Exploring the Role of Talent Management in Talent Migration: A Scoping Review

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Abstract

The purpose of this review is to produce a comprehensive understanding of themes related to the role of talent management in talent migration. Hence, a scoping review of the literature is conducted and finally discovers six themes related to the topic. It can conclude that macro talent management and its impact on economy is the most popular theme in these studies. Specifically, macro talent management can optimize the positive effects of talent migration for host countries by implementing organizational-level talent management practices and national-level policy that effectively attract and retain talents, thereby enhancing a country's global competitiveness and economic development. Conversely, socioeconomic factors also have a substantial impact on macro talent management. Future research could further explore the role of socioeconomic factors on macro talent management. The findings from this review indicate the importance of talent management in talent migration, which has the potential to be advantageous for businesses, organizational researchers, and policymakers.

Keywords: *Talent Management, Talent Migration, Scoping Review.*

INTRODUCTION

The development of a knowledge-based and innovative economy highlights talent as a valuable resource that can lead to a sustained competitive advantage and influence organizational performance (Khilji et al., 2015; Khilji & Schuler, 2017; Latukha et al., 2022). Moreover, with the growing of "the war for talent" globally (Chambers et al., 1998), talent management (TM) plays a crucial role within the realm of human resource management (HRM), meanwhile indicating that firms adopt strategic and intentional approaches to attract and retain talented personnel within the organizational framework (Kaliannan et al., 2023). Hence, TM has been a significant focal point in organizational research (Hassan et al., 2022). However, although TM is gaining global recognition as an important management technique, it remains an evolving area of study, with research on TM varying in quality and quantity across different regions (Festing et al., 2015). Researches on TM are still characterized by some blind alleyways (Battisti et al., 2023; McDonnell et al., 2017; Yildiz & Esmer, 2023).

Simultaneously, Due to reduced interregional and international barriers, there are increased opportunities for skilled individuals to migrate in pursuit of improved living standards and job prospects (Latukha et al., 2022). Talent migration is the most common term used to describe the movement of human capital resources in literature on human capital mobility (Khilji et al., 2015; Latukha et al., 2022). Prior studies revealed that talent migration as a significant global talent challenge to TM (Khilji et al., 2015; Reji George, 2021; Tarique & Schuler, 2010). Meanwhile, competition for talents and their migration emphasize the need of effective TM strategies and practices in maintaining a sufficient supply and demand of skilled workers and their human capital (Battisti et al., 2023; Gallardo-Gallardo et al., 2020).

Further, from the economic aspect, knowledgeable and skilled migrants make a substantial contribution to the economic development and competitiveness of the host country by bringing innovation, entrepreneurship, and increased productivity (Oliinyk et al., 2021; Sheehan et al., 2018). Notably, some scholars (e.g., Khilji et al., 2015; Oliinyk et al., 2021; Sheehan et al., 2018) presented that national-level macro TM addresses issues pertaining to talent migration by employing firm-level TM practices that attract and retain talented migrants (Latukha et al., 2022; Yildiz & Esmer, 2023). Therefore, it is of utmost significance to explore the role that both macro TM and micro TM practices play in talent migration (Khilji et al., 2015; Latukha et al., 2022).

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Nevertheless, there is still a lack of research on exploring the role of TM on talent migration and its influence on economic development in a life circle view (i.e., overall talent management processes) (Khilji et al., 2015; Reji George, 2021; Battisti et al., 2023). Several studies have focused solely on analyzing talent migration within one function of TM (e.g., talent attraction, talent retention), whereas only a few have explored the incorporation of overall TM practices (Jin et al., 2022; Latukha et al., 2022; Yildiz & Esmer, 2023).

Hence, the purpose of this study is to deep understand how TM influence talent migration. In order to do this, a scoping review was done to combine different theoretical viewpoints and highlight research gaps and opportunities. A scoping review is an approach to synthesizing research evidence to enhance the research questions, summarize, and analyze the research outcomes, showcasing the research's significance by pinpointing gaps (Arksey & O'Malley, 2005; Munn et al., 2018). As TM is an emerging field of research (Yildiz & Esmer, 2023), the purpose of this scoping review is to provide researchers with a comprehensive overview of current research on the role of TM in talent migration, which including the emerging themes of the role of TM in talent migration and the nature of published studies on this topic. By doing so, it will enable more thorough exploration and analysis of these concepts. Aside from the opening section, this paper is organized as follows: Section two and section three outlines the literature review and research methods separately, while Section four elaborates on the results, and section five presents the discussion, recommendations. Finally, section six brings the conclusions.

LITERATURE REVIEW

Talent Management

The primary aim of talent management (TM) is to effectively align and utilize human resources in order to accomplish organizational objectives (Beechler & Woodward, 2009; Thunnissen et al., 2013). Furthermore, it has been contended by some scholars (Claussen et al., 2014; Collings & Mellahi, 2009) that TM plays a significant role in enhancing the overall performance of organizations, and these scholars emphasized the crucial nature of TM practices (Gallardo-Gallardo et al., 2020; Thunnissen & Gallardo-Gallardo, 2017). Simultaneously, several scholars (e.g., Bethke-Langenegger et al., 2011; Festing & Schäfer, 2014) have demonstrated that TM has a favorable influence on individual outcome attributes (Thunnissen & Gallardo-Gallardo, 2017). Based on existing literature, there are three primary strategic approaches to TM concepts (Rothwell & Sherwani, 2007; Thunnissen & Gallardo-Gallardo, 2017), First definition: "TM understood as the systematic identification of key positions and the development of a talent pool of high potentials and high performers to fill these roles" (Collings & Mellahi, 2009, p 305). Second definition: "TM seen as the attraction, selection, development, and retention of talented/key employees who are of particular value to an organization" (Stahl et al., 2007, p 31). Third definition: "Employee retention is a key component of an effective organizational talent management strategy" (Rothwell & Sherwani, 2007, p 9). The first TM strategic approach focuses on key positions or high potentials, and the second TM strategic approach focuses on key people (Thunnissen & Gallardo-Gallardo, 2017), the third one more focus on the process of retention (Rothwell & Sherwani, 2007).

