CULTURAL INTELLIGENCE: A CORE COMPETENCE OF KNOWMADS IN MULTICULTURAL BUSINESS ENVIRONMENT

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Abstract
This article explores and constructs the concept of Cultural Intelligence (CQ) as the primary form of intelligence among knowmads. The study aims to investigate and understand the relationships between individuals' perception of their intelligence, their view of intelligence that best reflects knowmads, and their aspiration to become knowmads. The research questions are addressed by integrating qualitative and quantitative methods, including VOSviewer, SPSS, and PLS-SEM analyses. The statistical evaluation was derived from a questionnaire survey that yielded 309 valid replies. The findings of this study indicate that among the leading three forms of intelligence (Intellectual Quotient: IQ, Emotional intelligence: EQ, and CQ), IQ is the most relevant, utilized, and referred to form, followed by EQ in second place, and CQ in third position, as revealed by the VOSviewer and SPSS analysis. Moreover, knowledge dynamics have been identified as a significant catalyst and enabler of these intelligence concepts. However, when explicitly focusing on knowmads, CQ emerges as their main intelligence, followed by EQ, and then IQ, reinforcing the findings from the VOSviewer analysis. The alignment between intelligence types and knowmads is further supported by statistical analysis using SPSS. Respondents predominantly identified cultural intelligence as the dominant intelligence type among knowmads, supporting the hypothesis that Cultural Intelligence is highly valued in navigating diverse cultural landscapes. Analyzing the answers from the self-identified knowmads revealed exciting insights. While 47.5% of the knowmads positioned IQ as their main intelligence form, 37.5% identified CQ, and 15% mentioned EQ. However, when estimating the intelligence forms that best describe knowmads overall, the respondents prioritized CQ (65%), followed by EQ (22.5%), and IQ (12.5%). This suggests that societal biases and the emphasis on IQ may explain the discrepancy between self-perception and the perception of knowmads' intelligence. Our further analysis using SmartPLS demonstrates a mildly positive relationship between individuals' perception of their own intelligence and their aspiration to become knowmads. However, the relationship is not statistically significant, indicating that self-perceived intelligence is not a decisive factor in driving this aspiration. In contrast, the perception of the intelligence that best describes knowmads (CQ, EQ, or IQ) shows a stronger and statistically significant relationship with the dream of becoming a knowmad. In conclusion, Cultural Intelligence is the main intelligence among knowmads, followed by EQ and IQ. The perception of intelligence characteristics associated with knowmads plays a crucial role in shaping individuals' aspirations to embrace a knowmad lifestyle. This study highlights the significance of CQ in developing multicultural leadership skills and meeting the next generation's expectations, emphasizing work-life balance. Future research will explore the practical implications of these findings in preparing individuals for knowmadic and knowledge-based living and working new patterns.

Keywords: cultural intelligence; knowmads; emotional intelligence; intellectual intelligence; knowledge dynamics; multicultural business environment.
1. INTRODUCTION

The context of the present article and the underlying study is represented by multicultural business environments (MBEs). According to Branouw (1963), culture is the collective way of life of a particular group of people. It encompasses the many established and predictable patterns of learned behaviour passed down from generation to generation through language and imitation. Expanding on Branouw's definition, we can initiate the present study based on the assumption that MBEs refer to workplaces or markets that reunite individuals from multiple cultural backgrounds, races, traditions, spoken languages, and various other demographic parameters under the shared goal of contributing to the business objectives.

According to Wakefield (2001), most organizations face the reality of a global market with diverse audiences from different ethnic backgrounds. In this context, including a variety of people in the workplace may foster a wide range of perspectives, skills, and life experiences, stimulating the generation of innovative ideas and creative solutions. Consistent with McCuiston, Wooldrige & Pierce (2004), having a diverse senior management team will allow firms to effectively align business objectives with current and future demographic and market trends to attain organizational growth and profitability.

Moreover, as stated by Adler (1983), within an organization, culture has been demonstrated to produce a range of effects that typically encompass significant influence on leadership practices and beliefs, the attitudes of workers and leaders (Hofstede, 1980), decision-making behaviour (Burger & Bass, 1979), as well as the perceived factors determining career success.

