

Review Article

Mixed Methods Research in Employability Discourse: A Systematic Literature Review Using PRISMA

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Studies on employability using a mixed methods (MM) design have been published in relevant journals in recent years, paving the way for a meaningful engagement with these published articles so that researchers can create milestone documents dedicated to exploring employability. This study explored the trend of utilizing mixed methods research (MMR) in the literature and the resultant methodological insights in 34 MMR articles on employability, which were selected from the 744 articles published during 2010–2019 in five major journals. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique was followed for systematic review, and analysis was conducted. The analysis reveals an increasing trend by using an MMR approach in employability studies. The robust analysis of a body of qualitative and quantitative data with personal reflection from deeper understanding supported the outcomes of most of these studies. However, informed engagement of both qualitative and quantitative strands and additional efforts in integration and data merging can contribute meaningfully to the examination of the employability notion. In conclusion, MMR adds rigor to the discourse of employability, serving as a guide to ensure the connection between education and employment. It also offers insights into reforming higher education.

1. Introduction

Employability, an integrated concept that contributes to sustainable employment and a successful career span, has drawn the attention of scholars. The literature backdrop provides multidimensional and interdisciplinary concepts of employability that are well defined and have unified and integrated frameworks [1, 2]. Comprehensive studies have been conducted with various stakeholders to determine what enhances employability in short-term employment outcomes, professionalism, and career lifespan (e.g., [3–7]). In this effort, higher education, workplace learning, and policies are most commonly found in research. Among the studies, research of stakeholders (e.g., [8–10]) included graduates/students, policymakers, academicians, and employers who have contributed amply to the employability construct. The stakeholders also engaged in the policy debate and several policies were formulated. In many cases, policies at the state, academic, and industry levels were influenced by these researches [11, 12].

Similarly, in practice, the research on employability helped to prepare students to tackle uncertainties and supported them in facing challenges. These studies further encouraged and motivated students to muster additional effort in their careers [13]. Likewise, the studies supported employers to be open and proactive in the workplace [10]; thus, the employers began to demand a suitable workforce. Consequently, professionals from academia and universities are engaged in identifying emerging needs to address the future of work. The concept of employability bridges the existing gap between needs and wants and at the same time, it enhances the future of work. Additionally, policymakers were dedicated to achieving employment targets for economic development and maintaining social harmony. Against this backdrop, a wide range of empirical studies (such as [14–18]) were conducted using several established research methods to explore the notion of employability.

The literature on employability, in general, offers a wide range of choices and compounding information, and there is

no unified view of the term, although attempts are made. It has been developed and understood differently over time. However, overall, the notion signifies the aspects of learning benefits to a career just beyond the acquisition of attributes [19]. To explain it further, graduate employability has been portrayed as crude employment outcomes alluding to developing competencies, pushing higher, and thinking broader. It has been accepted by governments as labor intervention, whereas it is the capability to achieve a job at the university level and proactive management of one's career at a personal level [20].

The theoretical aspects of employability are explained in different ways and are mostly contextual. When it is linked with employment directly, it is the supply side of employment integrated with education [21]. It is portrayed as input when connected with employment outcomes [22]. Moreover, it can also be looked at as a university-work transition view over the learning view when it comes to establishing employability. When it is looked at from the neoliberal perspective, employability reflects more significant insights into how graduates develop and sustain the relationship with labor market for their lifelong careers [23]. In a similar context [24], it emphasized the importance of personal attributes and career guidance as the structural determinants of employability. Hence, it can be explained as an integrated and multidimensional concept that contributes to sustainable employment and a successful career at an individual level. Most scholars define it as the underpinning belief where they stand. So, employability can be conceptualized as the construct built around individual factors, external factors, and environmental factors. In many cases, employability is explained as the synergistic combination of conceptual and empirical commonalities [25]. As the conceptual and empirical commonalities often get changed, its constructs are dynamic and mostly contextual.

While reviewing the literature, we noted that employability research has been dominated by quantitative research methods (e.g., [15]). Most of the studies (such as [9, 12]) have used surveys and comparative analyses. In the studies, comparing and contrasting the models used across these studies, cross-sectional and longitudinal data were found to be commonly used for quantitative methods within employability research. Similarly, calculating employability rates, ranking the university, measurements of the skill-based learnings and competencies, conceptual specification analysis, and analysis of indicators of employability are common practices associated with quantitative studies in employability [26].