In addition, from the macro and micro perspectives, TM can be divided into macro TM and micro TM (Khilji & Schuler, 2017; Latukha et al., 2022). The macro TM refers to a series of strategies created and put into action by governmental and non-governmental organizations to attract, select, develop, and retain talents worldwide, the goal is to boost economic growth, creativity, performance, and the competitive edge of local organizations, while also providing social advantages (Khilji & Schuler, 2017; Khilji et al., 2015). Conversely, practices that boost organizational performance and personal career advancement are the primary emphasis of micro TM (Latukha et al., 2022). The micro TM emphasizes the attraction, retention, and development of individual talents to enhance organizational performance and competitive advantage (Sheehan et al., 2018). In a nutshell, both macro TM and micro TM approaches are important. Implementing TM strategies at a macro-level can improve a country's worldwide competitiveness, appeal, economic growth, and empower organizational TM effectiveness, while micro-level TM practices more focus on organizational level TM and talented individual development (Munn et al., 2018). Additionally, both of the two approaches are employed to address global talent challenges, including talent migration, which aids nation and region in attracting and retaining high skilled workers for economic development (Farndale et al., 2010; Khilji et al., 2015; Khilji & Schuler, 2017; Latukha et

al., 2022).

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Nowadays, professionals with advanced expertise, such as scholars, engineers, and inventive business owners, have increased ease and reduced costs when it comes to migrating, thanks to their access to economic, technological, and cultural resources (Gesing & Glass, 2019). In addition, most of the young talents such as university graduates, who are highly educated human capital, also choose to leave their original place of residence after their graduation for their career development (Faggian et al., 2017; Jin et al., 2022; Wang et al., 2023). In this vein, talent migration is the term to describe the movement of human capital resources in the research undertaken on human capital mobility (Latukha et al., 2022; Khilji et al., 2015; Jin et al., 2022). Further, talent migration can typically be classified geographically into two categories: interregional/sub-national migration and global/international migration (Arntz, 2010; Khilji et al., 2015; Marinelli, 2013). The former emphasizes talented individual migration between regions and cities (Faggian & McCann, 2006), while the latter highlights talents migration between countries and on a global scale (Schuler et al., 2011). Both forms of talent migration are closely related to talent management (TM), though (Khilji et al., 2015).

Kerr (2020) argued that talent migration has a substantial and beneficial impact on the United States' economy, particularly in the areas of innovation and entrepreneurship. Further, Oliinyk et al. (2021) investigated the impact of the migration of highly trained workers on the economy of both the nations that send these workers and the countries that receive them. He presented that talent migration has an important role in enhancing a country's competitiveness and economic growth, specifically, the immigration of highly educated individuals has a more pronounced effect on macroeconomic indicators compared to social development indicators (Oliinyk et al., 2021). Moreover, according to certain scholars (e.g., Latukha et al., 2021, 2022), TM practices are considered a means of accumulating human capital at the national level by employing approaches to manage the migration of talented individuals (Mao et al., 2022). However, Previous literature indicates that research on TM and talent migration is still in its early stages and need further clarification (Battisti et al., 2023). As far as we know, there is a scarcity of research that has examined the subjects of TM and talent migration (Kaliannan et al., 2023). Additionally, although some systematic literature reviews of TM have been completed (e.g., Battisti et al., 2023; Kaliannan et al., 2023), these studies have concentrated on the TM functions separately, and has not directly discussed the role of TM on talent migration (Yildiz & Esmer, 2023). In line with these forementioned, this scoping review must gather and assess past studies on the topic to provide insights and direction for future studies.

Material and Methods

This scoping review follows the studies and recommendations of Arksey and O'Malley (2005) and Levac et al. (2010) in its framework. The methodology is employed to locate all pertinent material related to the study's topic, aiming to offer a complete overview of the breadth of concepts rather than delving into the material's depth (Arksey & O'Malley, 2005). In this scoping review process, the following six methodological steps will be utilized. These stages will be conducted in respect to the subject matter of this study and will be based on the research methodology described above. The initial step is to establish the research questions. Two research questions are posed in this scoping review. First, based on the two levels of talent management (TM) (i.e., macro talent management and micro talent management) and their influence on economic development in host country and region, what are the themes of the existing literatures related to TM in talent migration? Second, what is the nature of the published literature on TM in talent migration?

Step two relates to the identification of the relevant studies. Academic journals are retrieved from two main databases: Web of Science (WoS) and Scopus. Web of Science (WoS) is a database provided by Thomson Reuters. The collection has over 12,000 active journals, 23 million patents, and 148,000 congress proceedings (Zhu & Liu, 2020). Scopus database is the greatest repository of searchable citations and abstracts for literature (Guz & Rushchitsky, 2009). By January 2020, there were over 25,100 articles from over 5000 international publishers, according to reports (Elsevier, 2020). Both databases above are frequently employed in meta-analysis studies. The search strategy included a comprehensive search string of keywords related to TM i.e., talent management processes, talent management process, talent management, talent management

strategic approach, talent management strategy, talent management function, and Talent Migration i.e., talent migration, talent mobility, graduate migration, graduate mobility, talent flow, postgraduate migration combined with Boolean operator "OR" and "AND" (Table 1).

