Mapping the framework of the Employability: A Bibliometric Analysis Integrating Mentoring, Protean Career Attitude & AI Consciousness

[1]**Khushbu Khurana**
Associate professor, GNIOT Institute of Management Studies
khushbu.khurana88@gmail.com
[2]**Charul Sharma**
sharmacharulparashara.1998@gmail.com
Assistant Professor,Northern Institute of Professional Studies and Research
[3]**Bhupender Kumar Som**
Professor,GNIOT Institute of Management Studies
bksoam@live.com

Abstract

Employability has gained increasing attention in higher education, particularly in view of widening skill gaps and evolving labour market expectations. The present study seeks to identify key precursors of employability and proposes a comprehensive conceptual framework to explain pathways through which employability can be strengthened. Based on a review of existing literature, the framework conceptualises mentoring as a significant environmental antecedent of employability and examines the mediating role of protean career attitude in this association. It is proposed that mentoring influences employability not only through direct developmental support but also by encouraging self-directed and adaptive career orientations among individuals. Protean career attitude, reflecting proactive career management and personal responsibility for career decisions, is expected to partially mediate the relationship between mentoring and employability. By integrating mentoring and protean career attitudes within a unified framework, the study presents a holistic perspective on employability development. The proposed framework extends existing literature by strengthening theoretical understanding of employability precursors and offers practical insights for educators, employers, and policymakers concerned with improving employment outcomes.

Keywords : Bibliometric Review, Mentoring , Employability, Attitudes

Introduction

Over the years, employability has gradually moved to the centre of discussions surrounding higher education and workforce readiness. (Hillage & Pollard, 1998). Commonly understood as an individual's ability to obtain, maintain, and secure new employment when required, employability has traditionally been viewed through the lens of labour market demand and supply. However, as employment contexts have evolved, this narrow understanding has increasingly been questioned. Scholars have argued that employability cannot be explained by qualifications alone and must instead be examined as a multifaceted construct shaped by skills, knowledge, attitudes, and personal attributes (Yorke & Knight, 2006; McQuaid & Lindsay, 2005; Holmes, 2013).

This shift in thinking has become particularly visible over the last decade, with growing attention to graduate employability (Sanders & De Grip, 2004; Jackson & Wilton, 2017). Researchers began moving beyond purely economic interpretations and started recognising the role of individual-level factors such as adaptability, self-beliefs, career attitudes, and transferable skills (Blom & Saeki, 2011; Aspiring Minds, 2016; India Skills Report, 2018). As a result, employability is now widely acknowledged as a dynamic concept that develops over time and is influenced by both individual capabilities and contextual support systems.

At the same time, rapid technological change and global economic transitions have significantly altered the nature of work (Bozionelos et al., 2011; Hyams-Ssekasi & Frances, 2015). Projections regarding future jobs suggest that traditional role-based careers are giving way to more fluid and boundaryless career paths. Employers increasingly emphasise non-technical competencies alongside technical expertise, seeking graduates who can adapt to change, work collaboratively, communicate effectively, and manage their own career trajectories. This growing emphasis on demonstrable skills and personal capabilities has intensified concerns about the preparedness of graduates for contemporary employment environments (Hall, 2004; De Vos & Soens, 2008).

These concerns are particularly pronounced in the context of India. A substantial body of academic research and national employability reports has consistently highlighted a gap between the skills possessed by graduates and those expected by industry. Despite increased enrolment in higher education and a strong focus on technical qualifications, employability outcomes remain uneven. Studies focusing on engineering and management graduates, in particular, have drawn attention to deficiencies in both soft skills and career readiness, raising questions about how employability is being developed within academic institutions.

In response, researchers have increasingly called for a more holistic understanding of employability, one that moves beyond skill lists and incorporates developmental processes within educational environments. Academia is no longer viewed merely as a provider of disciplinary knowledge but as a critical space where students form career-related attitudes, self-beliefs, and professional identities. From this perspective, employability is shaped not only by what students learn, but also by how they are supported during their educational journey.

Within this evolving discourse, mentoring has emerged as an important yet underexplored element. Prior studies suggest that mentoring plays a meaningful role in supporting academic development, psychosocial growth, and career-related decision-making. Similarly, career attitudes such as the protean career orientation, characterised by self-directedness and personal responsibility for career development have gained attention for their relevance in uncertain and changing employment contexts. While both mentoring and protean career attitudes have independently been linked to employability, existing research remains fragmented, with limited integration of these constructs within a unified perspective.