Despite quantitative domination of employability study, there is also an increasing trend to use qualitative inquiry in this field. The qualitative method has supported gaining an understanding of the underlying reasons [11] and has helped to uncover grounded meaning within the notion of employability. It further supports understanding the perceptions of the various stakeholders about the employability notion [27]. The perceptions are captured mostly to comprehend in-depth beliefs and their underlying reasons.

Each research method has strengths as well as inadequacies. For instance, quantitative research lacks an understanding of specific settings. With quantitative research, the questions of "What?" can be answered; however, responding

to the question of "Why?" and "How?" about the same research needs a more comprehensive understanding. Additionally, qualitative research has challenges and potential limitations, similar to those in quantitative research. In such a situation, when research questions demand both aspects, the mixed method design can provide an approach to examine the notion of employability by considering each research method's strengths.

There are several examples of the use of mixed methods research (MMR) in employability studies. The strengths of an MMR design in the context of employability and higher education have been explained in several studies. For example, Nam and Kim [28] used MMR to obtain complementary results to gain the strength of both quantitative and qualitative strands and arrive at full concepts of employability. Similarly, it was used to investigate issues through both open-ended and close-ended questions with the objective of understanding the depth of the employability construct. Moreover, the integration of the approaches was seen as a significant strength in completing sophisticated analyses of complex research questions that result in the confirmation of hypotheses [29]. Additionally, MMR approaches are used for pragmatic advantages while exploring a complex research question. Likewise, Synard and Gazzola [30] used MMR for the inductive derivation of factors to explain the relationship provided by participants. Meanwhile, another group of researchers used MMR for validation [31]. Such examples help us to understand the importance of MMR in the employability discourse. MMR also makes a valuable contribution to the research and strengthens the theoretical discussion [32]. It helps to provide a better understanding than either quantitative or qualitative method alone [33]. Interpretations from MMR studies can be traced to support students, education providers, and institutions in understanding and explaining the complex phenomenon of human capital development [3, 4, 34]. Furthermore, they provide an opportunity for deep and broad analysis [35], particularly of higher education and work-education transition. The researcher can find additional insights by merging the result of qualitative and quantitative strands [36]. Researchers who deal with the complexities of engaging with the education and employment linkage may experience challenges, but it can also contribute to a broader purpose of higher education beyond economic development [3, 37]. Therefore, meaningful research with additional insights can promote knowledge in the economy.

Notwithstanding, the quality of evidence and rigor of MMR add value to emerging research areas like employability. Furthermore, the integration of data provides endless possibilities for analyses and statistical interferences [38]. Moreover, it supports confirmatory and exploratory research questions, generating more robust, credible inferences, and divergent viewpoints [39]. With such strengths, there is an increasing trend of using MMR in employability discourse as it contributes explicitly and implicitly to understanding the employability construct. Hence, this study endeavored to understand the contribution of MMR to employability research by analyzing the processes of MMR and its outcomes in employability discourse. The gaps in MMR are also discussed.