To successfully navigate MBEs, the authors focused on grasping and understanding the importance of cultural intelligence (CQ), intellectual intelligence (IQ) and emotional intelligence (EQ) for specific categories of workers. The role of CQ and emotional intelligence within multinational environments was studied and underlined by Bratianu and Paiuc (2023a; 2023b) and Paiuc (2021b). Nevertheless, in order to better understand the effects of CQ in MBEs, the authors aim to grasp a more detailed analysis regarding individuals' perceptions of the importance of CQ compared to IQ and EQ. In an effort to add to the state of the art in the field, we opted to apply our study on one of the most representative groups of workers activating in MBEs: the knowmad workers.

Knowmads are professionals who excel in the digital era, prioritizing knowledge and information as valuable resources. The concept, suggested by John Moravec, combines the words "knowledge" and "nomad" to convey the characteristics of persons who are always on the move, always adapting to new information, technology, and work situations. The abilities of a knowmad often include being able to quickly learn new things and discard outdated ideas, as well as being creative and adaptable. The use of technology and networks to facilitate collaboration and innovation is commonplace in their work, and they thrive in fluid and unpredictable environments. Amongst all their qualities, the geographical fluidity powered by their adaptability positions them as a relevant target for the present research.

In the context described above, defined by MBEs involving knowmad workers and their perceptions of the roles of different forms of intelligence, we delimited a set of research hypotheses to be further tested through quantitative research.

Our research questions are:

**RQ1.** What is the most relevant, utilized, and referred to form of intelligence? Is it IQ, followed by EQ in second place and CQ in third? | with VosViewer and quantitative method.

**RQ2.** What is the most relevant, utilized and referred to a form of intelligence for knowmads? Is it CQ, followed by EQ in second position and IQ in third? | with VosViewer and quantitative method.

**RQ3.** Is knowledge dynamics playing a pivotal role in the knowmad intelligence mapping? | with VosViewer.

**RQ4.** Is there a positive relationship between how individuals perceive their own intelligence (whether it be Cultural Intelligence, Emotional Intelligence, or Intellectual Intelligence) and their aspiration or dream of being a knowmad? | with SmartPLS.
RQ5. Is there a positive relationship between the perception of the intelligence which best describes knowmads (CQ, EQ, or IQ) and the dream of being a knowmad? | with SmartPLS.

The structure of this article is the following: after the brief Introduction of the research topic in the first section, we will dive deep into understanding the critical concepts enabled through the research in the second section, the literature review. Some of the concepts we scrutinized are knowmads, intellectual, cultural, and emotional intelligence (IQ, CQ, and EQ), and knowledge dynamics theories.

In the third section, Methodology, we indicated the data sources and methodologies enabled for each research method: bibliometric analysis enabling VOSviewer and quantitative research through sociological questionnaires. The responses to the quantitative research methods have been analyzed through IBM SPSS Statistics 25 and SmartPLS 4.

In the fourth section, Results, we first outline the results of the qualitative analysis, represented in the present study as a bibliometric analysis. Next, we present the findings of the quantitative analysis. Finally, in the fifth section, we present the conclusions, the limits of the study, and the future research directions we envision after the completion of the present research strategy.

2. LITERATURE REVIEW

The present research approaches fundamental concepts in the knowledge management (KM) literature and practice, placing them in novel optics and configuration. As an outcome, the study contributes to the state of the art of the KM broad field and to each subfield approach, including knowmads, knowledge dynamics, IQ, EQ and CQ.

2.1. Knowmads

John Moravec (2008) was the author to officially introduce the knowmad concept early in the second millennium as a neologism and a declination of nomadism and knowledge. The term's introduction has been justifiable in light of societal updates and changes as well as the development of the global work environment. The author claims that Society 3.0, which is unique in its unpredictability, technological nature, and global scope, is to blame for the emergence of the knowmad workforce.