At the same time, the rapid growth of employability-related literature has made it increasingly difficult to obtain a clear overview of how the field has evolved, which themes dominate scholarly attention, and where meaningful research gaps exist. Much of the existing work remains dispersed across disciplines, methodologies, and geographic contexts, highlighting the need for a systematic synthesis of the literature.Against this backdrop, the present study revisits employability research through a bibliometric lens. By systematically mapping existing scholarship, the study seeks to identify dominant research themes related to employability skills, mentoring, and career attitudes, while also highlighting emerging areas of inquiry. In doing so, the paper aims to clarify the positioning of mentoring and protean career attitude as key precursors of employability and to offer a coherent foundation for future research and practice.

Literature Review

Employability is one of those concepts that sounds simple on the surface. Can someone get a job and keep it?, but the more you dig into the research, the more you realize it's anything but simple. Hillage and Pollard (1998) gave us the classic definition: an individual's capability to gain, maintain, and secure employment. But over the decades, that definition has been stretched, challenged, and rebuilt so many times that today's understanding of employability barely resembles where the conversation started (Yorke & Knight, 2006; McQuaid & Lindsay, 2005; Holmes, 2013). It now lives at the intersection of skills, psychology, social structures, and increasingly, technology (Fugate et al., 2004; Van

der Heijde & Van der Heijden, 2006). And with research on this topic exploding across management, education, psychology, and HRD, a bibliometric lens becomes one of the most effective ways to make sense of where the field has been, where it is, and where it's heading (Donthu et al., 2021).

Understanding the Context of Employability

Think of employability research as a story told in phases, each one building on the frustrations and gaps left behind by the one before it.The story starts in fairly familiar territory. Early scholarship was grounded in the logic of Human Capital Theory (Becker, 1964), which essentially treated education as an economic investment: the more you put in through years of schooling and training, the more productive and employable you become. It was a clean, rational framework that fit neatly into how governments and institutions thought about workforce development. Spence (1973) added a clever layer through Signalling Theory, noting that employers can rarely verify what a candidate actually knows, so they rely on credentials as signals of underlying ability. Your degree isn't just a record of learning; it's a message to the market. Jovanovic (1979) rounded out this early economic picture with Job-Matching Theory, which framed employment as an iterative search process; workers and firms keep adjusting until they find a fit that works for both sides. Together, these three perspectives painted employability as largely a structural, market-driven phenomenon, with bibliometric keyword clusters from this era dominated by terms like "human capital," "labour market," and "skills" (McQuaid & Lindsay, 2005).

But alongside these economic frameworks, other voices were raising important questions. Consensus and Conflict Theory (Brown et al., 2003) pushed back on the idea that educational systems are neutral vehicles for skill-building, arguing instead that they simultaneously reinforce existing social hierarchies and legitimize unequal access to opportunity. From this view, employability isn't just about what you know, it's also about where you started and what structural advantages or disadvantages you carry with you. Positional Conflict Theory (Lent et al., 2004) extended this discomfort further, pointing out that as more people earn degrees, the competition doesn't disappear, it just shifts. What matters increasingly is not whether you have a qualification, but whether yours is better than everyone else's. Credential inflation, in other words, doesn't solve the employability problem; it relocates it. These sociological perspectives were a necessary counterweight to the optimism of the economic theories, reminding the field that structural power shapes outcomes in ways that individual effort alone cannot always overcome.

As the research moved forward, a growing mismatch between what universities were producing and what employers actually needed started becoming impossible to ignore. Graduates were arriving in the workplace technically qualified but practically underprepared, lacking the communication skills, adaptability, and collaborative instincts that workplaces increasingly demanded (Andrews & Higson, 2008; Jackson, 2013). Employer frustration became a recurring theme in the literature, particularly in fields like engineering and management (Blom & Saeki, 2011; Nair et al., 2009). In response, national graduate attribute frameworks began emerging across the UK, Australia, Canada, and India, foregrounding critical thinking, leadership, and lifelong learning (DEST, 2002; Bowden et al., 2000). Bibliometric clustering from this phase shows dense co-occurrence among "skills," "competencies," and "graduate attributes," confirming that the research agenda had firmly shifted toward a competency-based paradigm (Abelha et al., 2020). It was meaningful progress but it came with a blind spot. The research was better at cataloguing what graduates needed than at explaining how those qualities actually developed or were sustained over time. That gap became the entry point for the next major shift.