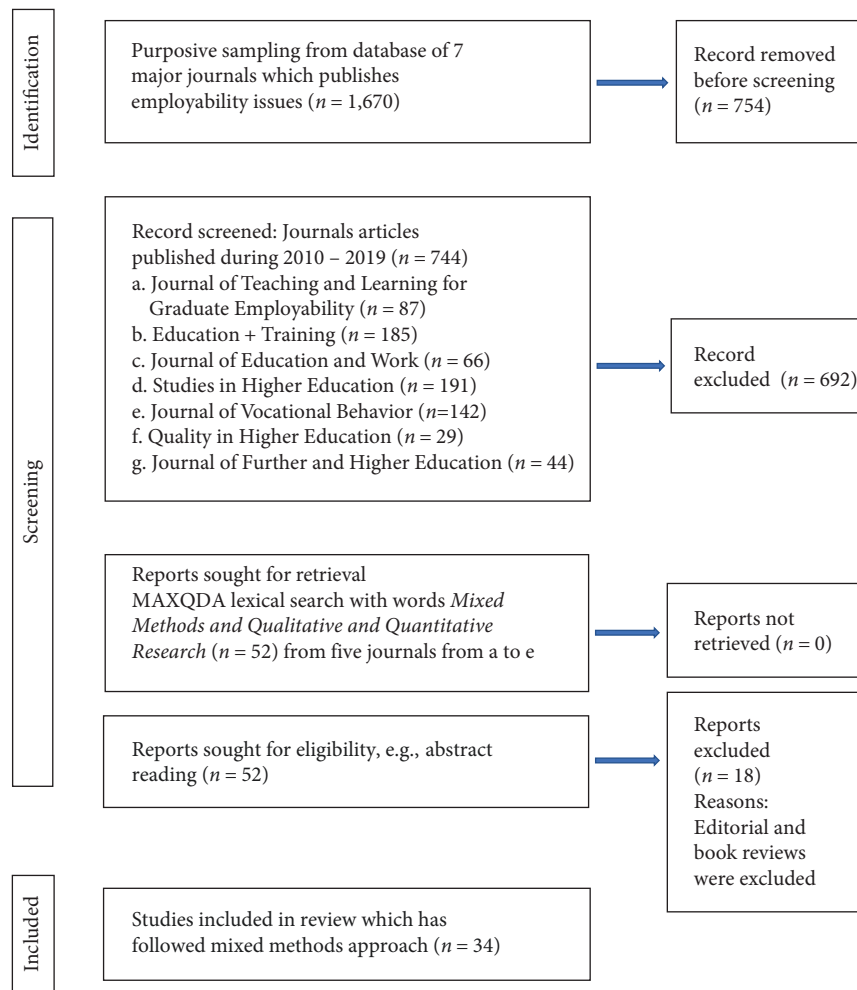


FIGURE 1: Article search and selection procedure using the PRISMA flow diagram.

2. Methodology

This study was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique because it has a well-defined guideline that can facilitate review methods [40]. Particularly, in this study, the PRISMA provided a framework for screening and helped finalize the articles that could be included in the study (see Figure 1).

With the framework, major journals publishing employability-related concerns were selected. The selection criteria were based on the authors' own experience with exploring employability issues. As per the authors, the seven major journals that publish employability are: Journal of Teaching and Learning for Graduate Employability, Education + Training, Journal of Education and Work, Studies in Higher Education, Journal of Vocational Behavior, Quality in Higher Education, and Journal of Further and Higher Education.

After the journals were selected, selecting employability articles from them was necessary. For the same, the authors searched the official databases of the journals using the keywords: "employability," "employability skills," and "study-work transitions." Only keywords pertinent to the field of employability discourse were selected (Tymon, 2013). The search results of the seven journals revealed 1,670 articles

in total. Subsequently, articles published between 2010 and 2019 were sorted, which resulted in 744 articles. The authors selected 2010–2019 for the study as a prior literature review; she had found that the discourse of employability was intense in this decade. The year 2020 was not considered because the study was conducted in April/May 2020 and the authors were unable to select articles from the year 2020.

After the articles from 2010 to 2019 were selected, they were imported to MAXQDA version 2020.1, and a lexical search with the terms "mixed methods" and "qualitative and quantitative research" was run. The process revealed 52 articles. The terms were used because the objective of this study was to explore the articles using MMR.

Editorials and book reviews were then excluded from the selected articles since they were outside the scope of this study. To determine whether the articles were using MMR, their abstracts and methodology were reviewed. Thirty-four articles met the criteria of using MMR, and only they were included in the analysis. A closer look revealed that no articles from the journals "Quality in Higher Education" and "Journal of Further and Higher Education" used MMR. Thus, they were not studied. This further shows that several editors do not consider MMR articles in the publication process [41].

