review of recent research. *Personnel Review*, *37*(4), 426–441. <https://doi.org/10.1108/00483480810877598>
- Matošková, J., & Kovářík, M. (2017). Development of a Situational Judgment Test as a Predictor of College Student Performance. *Journal of Psychoeducational Assessment*, *35*(8), 768–784. <https://doi.org/10.1177/0734282916661663>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Journal of Clinical Epidemiology*, *62*(10), 1006–1012. <https://doi.org/10.1016/j.jclinepi.2009.06.005>
- Motowidlo, S. J., & Beier, M. E. (2010). Differentiating specific job knowledge from implicit trait policies in procedural knowledge measured by a situational judgment test. *Journal of Applied Psychology*, *95*(2), 321–333. <https://doi.org/10.1037/a0017975>
- Motowidlo, S. J., Hooper, A. C., & Jackson, H. L. (2006). Implicit policies about relations between personality traits and behavioral effectiveness in situational judgment items. *Journal of Applied Psychology*, *91*(4), 749–761. <https://doi.org/10.1037/0021-9010.91.4.749>
- National Research Council. (2015). Situations and Situational Judgment Tests. In National Research Council (Ed.), *Measuring Human Capabilities: An Agenda for Basic Research on the Assessment of Individual and Group Performance Potential for Military Accession* (pp. 187–199). National Academies Press. <https://doi.org/10.17226/19017>
- O’Connell, M. S., Hartman, N. S., McDaniel, M. A., Grubb, W. L., & Lawrence, A. (2007). Incremental Validity of Situational Judgment Tests for Task and Contextual Job Performance. *International Journal of Selection and Assessment*, *15*(1), 19–29. <https://doi.org/10.1111/j.1468-2389.2007.00364.x>

- Patterson, F., Prescott-Clements, L., Zibarras, L., Edwards, H., Kerrin, M., & Cousans, F. (2016). Recruiting for values in healthcare: a preliminary review of the evidence. *Advances in Health Sciences Education*, 21(4), 859–881. <https://doi.org/10.1007/s10459-014-9579-4>
- Patterson, F., & Driver, R. (2018). Situational Judgement Tests (SJTs). In F. Patterson & L. Zibarras (Eds.), *Selection and Recruitment in the Healthcare Professions: Research, Theory and Practice* (pp. 79–112). Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-94971-0>
- Patterson, Fiona, Knight, A., Dowell, J., Nicholson, S., Cousans, F., & Cleland, J. (2016). How effective are selection methods in medical education? A systematic review. *Medical Education*, 50(1), 36–60. <https://doi.org/10.1111/medu.12817>
- Pavlidou, K., & Alevriadou, A. (2020). An Assessment of General and Special Education Teachers' and Students' Interpersonal Competences and Its Relationship to Burnout. *International Journal of Disability, Development and Education*, 1-15. <https://doi.org/10.1080/1034912X.2020.1755425>
- Pavlidou, K., Alevriadou, A., & Antoniou, A. S. (2020). Professional burnout in general and special education teachers: the role of interpersonal coping strategies. *European Journal of Special Needs Education*, 1-18. <https://doi.org/10.1080/08856257.2020.1857931>
- Petticrew, M., & Roberts, H. (2006). *Systematic Reviews in the Social Sciences*. Blackwell Publishing Ltd. <https://doi.org/10.1002/9780470754887>
- Ryan, A. M., & Ployhart, R. E. (2014). A century of selection. *Annual Review of Psychology*, 65(1), 693–717. <https://doi.org/10.1146/annurev-psych-010213-115134>
- Schleicher, A. (Ed.). (2014). *Equity, Excellence and Inclusiveness in Education*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264214033-en>
- Scully, D., Pitsia, V., & Karakolidis, A. (2019). Exploring the interpersonal dimension of teaching in an Irish post-primary context. *Irish Educational Studies*, 39(3), 355–374. <https://doi.org/10.1080/03323315.2019.1697947>
- Shaffril, H. A. M., Samsuddin, S. F., & Samah, A. A. (2020). The ABC of systematic literature review: the basic methodological guidance for beginners. *Quality & Quantity*, 1-28. <https://doi.org/10.1007/s11135-020-01059-6>
- Sheridan, L., Durksen, T. L., & Tindall-Ford, S. (2019). Understanding the reasoning of pre-service teachers: a think-aloud study using contextualised teaching scenarios. *Teacher Development*, 23(4), 425–446.

<https://cibg.org.au/>

P-ISSN: 2204-1990; E-ISSN: 1323-6903

DOI: 10.47750/cibg.2021.27.02.607

<https://doi.org/10.1080/13664530.2019.1640281>

Wernimont, P. F., & Campbell, J. P. (1968). Signs, samples, and criteria. *Journal of Applied Psychology*, 52(5), 372–376. <https://doi.org/10.1037/h0026244>

Whetzel, D. L., & McDaniel, M. A. (2009). Situational judgment tests: An overview of current research. *Human Resource Management Review*, 19(3), 188–202. <https://doi.org/10.1016/j.hrmr.2009.03.007>

Whetzel, D., Sullivan, T., & McCloy, R. (2020). Situational Judgment Tests: An Overview of Development Practices and Psychometric Characteristics. *Personnel Assessment and Decisions*, 6(1), 1–16. <https://doi.org/10.25035/pad.2020.01.001>

Zakaria, M. H., Yatim, B., & Ismail, S. (2014). Implementation of graduate employability skills SJT instrument in Universiti Utara Malaysia. *AIP Conference Proceedings*, 1635, 962–965. <https://doi.org/10.1063/1.4903698>

Zhu, J., & Liu, W. (2020). A tale of two databases: the use of Web of Science and Scopus in academic papers. *Scientometrics*, 123(1), 321–335. <https://doi.org/https://doi.org/10.1007/s11192-020-03387-8>