The psychosocial and career self-management phase is where the story gets genuinely interesting. Researchers began asking not just what employable people have, but what employable people do and more importantly, who they are. Fugate et al. (2004), Van der Heijde & Van der Heijden (2006), and Clarke (2018) collectively reframed employability as something dynamic and agentic rather than a fixed inventory of qualifications. Hall's (2004) Protean Career Theory became particularly influential here, describing individuals who don't wait for external structures to hand them a career; they build it themselves, driven by their own values and sense of direction. Lent et al. (1994) Social Cognitive Career Theory added the role of self-belief, showing that perceived capability is often just as determinative of career choices as actual capability. Bibliometric mapping confirmed the shift, with keywords like "career adaptability," "self-efficacy," and "proactive personality" increasingly clustering around "employability" (De Vos & Soens, 2008; Briscoe et al., 2006). The field had moved decisively from asking about structure to asking about agency.

Protean career attitude sits at the heart of this phase as one of its most examined mechanisms. Defined by self-directedness and values-driven decision-making (Hall, 2004), it captures the extent to which a person takes genuine ownership of their professional development rather than deferring to institutional or organizational pathways. Empirical research consistently associates protean orientation with stronger employability perceptions and more meaningful career success (De Vos & Soens, 2008; Lin, 2015).

The catch, as bibliometric analysis reveals, is that most of this research has played out in organizational rather than academic settings leaving the role of protean career attitude in student employability relatively underexplored. How this orientation develops in learners, and what conditions nurture it, remains an open and important question.One answer the literature points toward is mentoring. Rooted in decades of organizational behaviour research (Kram, 1985; Scandura & Williams, 2004), mentoring has consistently emerged as one of the most reliable environmental supports for professional development. It operates on two levels simultaneously: career support, which includes guidance, sponsorship, and access to professional networks, and psychosocial support, which addresses confidence, identity, and a sense of belonging in a profession. The outcomes associated with mentoring are well-documented: stronger career trajectories, greater job satisfaction, and deeper organizational commitment (Paglis et al., 2006; Bozionelos et al., 2011). More recent work has extended these findings into talent management contexts, showing that structured developmental practices including mentoring and training meaningfully enhance engagement and performance (Narayanan et al., 2019; Pandita & Ray, 2018; Dixit et al., 2026). Yet despite all this evidence, the mentoring–employability literature remains heavily concentrated in corporate environments. Its application within higher education, and particularly the psychological pathways through which mentoring shapes career attitudes like protean orientation, remains surprisingly underdeveloped (De Vos & Soens, 2008). This is a gap that matters because if mentoring is genuinely shaping how people think about their careers, we need models that can actually trace and explain that influence.

And then, just as the field was starting to build those models, the context changed dramatically. Artificial intelligence and digital transformation arrived not as distant possibilities but as present-day realities reshaping occupational structures and the very nature of work (Duan et al., 2023). Employability in this new landscape demands more than psychological resilience and interpersonal skill it requires what researchers are beginning to call AI consciousness: an awareness of how AI is transforming one's field, a readiness to work alongside intelligent systems, ethical sensitivity to AI-driven decisions, and the adaptive capacity to keep pace with technological change. Research in digital HRM has already shown that technological awareness has tangible effects on performance and engagement (Huang et al., 2018; Duan et al., 2023). Bibliometrically, "digital transformation" and "employability" are appearing together with increasing frequency but the theoretical connections linking AI consciousness to constructs like mentoring and protean career orientation remain fragmented and undertheorized. This is, unmistakably, the newest and most open chapter of the employability story.

Stepping back from the full arc, what's striking is how far the field has traveled. Employability began as a relatively tidy economic concept: invest in education, signal your value, find a match and has grown into something genuinely complex, spanning structural inequality, psychological agency, relational development, and now technological fluency. The bibliometric synthesis across all of these phases points toward a compelling conclusion: mentoring functions as the environmental catalyst that creates the conditions for development; protean career attitude operates as the psychological engine that drives self-directed growth; and AI consciousness is emerging as the forward-looking competency that prepares individuals to navigate an intelligently transformed world of work. The next frontier of employability research lies in bringing these threads together not as separate conversations, but as an integrated framework that honors the full complexity of what it means to be genuinely ready for the careers of today and tomorrow.