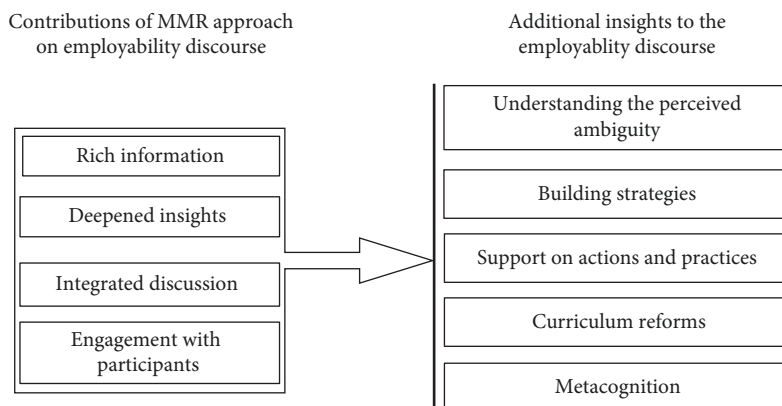


FIGURE 2: Contribution of mixed methods research in employability discourse.

Then, the selected articles were reviewed and coded in MAXQDA software. The codes were exported to an Excel sheet with the title of the articles in the columns and MMR-related themes in the rows. In the rows, the title, abstract, research questions, direct/indirect indication of MMR, origin of articles, year of publication, finding and conclusion, the themes of methodologies, such as study participants, sample, data collection, use of software, data analysis, key decisions of using MMR (level of interaction between strands, relative priority of strands, timing of qualitative and quantitative strands, and mixing procedure), ethics, reliability and validity, joint display, and meta-inference [33, 42, 43] were visible. The prevalence and frequency of each code were counted and, meaning, out of the code counts, were abstracted. For example, many authors of the articles view that MMR enriched additional insights from the inference they have drawn from qualitative and quantitative inquiries. The idea was termed “rich information” (Figure 2). Such abstracted ideas from each code were then summarized and explained into three headings: trends and practices in employability research using MMR, key decisions of MMR studies in employability discourse, and contribution of MMR approach to the notion of employability.

3. Findings of the Study

Each aspect of the 34 selected articles was analyzed, and an overview of the findings has been presented in three major sections: trends in employability research using MMR, key decisions of MMR studies in employability discourse, and contribution of MMR approach in the discourse of employability.

3.1. Trends and Practices in Employability Research Using MMR. Nine major trends and practices were observed during the analysis of the articles. These are explained below and presented in Table 1.

Table 1 reveals that first, there is an increasing trend of MMR approaches in employability discourse. The evidence is that numerous articles were using MMR in 2019, and recent trends showed that in the period of 2017–2019, a significant increase in usage of MMR had been observed (one in 2011, three in 2012, two in 2013, three in 2015, three in 2016, six in 2017, six in 2018, and 10 in 2019).

Second, two major types of studies have been conducted using MMR approaches. One is program/project evaluation, and the next is other types of research except that of the evaluation. The articles with the presentation of the findings of the evaluation research dominated with 20 articles, compared to 14 other articles. The third research practice was demonstrated by the country of origin of the articles. Australia dominated the research with 12 studies conducted there; six were in the UK, three in Canada, two each in New Zealand and Vietnam, and one each in the USA, Estonia, South Africa, South Korea, Middle East (Lebanon), Laos, Cambodia, Ireland, Netherlands, Scotland, Switzerland, Spain, and China.

The fourth finding relates to word usage. Abstracts do not necessarily mention MMR. Only 14 articles clearly mentioned MMR in the abstract, and nine articles clarified it in the methodology section. Moreover, four articles stated quantitative and qualitative in the abstract, and eight articles elaborated it in the methodology section. The fifth research practice was reflected in the type of research participants taken in the process of carrying out the studies. This study found that most studies took the data of the students and universities. A few articles captured the employers’ perspectives, but policymakers’ concerns are largely ignored.

The sixth development observed was the use of software for data analysis. Ten articles clearly stated the use of Statistical Package for the Social Sciences (SPSS) tools. Five articles used NVivo for qualitative analysis, and one article used GraphPad Prism. Verbatim transcription was used in three papers. This shows that software use is a common trend in analyzing data, and the use of software supports the research process irrespective of the specific tools. The seventh trend showed that most of the studies have sample sizes ranging between 200 and 500, with the lowest to the highest number of respondents, 24–1,160, respectively. Similarly, for qualitative analysis, the number of interview participants ranged from 2 to 86 participants, with 15 participants on average.