TABLE 1. The Search String

Database Search String	
WoS	TS= (("talent management processes" OR "talent management process" OR "talent management" OR "talent management strategic approach" OR "talent management strategy" OR "talent management function") AND ("talent migration" OR "talent mobility" OR "graduate migration" OR "graduate mobility" OR "talent flow" OR "postgraduate migration"))
Scopus	TITLE-ABS-KEY (("talent management processes" OR "talent management process" OR "talent management" OR "talent management strategic approach" OR "talent management strategy" OR "talent management function") AND ("talent migration" OR "talent mobility" OR "graduate migration" OR "graduate mobility" OR "talent flow" OR "postgraduate migration"))

Step three involves screening to eliminate redundant material. The initial criterion for selection is the specific genre of literature on which the research is centered. Only research articles are considered for this exercise. The study does not include review articles, book chapters, conference papers, or books. All selected publications are published in English. In addition, due to Khilji et al.'s (2015) study bridges a gap in the existing literature by integrating macro-level influences (e.g., economic development, competitiveness) with micro-level TM practices, and encouraging a more integrative research approach in the field (Latukha et al., 2022). Hence, in this study, we focus on the papers that were published between 2015 to 2023 (Table 2). Step four entails the creation of a chart based on the data. The data which collected organize in table using Microsoft Excel to aid thematic and comparative analysis (Appendix). Details regarding authorship, year, research location, methodology, variables, and key findings. The sub-theme and theme were documented in this format.

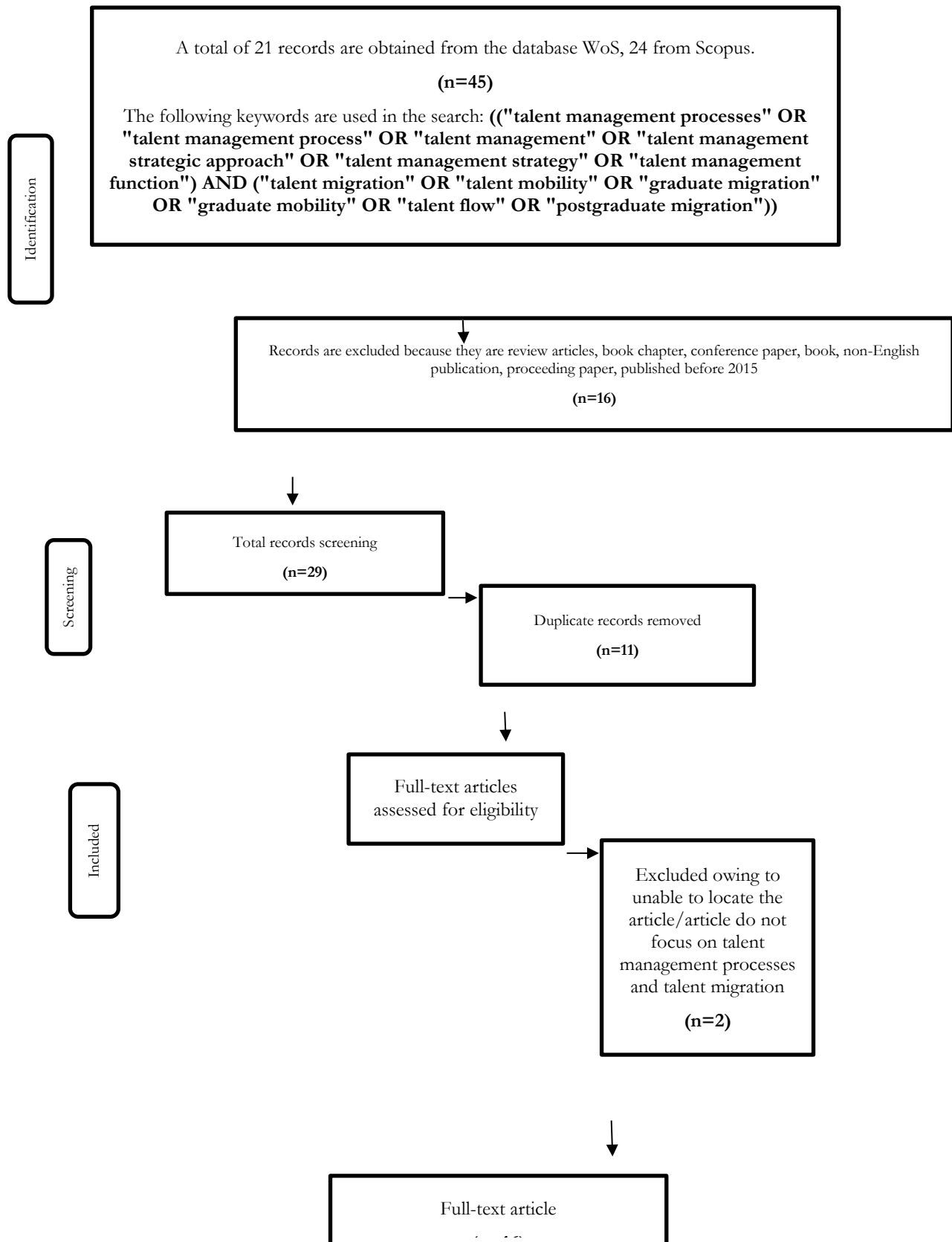**TABLE 2. The inclusion and exclusion criteria**

Criterion	Eligibility	Exclusion
Literature type	Research articles	Review articles, book chapters, conference papers, or books
Language	English	Non-English
Timeline	Between 2015 and 2023	Before 2015

Step five involves the tasks of arranging, summarizing, and displaying results. An analysis will be conducted on the publications to determine the themes of studies on this topic, as well as the sub-themes, research population, scholars' location, and methodology pertaining to the existing literatures. The background of the research included in the review also will be discussed in this Step. Step six includes discussion, recommendation and conclusion.