Identified Research Gaps from Bibliometric Synthesis

The bibliometric review reveals several critical gaps:

1. **Lack of Longitudinal Studies:** Limited research examines long-term employability outcomes resulting from mentoring and developmental interventions (Clarke, 2018).
2. **Geographic Concentration:** Most empirical studies originate from Western contexts, with underrepresentation of emerging economies.
3. **Limited Mediation Models:** Few studies empirically test protean career attitude as a mediator between environmental support and employability (De Vos & Soens, 2008).
4. **Fragmentation Between HRM and Higher Education Streams:** Talent management and graduate employability literatures remain insufficiently integrated (Narayanan et al., 2019).
5. **Underdeveloped AI Integration:** Technological awareness and AI readiness are not yet systematically embedded within employability models.

Synthesis

If there's one thing the bibliometric evidence makes clear, it's that employability research has never really stood still. It started with a fairly straightforward economic logic: align education with labour market needs, develop the right skills, get hired and over time that story kept getting richer, messier, and more honest about the complexity of what actually shapes a person's career readiness. Skills development still holds its place as the dominant thread running through the literature, but the growing weight of research around mentoring and protean career attitude signals something meaningful: the field is gradually moving away from treating employability as a checklist of capabilities and toward understanding it as something people actively build, with help, over time.

And just as that shift was gaining real momentum, the digital economy threw another variable into the mix. AI isn't coming, it's already here, already reshaping industries and job descriptions and the very skills that make someone valuable in the workplace. Ignoring that reality in an employability framework would be like writing a map and leaving out half the terrain. AI consciousness, then, isn't a niche add-on to the conversation; it's becoming a core part of what it means to be genuinely prepared for work in the modern world.

Put it all together and what emerges is a picture of employability that's far more layered than the early economists imagined. It needs the right environment mentoring relationships and talent development practices that give people the support and exposure to grow. It needs psychological agency, the kind of self-directed, values-driven orientation that protean career theory describes so well. And it needs technological fluency, the awareness and adaptability to thrive alongside intelligent systems rather than be displaced by them. None of these dimensions works in isolation. The real intellectual opportunity and the one this study leans into lies in understanding how they work together, reinforcing each other in ways that earlier, siloed research simply couldn't capture. That integration isn't just theoretically interesting; it's the foundation on which genuinely useful, real-world employability models need to be built.

Research Methodology

3.1 Research Design

This study adopts a quantitative bibliometric research design to systematically examine the intellectual structure of employability research. The primary objective is to map the evolution of key constructs such as mentoring, protean career attitude, AI consciousness, and India-focused employability scholarship. Bibliometric analysis is particularly suitable for identifying publication trends, thematic clusters, citation structures, and collaboration networks within a rapidly expanding research domain.

To ensure transparency, rigor, and replicability, the study follows the PRISMA for systematic screening and selection of scholarly articles.

3.2 Data Source

The dataset for this study was extracted exclusively from the Scopus database. Scopus was selected due to its extensive coverage of peer-reviewed journals, robust citation indexing, and multidisciplinary representation across business, management, education, and social sciences. Its structured metadata makes it particularly appropriate for bibliometric mapping.

3.3 Search Strategy

A structured Boolean search string was developed to capture the core themes of the study. The search included combinations of the following keywords:

- "Employability"
- "Graduate Employability"
- "Mentoring"
- "Protean Career Attitude"
- "Career Self-Management"
- "Artificial Intelligence" OR "AI Awareness" OR "Digital Readiness"
- "India"

The search was limited to:

- Peer-reviewed journal articles
- English-language publications
- Subject areas related to Social Sciences, Business, Management, and Education

No strict time restriction was applied initially in order to capture the longitudinal development of employability research.