The eighth research practice observed was the low priority given to the concern of reliability and validity issues in employability research. Only three articles explained the concerns of validity, reliability, and credibility. The ninth and final one is the concern about ethics in employability

TABLE 1: Trends and practices in employability research using MMR.

Information observed	Findings
Number of articles	There is an increasing trend of using MMR in employability discourse
Sector	MMR is not limited to the academic sector only and it has social and practical applications
Origin	Australia and UK are leading in terms of country of origin of articles in integrating MMR in employability
Terminology	Usage of terminology of MMR in the abstract is less but explained in methodology and also used approach without mentioning MMR
Participants	Participants of most of the studies are mostly students and employers, but policymakers' concerns are largely ignored
Software usage	Usage of software is common
Sample size	Sample size was between 200 and 500 in quantitative strands and 15 participants on average in qualitative strands
Reliability and validity	Concerns of reliability and validity are less prioritized
Ethical consideration	It is not explicated

research that uses MMR. Most research papers followed the ethical guidance of universities or departments. Some embedded considerations of ethics are “do not harm,” “honesty of reporting,” and “maintaining data quality measures.”

3.2. Key Decisions of MMR Studies in Employability Discourse. A researcher following MMR has to prepare a clear plan on “four key decisions” [33] in the design phase of their research. The decisions are: the level of interactions between strands, relative priority of strands, timing of qualitative and quantitative strands, and mixing procedure; the observations are discussed further. With this view, articles were reviewed. The result shows that in the level of interaction of the qualitative and quantitative strands, twenty-eight of the total articles had the studies with independent strands, but six articles were the outcomes of the studies with the interactive strands. On the relative priority of the strands, in the articles reviewed for this study, 13 papers placed greater emphasis on quantitative methods and used qualitative methods in a supportive secondary role; on the other hand, eight papers had a qualitative focus with quantitative methods playing a secondary role. Moreover, 14 articles were equally balanced in both strands when expressing the research problem and analyzing the data. An additional and important observation is that those articles that gave priority to quantitative strands showed a gap in methodological rigor and engagement in qualitative strands. In the studies of these articles, many author(s) did not conduct the qualitative analysis in depth. Most articles claimed to have had about 30–120 min of interviews with the participants to support the qualitative study.

Regarding the timing of the qualitative and quantitative strands, it has been observed that all articles included in the study followed either simultaneity or dependence on their timing, although only three articles clearly mentioned the timings. In most cases, interviews were conducted after the survey but in some cases before the survey. In such cases, the interviews contributed to constructing the scale of the survey. It is not only in the interview, but also in the combination that concerns can be raised. For example, a combination of different phases was made without mentioning it directly. More specially, the name of such designs was not

mentioned but the idea was well observed explicitly and implicitly in the reviewed articles.

In the mixing procedures, different points and stages of integration were observed. Five articles stated their integration at the level of design, eight reported it during data collection, seven while analyzing the data, and five during interpretation. Though not clearly mentioned, it was sensed that the additional nine articles were integrated during interpretations and conclusions. Only one paper has presented the finding with the joint display.

3.3. Contribution of MMR Approach to the Notion of Employability. Considering the characteristics and strengths of MMR design, the articles were reviewed, focusing on the question: How did the strengths of MMR contribute to employability research? Specifically, the research findings, conclusions, and meta-inferences of 34 articles were analyzed thoroughly. For example, as presented in Figure 2, the researcher abstracted the benefits of using MMR on employability literature and identified that MMR contributed significantly to enhancing employability discourse by dialoging the findings of qualitative and quantitative strands. This contribution took the discourse to the next level. Likewise, MMR design significantly enriched the employability discourse with meaningful insights. The major benefits abstracted were rich in information and deepened insights, integrated discussion, and engagement with participants (Figure 2).