RESULTS

Using the search method described a total of 45 articles are found during the database search. 16 publications are removed based on the title and abstract for being review articles, book chapters, conference papers, or books, written in a non-English language, or published before 2015. Furthermore, 11 items are eliminated because they are duplicates. Out of the remaining 18 articles, 2 are eliminated because they could not be located or did not focus on the topic. After a rigorous screening process, only 16 papers are deemed relevant and meet the study's objectives based on desired reporting items for systematic review (Figure 1) (PRISMA, (Moher et al., 2015)

FIGURE 1. Preferred Reporting Items for Systematic Review (PRISMA)

Identification

A total of 21 records are obtained from the database WoS, 24 from Scopus.

(n=45)

The following keywords are used in the search: **(("talent management processes" OR "talent management process" OR "talent management" OR "talent management strategic approach" OR "talent management strategy" OR "talent management function") AND ("talent migration" OR "talent mobility" OR "graduate migration" OR "graduate mobility" OR "talent flow" OR "postgraduate migration"))**

Records are excluded because they are review articles, book chapter, conference paper, book, non-English publication, proceeding paper, published before 2015

(n=16)

Screening

Total records screening

(n=29)

Duplicate records removed

(n=11)

Included

Full-text articles assessed for eligibility

Excluded owing to unable to locate the article/article do not focus on talent management processes and talent migration

(n=2)

Full-text article

MAIN FINDINGS

The table in the Appendixes presents 16 papers that are chosen for the scoping review based on the defined criteria. The authors as follows (Ali & Kasim, 2019; Dang et al., 2023; Howe-Walsh et al., 2023; Khilji et al., 2015; Latukha et al., 2021; Latukha et al., 2019; Latukha et al., 2023; Latukha et al., 2022; Mao et al., 2022; Molano et al., 2023; Silvanto et al., 2015; Tansley & Kirk, 2018; Vaiman et al., 2015; Whysall et al., 2019; Zhang et al., 2019; Zhang et al., 2020).

The scoping study has discovered 6 themes across 16 articles, each theme consisting of sub-themes (totally 16 sub-themes). The main themes include macro talent management (TM) and its impact on economy (6 articles), macro TM with its influence factors (2 articles), macro TM with its influence on organizational success (2 articles), macro TM in interregional talent migration with its influence factors (2 articles), micro TM in specific industry sector (3 articles), and micro TM and its impact on economy (1 articles). Hence, the existing studies on TM in talent migration has predominantly focused on macro TM and its impact on economy based on the distribution of themes in the literature (Figure 2). In addition, through the scoping exercise, it is found that each of the 16 publications had a distinct sub-theme. This implies that if the role of TM in talent migration is characterized as a comprehensive area of research, as an emerging and developing field, it is disorganized and lacks unity.

FIGURE 2. The distribution of literature themes

The distribution of literature themes
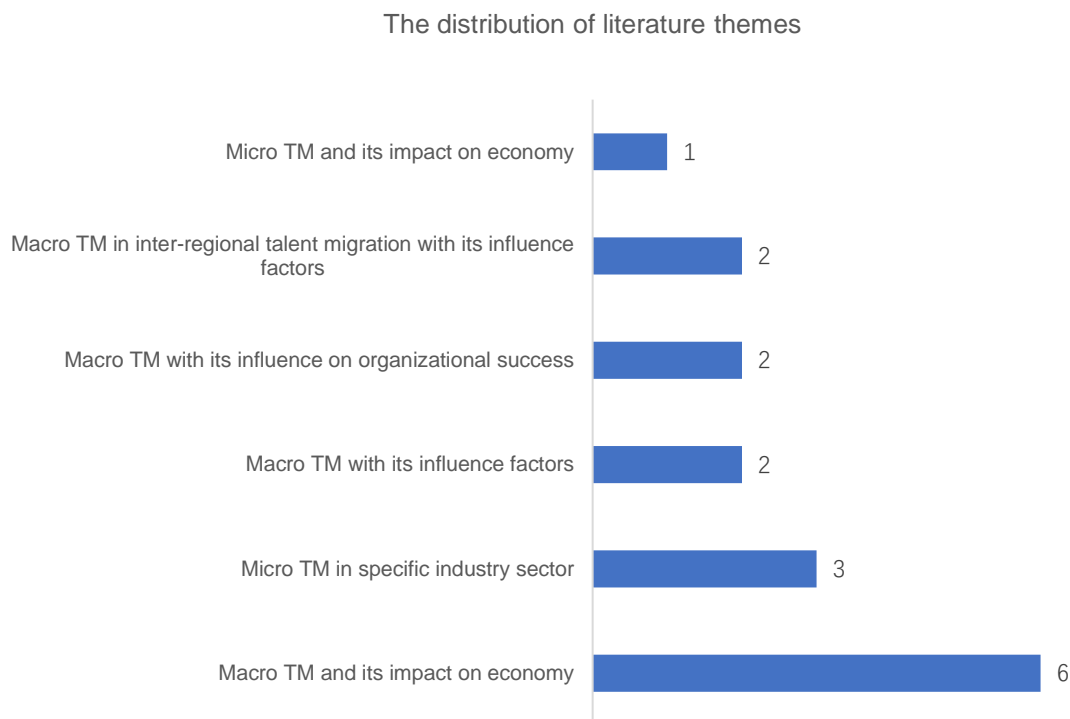
Regarding article types and research approach, three-quarters of the articles (N=12) were empirical and another four were conceptual works. Out of the total of 12 empirical research, 9 employed qualitative methods while the remaining 3 utilized quantitative approaches. The bulk of the qualitative research employed interviews as the primary method for data collection, with the exception of one study that utilized fuzzy set qualitative comparison analysis. Further, the quantitative studies predominantly relied on questionnaires (Table 3). This finding demonstrates that while TM is an emerging field of study, an increasing number of scholars are use empirical research methodologies to investigate the role of TM in talent migration.