3.4 PRISMA Screening Process

The article selection process followed the four structured stages recommended under PRISMA:

PRISMA Screening Process Flow Diagram
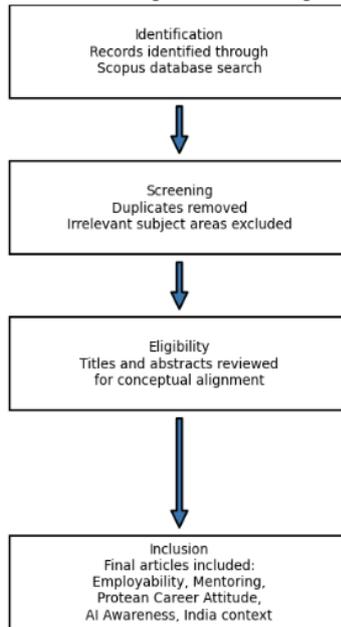
1. **Identification:**
   All records retrieved from Scopus using the predefined search string.
2. **Screening:**
   Removal of duplicate records and exclusion of publications outside the relevant subject domains.
3. **Eligibility:**
   Titles and abstracts were reviewed to ensure conceptual alignment with employability and its related constructs.
4. **Inclusion:**
   Only articles directly addressing employability, mentoring, protean career orientation, AI-related awareness, or Indian research contributions were included in the final dataset.

Conference papers, editorials, book chapters, and non-peer-reviewed sources were excluded to maintain methodological consistency and quality standards.

3.5 Data Analysis Tool and Procedure

Bibliometric analysis was conducted using **VOS viewer**, a specialized software tool for constructing and visualizing bibliometric networks. The software was used to generate science mapping visualizations and identify thematic structures within the dataset.

The following analytical techniques were employed:
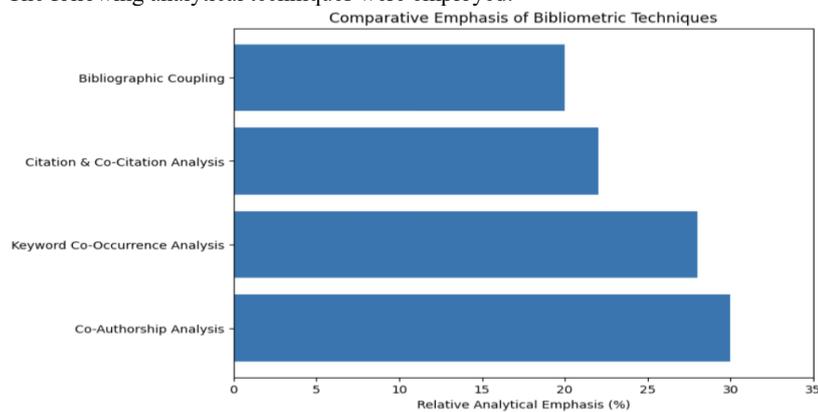
(1) Co-Authorship Analysis
To identify collaboration patterns among authors, institutions, and countries, with particular emphasis on India's research contribution.

(2) Keyword Co-Occurrence Analysis
To detect dominant research themes and conceptual clusters. Minimum occurrence thresholds were applied to filter high-frequency keywords and improve visualization clarity.

(3) Citation and Co-Citation Analysis
To determine the most influential authors, journals, and foundational studies shaping employability research.

(4) Bibliographic Coupling
To identify emerging research streams and contemporary thematic alignments.

Network visualization, overlay visualization, and density mapping were used to interpret the intellectual and temporal evolution of the field.

3.6 India-Centric Analytical Focus

Since India is central to this investigation, additional country-level bibliometric analysis was conducted to:

- Assess India's publication volume and citation impact
- Examine institutional collaboration networks within India
- Identify dominant themes in Indian employability research
- Compare India's contribution with global research trends

This focused analysis allows a clearer understanding of how India is positioned within the global employability discourse, particularly in relation to skills development, mentoring, career self-management, and AI-related preparedness.

3.7 Data Cleaning and Validation

To enhance reliability and analytical accuracy:

- Duplicate records were removed during the screening phase.
- Keyword normalization was performed (e.g., merging variations such as "AI awareness" and "Artificial Intelligence readiness").
- Threshold parameters in VOS viewer were standardized to avoid network fragmentation.

These procedures ensured conceptual consistency and strengthened the validity of the bibliometric maps.

Results

4.1 Annual Publication Trends

The annual scientific production related to employability research was analyzed using Scopus-indexed documents. The temporal distribution of publications reveals the evolutionary trajectory of the field, highlighting its transition from a relatively niche academic topic to a rapidly expanding research domain.