4. Discussion

The result of the study shows that there is an increasing trend of utilizing MMR in the research of employability. Importantly, Creamer and Reeping [41] mentioned that MMR is not a new research approach, and there is an increasing trend in its application in empirical research. This became distinct in the field of employability research as well. With long debates on MMR, scholars and scientists are finding it supportive as it integrates the strength of both qualitative and quantitative strands [44], which are also reflected in this study. The other finding of the study is that MMR has been utilized adequately to study project evaluation. As evaluation research is carried out to

document the practice, it shows that MMR is not limited to academics but has social and practical applications as well [43].

This study reflects the history and development of employability concerns and interventions worldwide in general and developed countries in particular. Bargsted [45] also notes that the UK and Australia are leading countries in integrating employability and developing employability skills. The history and evolution of employability discourse also showed that some countries are leading, and others are following and localizing as per their needs. However, it is true that MMR has not reached extensively beyond developed countries [46]. A future study can be initiated to get additional insights into it.

The result shows that MMR has been stated in the reviewed articles in different sections. Some states it in abstracts, while others do it in methodology section. Instead of using the term MMR, the others include the terms qualitative and quantitative. Defining MMR explicitly can support researchers [33]; however, following the crucial features and the essence of MMR are key. Anyway, the articles represented an established trend of MMR in employability. The intentions of using integration to infer from the consolidated results were distinctly stated.

The study explored that the voice of the policymakers was not included. However, the consolidation of the employability discourse from the policymaker's perspective is important for mutual understanding and collaboration among the stakeholders [27, 37]. In the studies, the participants/respondents are mostly students, academicians, policymakers, administrative staff, employers, employees, teachers, executives, trainees/trainers, workshop attendees, and alumni. The inclusion of policymakers creates mutual understanding and enhances the development of employability. It can mainstream employability in the overall development of education and economic sectors.

The result shows that utilizing software in data analysis is common in data analysis of MMR of employability. The software integrates quantitative and qualitative data analysis allowing flexibility and enhanced efficiency in the research process [47]. Therefore, the software saves time and builds confidence in researchers. There was not a single article that was developed using MAXQDA, which is claimed to be one of the best tools for MMR analysis, supporting both quantitative and qualitative data.

This study identified that the number of study participants varies and depends upon the types of studies. Although there is a sampling dilemma in MMR [48], sampling was mostly guided by the purpose of the research, research questions, project funding, and the process of developing strategies in the employability discourse. The justification of the sample depends largely on the objective of the study, and it was found to be accepted widely in academic research. In addition, this study explored that reliability, validity, and credibility were not stated in most of the studies. However, the details of validity criteria and strategies used to defend the study and the conclusion are an essential component of MMR [49]; however, they were mostly ignored in the

presentation of the study findings in the articles. Integrity and quality were also overlooked in writing and explanations.

Key decisions in MMR studies (the level of interactions between strands, relative priority of strands, the timing of qualitative and quantitative strands, and mixing procedure) were examined during the study. Among the four key decisions in MMR, the levels of interactions between two strands i.e., qualitative and quantitative—are categorized as independent and interactive [33]. Both are established ways of interaction in MMR design. At the independent level, integrations are made at the discussion level mostly to present the research findings, ideas, and inferences. Similarly, at the interactive level, it is distinct that one strand supports the other for better inferences from the earlier phase of the study. In the articles reviewed for the study, conducting the qualitative strand at the beginning contributed to the scale construction in the quantitative phase. Likewise, starting with the quantitative strand provided outliers or extreme cases that were studied further. The majority of the articles had independent strands. This kind of discourse in MMR may enrich the methodological insights of each study. Consequently, the findings of the study can go to the next level of understanding, and it may contribute the employability studies. In extreme cases and inferences, the level of interaction might support estimation and inclusion [50]. Therefore, such levels of distinct interaction may enrich and examine the insights from the study and existing gaps in the sector.

The other key decision was a relative priority of the strands (equal, qualitative, or quantitative). MMR has three established priorities in terms of weightage: equal, quantitative, and qualitative. In the articles reviewed for this study, the majority of them (21) were titled toward either qualitative or quantitative strands, and the others (13) equally balanced both strands. All the articles have utilized research questions to express their priorities of strands. Mertler and Charles [51] also suggest that the priorities of strands are expected to express in research questions in MMR. Importantly, the authors of the article did not conduct the qualitative inquiry rigorously. Applying the specific strength of each methodology of qualitative inquiry can provide additional insights and may support the analysis, thereby contributing to the extent and circumstances of employability discourse.