TABLE 3: Article types and research approach

Methodology	Number
Type of article	
Empirical article	12
Conceptual article	4
Total	16
Research approach	
Qualitative approach	9
Quantitative approach	3
Total	12

Further, regarding the types of migration in these studies, 11 out of the 16 articles are on international talent migration, which accounts for two thirds of the total. This indicates that talents such as university graduates, returnees, diasporas and self-initiated expatriates, who are more oriented towards international migration, are the main targets of global talent management. Additionally, it also demonstrates that the international talent migration is a subject of significant interest among scholars in the present day. Further, most of the articles focus on the macro TM in talent migration from developing country to developed country or how to prevent brain gain in emerging markets, only two article refers to managing talented migrants in developing countries (i.e., Ghana, Nigeria). Hence, the findings proves that socioeconomic macro factors are the main elements affecting Global TM in talent migration (Latukha et al., 2022). Moreover, the remaining five articles focus on TM in sub-national or interregional talent migration. Regarding the types of talents, there are nine articles focused on skilled workers or professionals, and five articles specifically addressing managers, such as HR directors, bank managers, line managers, and senior leaders. Nevertheless, there are merely two pieces focusing on the subject of young talents, specifically those who are university graduates (Table 4). This outcome indicates that an increasing number of scholars are directing their attention on TM for highly skilled workers and managers involved in talent migration. This can be attributed to the notion that effective TM for skilled workers and managers can enhance organizational efficiency and competitiveness, hence exerting a significant impact on the economic development of the region.

TABLE 4. Migration types and talent types

Research population	Number
Type of migration	
International migration	11
Sub-national or interregional migration	5
Total	16
Type of talents	
Skilled workers or professionals	9
Managers	5
University graduates	2
Total	16

Finally, Regarding the distribution of authorship, seven authors are from European institutions (e.g., UK, Russia), five authors are from Asian institutions (e.g., China, Malaysia, and Vietnam), and four authors are from North American (e.g., USA, Canada) (Figure 3). According to the data, research on the topic of TM in talent migration is concentrated in Europe, followed by Asia and North America. It indicates the study of TM in talent migration is mostly preference in universities and research institutes in Western countries, as well as in several emerging markets (Latukha et al., 2022; Mao et al., 2022).
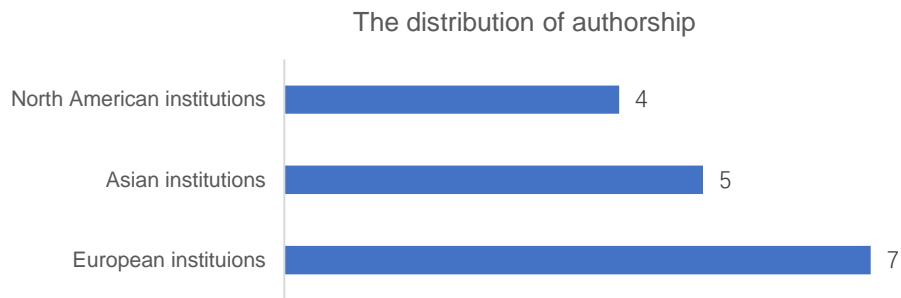
The distribution of authorship

North American institutions	4
Asian institutions	5
European instituions	7

Figure 3. The distribution of authorship

Background of the Resreaches Include in the Review

Based on Figure 4, the study location of talent management (TM) in talent migration is comprehensively elucidated to indicate the context in which the research is being undertaken. According to the findings of the scoping review, it has been determined that the study of the topic is conducted in a total of nine countries and one area. In particular, three in the United States (Khilji et al., 2015; Silvanto et al., 2015; Vaiman et al., 2015), three in Russia (Latukha et al., 2021; Latukha et al., 2023; Latukha et al., 2022), and two in China (Zhang et al., 2019; Zhang et al., 2020). Canada (Molano et al., 2023), Ghana (Latukha et al., 2019), Malaysia (Ali & Kasim, 2019), Nigeria (Howe-Walsh et al., 2023), the United Kingdom (Whysall et al., 2019), and Vietnam (Dang et al., 2023) each have one study. Finally, two studies have been conducted on emerging markets (Mao et al., 2022; Tansley & Kirk, 2018;)
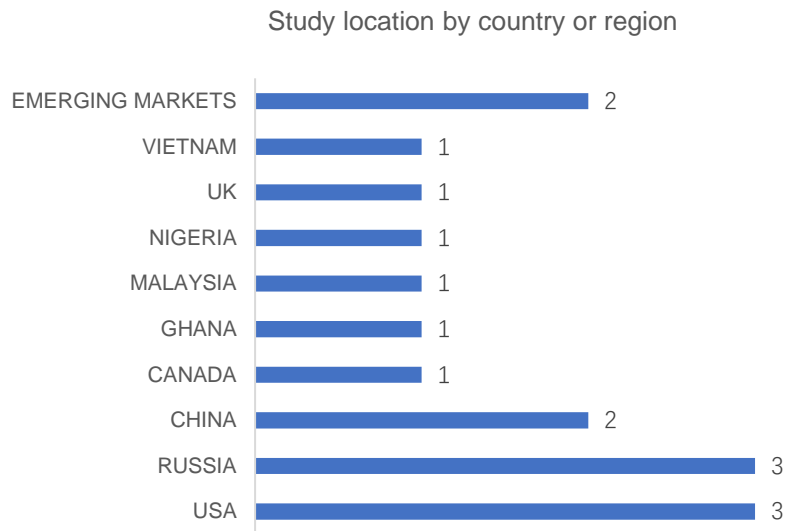
Study location by country or region