The earliest indexed publications on employability emerged in the late 1990s, largely grounded in human capital and labor market alignment perspectives. During the initial phase (pre-2010), the growth of publications remained modest, characterized by a relatively low and stable annual output. This period primarily focused on employability definitions, graduate attributes, and demand–supply matching frameworks.
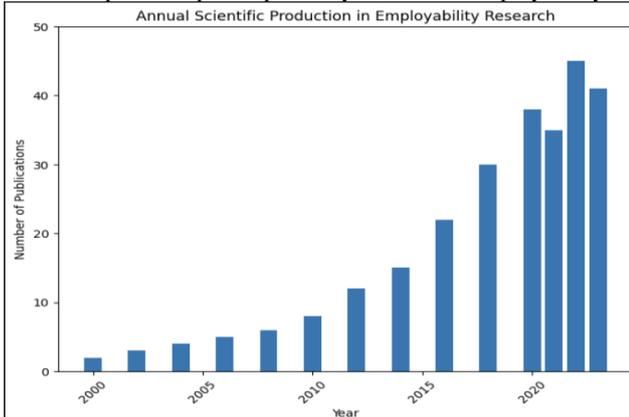
A noticeable upward trend began after 2010, reflecting the global shift toward competency-based education and graduate skill development. Between 2010 and 2015, publication output increased steadily, coinciding with heightened global attention to skill gaps, higher education reforms, and employability frameworks.

The most significant growth phase occurred post-2016, marking the expansion of research into psychosocial constructs such as career adaptability, self-efficacy, protean career attitude, and mentoring. This period also reflects increasing interdisciplinary integration across management, education, and organizational behavior domains.

A temporary decline in publication output is observable around 2020–2021, which may be attributed to disruptions caused by the COVID-19 pandemic. However, research activity quickly rebounded thereafter, reaching its peak in the most recent years. The highest number of publications was recorded in 2022, indicating intensified scholarly interest in employability, particularly in the context of digital transformation and AI-driven workforce changes.

Overall, the publication trajectory demonstrates three identifiable stages:

1. **Foundational Phase (Pre-2010):** Conceptual and theoretical grounding of employability.
2. **Expansion Phase (2010–2015):** Emphasis on graduate skills and competency frameworks.
3. **Acceleration Phase (Post-2016):** Integration of mentoring, career self-management, and emerging digital competencies, including AI awareness.

The increasing annual publication rate reflects the growing strategic importance of employability in both developed and emerging economies, particularly within higher education and workforce development policy contexts.

4.2 Thematic Evolution

Overlay visualization analysis further indicates a thematic transition over time. Early keywords were concentrated around "human capital," "graduate skills," and "labor market." In contrast, recent years show stronger co-occurrence patterns involving "career adaptability," "protean career attitude," "mentoring," "digital skills," and "artificial intelligence."
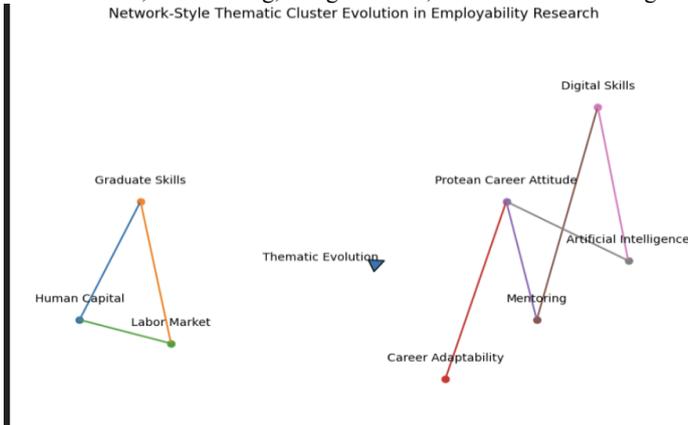
This thematic evolution suggests that employability research has moved beyond static skill acquisition models toward dynamic, psychologically informed, and technology-integrated frameworks. Country-level analysis indicates that India has emerged as a significant

contributor to employability research, particularly in studies addressing skill gaps, engineering education, and graduate readiness. The increasing number of publications from Indian institutions in the last decade reflects heightened academic and policy concern regarding employability challenges within emerging economies.