The timing of the strands, either simultaneity or dependence, is also one of the key decisions of MMR [33]. In simultaneity, two strands go together, but one strand comes after the other in case of dependence. This may happen not only during the data collection phase, but also during the entire study. The result of the study shows that all articles included in the study followed either simultaneity or dependence [52] about their timing. However, only three articles mentioned it. Johnson and Christensen [49] suggested that incorporating design is unnecessary, while the researcher is responsible for describing it. However, various designs are proposed in the literature. For example, Teddlie and Tashakkori [53] suggested parallel, sequential, conversion, multilevel, and fully integrated designs that are different from each other. Creswell and Plano Clark [33] have also explained the concurrent, sequential, and

multiphase timings. However, such terminologies were hardly seen in the reviewed articles.

There were different points of integration of qualitative and quantitative strands in the reviewed article. For example, some integrated into the design, while others did it in the data collection, analysis, or interpretation phases. This showed multiple points of integration [36, 39] in employability research. Additionally, joint display [54] has been one of the emerging trends reported in the mixed analysis. A single paper was found with a joint display of results, which showed that employability discourse is yet to follow the updated and emerging trends of MMR.

This research explored the contributions of MMR to the notion of employability. MMR provides a means to comprehend the complex and multifaceted phenomenon of employability using both qualitative and quantitative strands. Moreover, countless possibilities arise from the combinations of both strands [32, 33, 38]. This implies that it provides exceptional insights and interesting ideas when integrated well. In the study, MMR provided an opportunity to explore complex research questions and a deep understanding of various research phenomena. For example, the descriptive studies measured patterns and social metrics, whereas related perceptions, attitudes, and beliefs added to the patterns. Thus, the information became rich, and insights were obtained. It helped clarify any fuzziness created by research topics [55] for desirable outcomes of the employability discourse. Furthermore, the integrated discussions revealed other important benefits. When statistically significant outcomes and deep learning were combined, the learning process strengthened and contributed to the constructs. Moreover, MMR interplayed with comparative and contradictory findings that contributed to stronger evidence for the conclusion. It offset the weaknesses inherent in each method separately and supported approaching the specific vantage points of analysis. This was well reflected in this study. Integrated discussions further complemented a better understanding of the pros and cons of employability interventions as well as identified gaps in the construct.

One more point to note on the contributions of the MMR is that one can make prolonged engagement on both quantitative and qualitative data, which add to descriptive precision in the research review. In the articles, the perceptions and practices were captured effectively. More diverse views were captured, and the meaning of such views was analyzed. The discourse of employability received meaningful insights from it. Consequently, it not only added value to research but also provided ample opportunities for researchers to generate insights, connections, and strategic values for the discourse of employability.

The major findings from the articles revealed that MMR contributed significantly to the employability discourse. The major contributions found during the analysis were an understanding of the perceived ambiguity, building strategies, support actions and practices, curriculum reforms, and metacognition. Employability is a complex and multidimensional construct with stakeholders [1], ranging from individuals to employers, policymakers, and academicians. In the

articles, understanding differed at each level and created ambiguity. MMR supported discrepancies in perception analyses with in-depth information and the integration of various perspectives in one document. It ensures building strategies and translating knowledge into practice. Hence, building strategies and implementing them through actions and practices reinforced the construct of employability.

Moreover, MMR enhances effective actions at the levels of different stakeholders. Policymakers, academicians, and employers can utilize it to promote skill portfolio in the future. Furthermore, with MMR, the ideas of the stakeholders can be integrated and incorporated into the curriculum. Hence, curriculum reforms can intertwine effective and sustainable paths to enhance employability [56]. It provides a way to improve and promote employability.

The other important aspects of the findings of the study relate to metacognition. It has been claimed that metacognition has benefitted from MMR as pre- and posttest comparisons, along with reflection mapped onto the framework, provided the architecture of practice. Various domains, constructs, means of awareness, and understandings of employability have become clear with participants' cognitive knowledge and contributions (data). The participants' self-reflection added to the cultivation of knowledge, skills, and self-belief [10] in the employability discourse. It supports productivity in employability with innovation and creativity.