EMERGING MARKETS	2
VIETNAM	1
UK	1
NIGERIA	1
MALAYSIA	1
GHANA	1
CANADA	1
CHINA	2
RUSSIA	3
USA	3

FIGURE 4. Study location by country or region

The study location indicates that TM in talent migration has been studied in both western and non-western countries. However, the current focus of research on this topic is primarily on Western countries with eight studies conducted. Additionally, the study's findings also indicate that research on this topic is thriving in developing and emerging economies. Those trends may be due to macro TM can effectively tackle issues of talent migration and brain drain by employing firm-level TM practice that reduce migration intentions and retain talented individuals in emerging markets (Latukha et al., 2022; Mao et al., 2022), and improves a country's global competitiveness and economic development (Khilji et al., 2015; King & Vaiman, 2019). Furthermore, Figure 5 displays the annual publication count in Web of Science (WoS) and Scopus from 2015 to 2023.
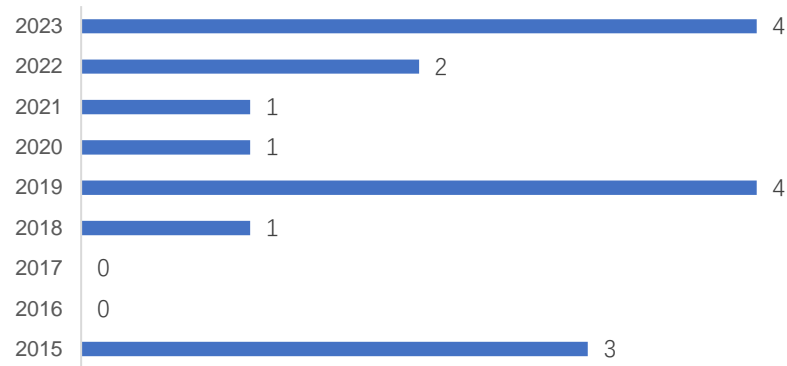
FIGURE 5. Year of publication in WoS and Scopus database

According to Figure 5, three articles were published in 2015 (Khilji et al., 2015; Silvanto et al., 2015; Vaiman et al., 2015), one article in 2018 (Tansley & Kirk, 2018), four articles in 2019 (Zhang et al., 2019; Latukha et al., 2019; Ali & Kasim, 2019; Whysall et al., 2019), and one article each in 2020 (Zhang et al., 2020) and 2021 (Latukha et al., 2021). In 2022, two articles were published (Latukha et al., 2022; Mao et al., 2022), followed by four in 2023 (Latukha et al., 2023; Molano et al., 2023; Howe-Walsh et al., 2023; Dang et al., 2023). All in all, over the past decade, there has been a general upward trend in the number of studies that have been published on this topic. However, there has been a decline in the number of studies published in the years 2016, 2017, 2020, and 2021. The lack of relevant studies in 2016 and 2017 could be attributed to the recent introduction of the macro talent management proposition in 2015 (Khilji et al., 2015). Academics required a significant amount of time to comprehend and acknowledge this concept and assertion. Moreover, it is possible that the decline in the years 2020 and 2021 might be caused by the impact of the epidemic and the decline in talent migration, with that being said, it is also observable that by the year 2023, the quantity of research publications begins to increase once more.

DISCUSSION AND RECOMMODATION

A comprehensive overview of the studies about the role of talent management (TM) in talent migration is provided by this scoping review. Based on the findings of this study, it was generally stated in the literatures that in talent migration, TM practices assist organizations attracting and retaining talents for gaining competitiveness, thereby improving national level TM systems and impacting economic development. Conversely, socioeconomic factors also significantly influence TM practice in talent migration, thereby impacting the brain drain (i.e., negative effects of talent migration) and brain gain (i.e., positive effects of talent migration). This is especially true in the modern era, which is characterized by the globalization of the economy (Khilji et al., 2015). In this vein, the findings of this studies are discussed below:

First, based on the scoping review, the topics of macro TM and its impact on economy, and macro TM with its influence on organizational success are the most popular themes in these studies. These two themes account for half of the total number of studies in the existing literatures. Hence, it demonstrates that several scholars (e.g., Mao et al., 2022; Latukha et al., 2022) have begun to concentrate on the influence of TM on the macro-level, such as national or regional economic development, following Khilji et al.'s, (2015) publication on the significance of macro-level TM in talent migration. Furthermore, in these two themes, the scholars did not only focus on the TM in brain gain in developed countries (e.g., Molano et al., 2023; Silvanto et al., 2015) but also concentrate on how to mitigate brain drain in developing and emerging economies (e.g., Tansley & Kirk, 2018; Latukha et al., 2019). In this vein, it indicates that in talent migration, strategic management of talent through macro TM improves a country's global competitiveness and economic development by effectively attracting and retaining talents. Moreover, at the national level, the macro TM system can influence the economic indicators, while TM practices necessitate the collaborative efforts of state and public institutions and organizations.