In the short upcoming period, the concept has been refined, and additional knowledge on the matter has been achieved in follow-up individual or collaborative materials (Cobo & Moravec, 2011; Moravec, 2013a, 2013b; Moravec, & van den Hoff, 2015). Moravec's (2008, 2013a, 2013b) definition has been adopted by upcoming waves of researchers on the matter (Garcia, 2012a, 2012b; Iliescu 2021a, 2021b, 2021c), resulting in a common understanding of knowmads in the literature. Consequently, knowmads are often seen as creative, innovative, and agile knowledge workers who can cooperate with anyone at any hour of the day from any place in the world (Iliescu, 2021a).

Their geographical dynamism and agility are highly relevant aspects in the present study, as this places them in multicultural contexts, more frequently compared to other workers. This is also one of their key traits, differentiating them and strongly defining them as a distinctive group, along with other characteristics (Cobo, 2013; Cobo & Moravec, 2011; Kakihara & Sorensen, 2001)

While focused attention has been offered to the topic from different angles, tackling aspects like educational needs (Moravec, 2008), the mutation process from knowledge workers (Bratianu & Iliescu, 2022), accessibility to knowmad lifestyle (Cook, 2020), the complexity of the phenomenon is yet to be fully grasped and understood, marking the knowmads field a still emerging one.

Based on the available information at the date of the research, more attention should be paid to understanding the influence of the different types of intelligence (IQ, CQ, EQ) in knowmad's activity. Gaining insight into how knowmads perceive and relate to various forms of intelligence enhances our comprehension of the current realities and difficulties in the corporate environment.
2.2. Intelligences

Howard Gardner, professor of education at Harvard University, developed the theory of multiple intelligences in 1983. He proposed that people have different kinds of "intelligences." Gardner originally stated that there are eight intelligences (Gardner, 1983) and has since considered the existence of the ninth intelligence, existential intelligence - which focuses on the interest in questions about life, death and beyond (Gardner, 1983). These eight main ways of knowing are: linguistic – focused on words and language; logical-mathematical - rooted in methodology and linear order; visual-spatial; musical-rhythmic; bodily-kinesthetic; interpersonal; intrapersonal; and naturalist. The above-mentioned varieties of intelligence are developed when individuals engage in activities that are valued in their culture, which in turn help them form distinct mental patterns (Cavas & Çavas, 2020).

While traditional measures of intelligence, like IQ, primarily focus on logical-mathematical abilities, emotional and cultural intelligence reflect on interpersonal and intrapersonal skills and competencies. Here is how the nine Gardner's intelligence can be grouped under three main categories: IQ (containing linguistic and logical-mathematical intelligence); CQ (based on interpersonal and intrapersonal intelligence) and EQ (rooted into spatial, naturalistic, bodily-kinesthetic, musical, and existential intelligence). Existential intelligence does not fit neatly into one category and should be considered as relating to both cultural and emotional intelligence.

Therefore, in the following sub-sections of the literature review segment, we will introduce our main related concepts: cultural intelligence, emotional intelligence, and intellectual intelligence – in conjunction with knowmadism in multicultural business environments.

2.2.1. Cultural Intelligence

CQ is crucial in a global knowledge society since workers and businesses often function in multicultural settings. From a business perspective, CQ can be especially advantageous in promoting efficient communication, cooperation, and comprehension across varied teams and international commercial transactions. Cultivating CQ is widely seen as an essential aptitude for people and businesses seeking to flourish in a worldwide and linked society (Bratianu & Paiuc, 2023b).

Earley and Ang (2003) introduced the idea of cultural intelligence as an intellectual adaptation and response to the rapidly changing job markets of the second millennium. According to Ang, van Dyne, and Rockstuhl (2015), understanding intercultural ways of working has become urgent. Since its public introduction, the concepts of CQ and associated multiculturalism have progressively gained importance in cross-cultural management and global business. The majority of academics define CQ as a person's ability to function and adapt successfully in various cultural contexts (Ang et al., 2007).

The original definition of Earley and Ang (2003) focused on CQ as the prerequisite and competence to operate effectively in MBEs, as defined above. From the ground intellectual moment of CQ to the present day, over two decades of scholarly interest and attention to the matter resulted in a consolidated and mature theoretical background of CQ. Today, cultural competence encompasses the capacity to comprehend, adjust to, and collaborate with others from diverse cultural contexts. Additionally, CQ extends beyond basic knowledge of cultural distinctions; it incorporates the aptitudes and mindsets required to navigate and interact in diverse settings effectively.