5. Limitation

The results of the study have the following limitations. First, the study was carried out by selecting seven journals that publish articles on employability based on the experience of their authors. The inclusion of many articles from several journals could give varying results. Second, the database of the articles was searched using the keywords "employability," "employability skills," and "study-work transitions." There could have been additional keywords. Third, the terms used in the lexical search were "mixed methods" and "qualitative and quantitative research." There could have been other terms, such as "Qual plus Quan." Fourth, the authors develop insights on the contribution—not critique—of using MMR in employability discourse.

6. Conclusions

The MMR approach has contributed to the discourse on employability by adding to the development of effective strategies to enhance employability by contributing rich and in-depth information. Furthermore, the engagement of participants provided ample opportunities to understand ambiguity within the employability construct. Additionally, it supported building strategies, effective actions, and translating these into practices. As employability discourse is linked with actions and practices, such rigorous analysis contributes to building strategies for the enhancement of employability. Undoubtedly, the employability research field can be further developed with better engagement in both qualitative and quantitative strands. Robust integrations, consolidation or data merging of both qualitative and quantitative strands, and extreme case

analysis on employability issues can contribute to inferences, meta-inferences, and meaningful interpretations. Furthermore, the informed use of both qualitative and quantitative strands contributes to deeper and broader analyses.

The MMR has, thus, added rigor to the discourse of employability. This serves as a guide to ensure that higher education serves not only as a connection between education and employment, but also aids in redesigning the curriculum or pedagogy to meet the major expectations of higher education, students, and employers. Additional efforts on integration and data merging by using MMR improve the insights and contribute meaningfully to the examination of employability constructs. These, in turn, contribute to reforming higher education. The researchers and the journal editors, particularly those interested in the study of higher education, can consider these insights to explore employability further. Through this, the field of higher education can be connected to the job market so that future generations can get optimum benefits from it.

Appendix

Reviewed Articles

- T. Acuña, G. McDonald, J. Kelder, and A. Able, "Implementing the threshold learning outcomes for agriculture at two Australian universities," *Journal of Teaching and Learning for Graduate Employability*, vol. 7, no. 1, pp. 2–21, 2016. doi: 10.21153/jtlge2016vol7no1art585.
- M. Brewer, M. Lane, A. Carter, S. Barnard, and O. Ibrahim, "Evaluation of a leadership development program to enhance university staff and student resilience," *Journal of Teaching and Learning for Graduate Employability*, vol. 10, no. 2, pp. 136–151, 2019. doi: 10.21153/jtlge2019vol10no2art882.
- N. Chhinzer, and A. M. Russo, "An exploration of employer perceptions of graduate student employability," *Education + Training*, vol. 60, no. 1, pp. 104–120, 2018. doi: 10.1108/ET-06-2016-0111.
- J. Choate, M. Demaria, M. Etheve, S. Cran, and D. Carroll, "A professional development program with an assessed ePortfolio: a practical solution for engaging undergraduates with their career development in large student cohorts," *Journal of Teaching and Learning for Graduate Employability*, vol. 10, no. 2, pp. 86–103, 2019. doi: 10.21153/jtlge2019vol10no2art788.
- D. Clarke, and M. Winslade, "A school-university teacher education partnership: reconceptualising reciprocity of learning," *Journal of Teaching and Learning for Graduate Employability*, vol. 10, no. 1, pp. 138–156, 2019. doi: 10.21153/jtlge2019vol10no1art797.
- G. E. de Blaquièrre, J. E. Nolan, and K. Wray, "Joining up the dots: telling the story of employability: how can students in Higher Education be supported to better understand and articulate their employability?," *Journal of Teaching and Learning for Graduate Employability*, vol. 10, no. 2, pp. 15–35, 2019. doi: 10.21153/jtlge2019vol10no2art699.
- K. Dooley, and L. Sexton-Finck, "A focus on collaboration: fostering Australian screen production students' teamwork skills," *Journal of Teaching and Learning for Graduate Employability*, vol. 8, no. 1, pp. 74–105, 2017. doi: 10.21153/jtlge2017vol8no1art642.
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Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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