Notably, from the studies in these themes, it also can conclude that when discussing talent migration, macro TM encompasses both national factors such as policy, branding and effective TM practices at the firm level (Latukha et al., 2022; Molano et al, 2023). However, as TM within the issue of talent migration is still in the early stages (Yildiz & Esmer, 2023) and TM in different contexts has different effects (Kabwe & Okorie, 2019), there is still room to deep understand the role of macro TM in talent migration in different context and background. Moreover, in macro TM, the current study mainly focuses on skilled workers and managers (e.g., Latukha et al., 2019, 2022; Molano et al., 2023), but gender, educational background, work experience and other factors also affect the effectiveness of TM practices, the determinants of talent migration, the competitiveness of organization, and regional economic development. Hence, in macro TM, future research may focus on the different types of talent migration groups.

In addition, there are two articles refer to the theme of macro TM with its influence factors. From these papers (e.g., Khilji et al., 2015; Latukha et al., 2023), it is concluded that socioeconomic macro factors significantly influence macro TM, which in turn affects the brain drain (i.e., negative effects of talent migration) and brain gain (i.e., positive effects of talent migration). Therefore, in talent migration, it is crucial for developed countries to fully leverage their own socioeconomic advantages, such as higher wages and remuneration, innovative and entrepreneurial environments, and other strengthen factors, in order to attract and retain talents through macro TM to enhance the brain gain. Conversely, regarding to developing and emerging economies, in order to mitigate the issue of brain drain, it is imperative to address their own socioeconomic disadvantages (e.g., inadequate infrastructure, lower level of economic development) which includes the enhancement of relevant policies, and firm-level TM practices. Moreover, there are also two articles (e.g., Zhang et al., 2019; Zhang et al., 2020) regarding to the theme of macro TM in interregional talent migration with its influence factors in the list. Notably, both articles emphasized the important role that macro TM plays in interregional talent migration in mitigating brain drain and enhancing brain gain. However, there is still limited empirical study for understanding the role of firm-level TM practice and the socioeconomic factors that influence interregional talent migration.

Additionally, the micro TM has two themes that specifically refer to micro TM in specific industry sector, and micro TM and its impact on economy. Under the theme of micro TM in specific industry sector, two articles (e.g., Ali & Kasim, 2019; Dang et al., 2023) focused on the TM practices in bank sector and one article concentrate on TM practices in industry 4.0 (Whysall et al., 2019). The findings of these studies highlight that TM practices play a significant role in talent migration within the financial and high-tech industry. Additionally, in these studies, it also shows that economic factors, such as wage and compensation, have a positive impact on TM practice in firm-level. Notably, there is one study about the theme of micro TM and its impact on economy in Nigeria (Howe-Walsh et al., 2023). This study states that effective TM practices can retain talents and mitigate brain drain in small-to-medium-sized enterprise (SME) hotels, thereby enhancing employee satisfaction, retention, and overall organizational performance. However, the study only focused on the impact of TM practices on the Nigerian hotel industry during the epidemic. Its findings still need further validation from empirical studies in different context and different period.

In another aspect, which is a result of this scoping review and regarding the distribution of authorship in these published articles, over two-thirds of the literature's authors are affiliated with research institutions in Europe and North America, whereas over fifty percent of the studies are situated within these continents. However, it is also clear from the data that research on the topic of TM and talent migration is emerging in some developing countries and emerging economies, such as China, Malaysia, and Vietnam. Hence, based on the findings, it can be summarized that the current talent migration trend is still mainly from developing countries to developed countries. Moreover, in the process of talent migration, macro TM can effectively attract, develop, and retain talents for the host countries, thereby improving a country's global competitiveness and economic development. Simultaneously, for original countries, macro TM can be effective in preventing brain drain and thus balancing the differences in talent distribution between countries and regions. Marinelli (2013) and Hu et al. (2022) highlighted that if migrants possess higher levels of education compared to the average individual in their region of origin, this phenomenon may give rise to disparities between the origin and destination regions, and exacerbate the regional imbalance of development. In line with this, future

research on TM within talent migration could concentrate more on developing nations and emerging economies.

CONCLUSION

The scoping review about the role of talent management (TM) in talent migration has enhanced the body of literature and bolstered the conceptualization and theorization of this topic. First, this study identifies six common themes in the existing literature on TM and talent migration that deepen our understanding of the role of macro and micro TM in talent migration and their implications. Specifically, macro TM can optimize the positive effects of talent migration (brain gain) for host countries by implementing organizational-level TM practices and national-level policy that effectively attract and retain talented individuals. Conversely, for original countries, macro TM also can mitigate the negative effects of talent migration (brain drain) by leveraging firm-level TM practices that develop and retain talent within the country. In addition, the study categorizes and analyzes the current body of literature on the topic based on the geographical distribution of authorship, study location, and the year of publication. Based on the results of the study, it can be summarized that the existing studies on the role of TM in talent migration is mainly in Western developed countries. This might reflect the mainstream trend of global talent migration from developing to developed countries.

However, it can also be seen from the research findings that in some emerging economies, such as China, and Malaysia, scholars have begun to focus on how to leverage macro TM to attract and retain talent in brain drain. Further, based on the research, it can be concluded that in talent migration, macro TM can improve a country's global competitiveness and economic development by strategically attract, develop, and retain talents. For host country, effective macro TM practices also can lead to improved national well-being and economic indicators by fostering decent work opportunities and reducing low-quality employment. Conversely, in talent migration, it has been determined that socioeconomic macro factors also have a substantial impact on macro TM, which subsequently influences the processes of attracting, developing, and retaining talent in brain gain. Hence, Future research could further explore the role of socioeconomic factors such as wages, social networks, and innovation environment on macro TM in talent migration.