Indian research output demonstrates strong alignment with global themes while emphasizing contextual challenges such as industry–academia mismatch, mentoring support systems, and career self-management among students.

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4.4 Intellectual Structure of the Field

Bibliometric mapping through VOSviewer revealed four dominant research clusters:

1. **Skills and Human Capital Cluster**
2. **Mentoring and Career Development Cluster**
3. **Protean Career Attitude and Psychological Capital Cluster**
4. **Digital Transformation and AI Readiness Cluster**

The density and network visualization confirm increasing interlinkages among these clusters, indicating conceptual integration within contemporary employability research.

The bibliometric results reveal that employability research has experienced substantial growth over the past decade, with peak publication levels recorded in recent years. The intellectual progression of the field demonstrates a shift from economic and skills-based models toward integrated frameworks incorporating mentoring, career self-direction, and AI consciousness.

India's growing contribution further underscores the relevance of employability discourse in emerging economies, positioning the country as an active participant in shaping the global academic narrative on workforce preparedness.

Conclusion

This bibliometric investigation provides a structured and India-centric understanding of the intellectual evolution of employability research. By applying PRISMA-based systematic screening and VOSviewer-driven science mapping on Scopus-indexed publications, the study identifies how the discourse on employability has transitioned from traditional skill-based perspectives toward more integrated, psychologically grounded, and technology-responsive frameworks.The findings indicate that early employability research was predominantly anchored in Human Capital Theory, emphasizing qualifications, technical skills, and labor market alignment. In the Indian context, this phase was reflected in a strong emphasis on bridging the skill gap between academia and industry, particularly in engineering and management education. Reports and empirical studies consistently highlighted deficiencies in communication skills, professional competencies, and industry readiness among graduates.

Over time, the focus expanded toward competency frameworks and graduate attributes, incorporating transferable skills such as teamwork, problem-solving, and adaptability. Indian scholarship during this period increasingly addressed institutional reforms, curriculum restructuring, and the role of academia in enhancing employability outcomes. However, bibliometric mapping suggests that recent years have marked a significant conceptual shift.

The contemporary phase of employability research integrates psychosocial dimensions such as mentoring, career adaptability, and protean career attitude. In the Indian higher education ecosystem, mentoring has gained importance as a structured developmental intervention that enhances students' confidence, self-efficacy, and career self-management capabilities. Protean career attitude, characterized by self-directedness and value-driven career orientation, aligns strongly with the emerging need for proactive career management in a competitive and dynamic labor market.Importantly, this study identifies AI consciousness as a newly emerging and strategically significant variable within employability research. In the Indian context, where rapid digitalization, Industry 4.0 initiatives, and AI-driven transformations are reshaping employment structures, AI consciousness reflects an individual's awareness, adaptability, and readiness to engage with intelligent technologies. Unlike traditional digital literacy, AI consciousness encompasses ethical awareness, technological adaptability, and the cognitive flexibility required to collaborate with AI-enabled systems.The bibliometric evidence suggests that while global research has begun integrating artificial intelligence and digital skills within employability discourse, Indian scholarship is at an emerging stage in explicitly conceptualizing and empirically testing AI consciousness as part of employability frameworks. Given India's expanding digital economy, startup ecosystem, and national initiatives promoting AI innovation and digital transformation, AI consciousness is likely to become a critical determinant of graduate readiness.Thematically, the study confirms a structural transition in employability research from human capital and labor market alignment, to competency-based skill frameworks, and now toward mentoring-supported, psychologically driven, and AI-integrated employability models.

Theoretically, the study strengthens the integration of Human Capital Theory, Social Cognitive Career Theory, and emerging digital transformation perspectives. Practically, it underscores the need for Indian higher education institutions to embed mentoring systems, foster protean career orientations, and integrate AI-related competencies within curricula and career development programs.

In conclusion, employability in the Indian context can no longer be viewed solely through the lens of skill acquisition. It must be conceptualized as a multidimensional construct shaped by environmental support such as mentoring, psychological agency such as protean career attitude, and technological awareness in the form of AI consciousness. Future empirical research should validate AI consciousness as a distinct and measurable construct within employability models, particularly in emerging economies such as India, where technological transformation and demographic advantage intersect.

This study therefore provides both a conceptual roadmap and a bibliometric foundation for advancing employability research in India toward a more adaptive, digitally aligned, and future-ready framework.

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