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Appendix

Author & Year	Location	Methodology	Key Findings	Sub-theme	Theme
Mao et al., 2022	emerging markets	Concept research	1. Social-, firm-, industry- and location-specific factors will determine talent migration in emerging markets; 2. Global talent management will mediate the relationship between push and pull factors and talent migration; 3. Degree of the state's involvement in talent management will moderate the relationship between push and pull factors, global talent management and talent migration; and 4. Global talent groups will moderate the relationship between push and pull factors, global talent management and talent.	Global talent management in emerging markets and its economic impact.	Macro TM and its impact on economy
Tansley & Kirk, 2018	emerging markets	Qualitative (case study)	1. The research identifies certain limitations in the pursuit of developing global talent management solutions that aim to facilitate talent mobility in multinational corporation (MNC); and 2. The study emphasizes that global talent mobility choices are influenced by cultural identification, national identity, and individual-level considerations.	Global talent management in emerging markets and its impact on economic and organizational success.	Macro TM and its impact on economy
Khilji et al., 2015	USA	Concept research	1. The study introduces a theoretical framework for managing global talent in macro global talent management; and 2. The study emphasizes to focus on talent migration in the global economy and society for managers and policymakers.	Global talent management practices with broader macro-level factors.	Macro TM with its influence factors

Latukha et al., 2023	Russia	Qualitative (fuzzy set qualitative comparative analysis)	1. TM practices of talented diaspora employee have a positive effect on firm capability; 2. Knowledge sharing within an organization plays a mediator role between TM practices and firm's absorptive capacity; and 3. TM practices of talented diaspora employee have a positive effect on the attractiveness of a company	Global talent management for firms' absorptive capacity and the influence of the socioeconomic and cultural environment on TM.	Macro TM with its influence factors
Molano et al., 2023	Canada	Qualitative (interview)	The model (CUAET) implemented by the Government of Canada is effective for talent attraction and retention.	Global talent management in diplomacy and policy, and the benefits of such program (e.g., CUAET) for both the host and home countries in terms of economic growth.	Macro TM and its impact on economy
Silvanto et al., 2015	USA	Quantitative	The study identifies job circumstances, quality of life, governance, and tolerance towards varied backgrounds as crucial factors that must be comprehensively addressed in effective nation branding efforts targeting the attraction of highly trained professionals from foreign countries.	Nation branding for global talent management and its relevance in the global competition.	Macro TM and its impact on economy
Latukha et al., 2022	Russia	Quantitative	The study discovered that implementing firm-level talent management practices enhances the appeal of local companies to graduates and reduces the impact of factors that lead to the migration of graduates to other countries in emerging markets, such as Russia.	Global talent management in emerging markets for enhancing the global competitiveness, and its influence on boosting the economy.	Macro TM and its impact on economy
Latukha et al., 2019	Ghana	Concept research	The research asserts that talent management practices, including talent attraction, development and retention, supported by the government, significantly contribute to the influx of individuals migrating from developed to developing countries, such as Ghana.	Global talent management for managing incoming talents in Ghana and its economic impact.	Macro TM and its impact on economy
Vaiman et al., 2015	USA	Concept research	The paper emphasizes the talent management processes on self-initiated expatriates.	Global talent management with self-initiated expatriates, and its impact on organizational growth.	Macro TM with its influence on organizational success
Latukha et al., 2021	Russia	Quantitative	The study finds the possibility of TM practices to influence talents' migration intentions. Moreover, female talent tends to be more sensitive and responsive in this aspect.	Gender factor for global talent management, and its impact on organizational growth.	Macro TM with its influence on organizational success
Dang et al., 2023	Vietnam	Qualitative (interview)	The study identified various complex challenges for talent management, such as talent mobility, competition for talent in bank sector.	Talent management practices in Vietnam's banking sector and future trends in a post-pandemic world.	Micro TM in specific industry sector
Whysall et al., 2019	UK	Qualitative (interview)	The study posits that in Industry 4.0, talent mobility is one of the challenges for talent management, and there is a need to consider new and more effective approaches to talent development.	Talent management practices for meeting Industry 4.0 and its impact on organizational success.	Micro TM in specific industry sector
Zhang et al., 2019	China	Qualitative	The local talent policies pay less attention to talent flow in China. The creation of regional talent policy should prioritize the feasibility of policies, enhance the composition of policy objectives, and promote long-term and sustainable growth.	Talent management policies for promoting regional talent development in China and its impact on regional development.	Macro TM in interregional talent migration with its influence factors
Howe-Walsh	Nigeria	Qualitative (interview)	The study highlights the importance of inclusive TM strategy for medium-sized enterprise (SME) hotels.	Talent management practices in Nigeria's	Micro TM and its impact

et al., 2023				small- to medium-sized (SME) hotels and its impact on navigating the economic downturn during the COVID-19 crisis.	on economy
Ali & Kasim 2019	Malaysia	Qualitative (case study)	The study emphasizes the talent development as one of talent management for Islamic Financial Institutions (IFIs) to face challenges, such as talent flow.	Talent management practices for Shariah Auditors in Islamic Financial Institutions (IFIs) in Malaysia.	Micro TM in specific industry sector
Zhang et al., 2020	China	Qualitative	The research finds that creative talents in Yangtze River Delta Bay Area are accumulating steadily in provincial capitals and financially advanced cities.	Factors such as economic opportunities and innovation ecosystem for talent management practices in interregional talent migration in China.	Macro TM in interregional talent migration with its influence factors