Individuals can connect successfully with others from various cultural backgrounds only when they possess a set of competencies at their disposal. It is not enough to be aware of the distinctions between cultures; cultural intelligence comprises the ability to navigate, communicate, and operate in culturally diverse contexts. From this angle, we can support the notion that CQ includes components of interpersonal and intrapersonal intelligence, as Gardner (1983) defined them.

2.2.2. Emotional intelligence

EQ is frequently defined in the dedicated literature as a complex capacity of individuals to sense, capture and comprehend different emotional processes with the outcome of a successful adaptation to each of them, also referred to as regulation (Bakker & de Vries, 2021; Salovey & Mayer, 1990).
For instance, Salovey & Mayer (1990) define EQ as the individual's capacity to observe both his own and others' emotions, distinguish them, and utilize this knowledge to influence his or her thoughts and actions. Gardner (1983) includes emotional intelligence as a component of social intelligence, which he categorizes as part of personal intelligence. Personal intelligence, split into inter- and intrapersonal intelligence, includes understanding oneself and others. One facet of personal intelligence pertains to emotions and aligns well with Salovey & Mayer's (1990) conception of emotional intelligence.

According to Bakker & de Vries (2021), those who possess a strong sense of EQ have a powerful awareness and control over their different emotional states. In this context, control refers to acknowledging and tempering emotional changes. For example, while navigating diverse palates of positive or negative emotions, ranging from sadness, frustration, grief, and irritability to joy, excitement or happiness, individuals with strong EQ can grasp the feeling, capture its source, and successfully approach it. Along these lines, the same individuals tend to manage others' feelings and emotions more easily.

Martins, Ramalho and Morin (2010) conducted a meta-analysis on the correlation between an individual's health estate and EQ, and their findings have proven a significant positive association between EQ and well-being as well as between EQ and lucrative performance. Similar findings on the relationship between EQ and work performance have been obtained by O'Boyle et al. (2011).

### 2.2.3. Intellectual Intelligence

Intellectual intelligence is an intricate and diverse characteristic encompassing the capacity to acquire knowledge, engage in logical thinking, resolve problems, and adjust to novel circumstances (Schwartz & Hayslett, 2023). While Alfred Binet is known for developing the first intellectual intelligence test, which was later revised and became the basis for modern intelligence testing (Cicciola, 2019), Carol Dweck's work focused on a growth mindset (Prodyanatasari et al., 2023), which examines the belief that IQ can be developed through effort and learning. Building on this and following the characterization proposed by Gardner (1993) and our suggested mapping at the beginning of the sub-section dedicated to intelligence, in this segment of the literature review, we are going to introduce in more detail the linguistic and logical-mathematical intelligence as relevant parts of IQ.

Howard Gardner's notion of multiple intelligences included, amongst others, two types of intelligence that we consider are best suited for mapping to IQ: linguistic intelligence and logical-mathematical intelligence. Gardner (1983) believes that linguistic intelligence encompasses awareness of word sights and sounds, the significance of patterns, and the mechanics of languages and how they work. He indicates there might be an emphasized linguistic intelligence involved in activities like writing (documenting knowledge), speaking (sharing knowledge), teaching (adapting and disseminating knowledge), as well as in other vocations that involve a high level of language proficiency. Howard Gardner's intelligence hypothesis also focuses on logical-mathematical intelligence, which he defines as the capacity to think rationally, to evaluate and assess situations, or to conduct calculations. High logical-mathematical intelligence involves analytical reasoning, effective problem-solving, especially in abstract or mathematical settings, and a deep interest in the universe's natural scientific rules or awareness and understanding of trends in symbols, numbers, and logical sequences.

The phrase "intellectual" often encompasses activities or endeavors that involve and activate cognitive faculties, such as analytical reasoning, resolving complex issues, and acquiring knowledge. Thus, intellectual intelligence is a component of general intelligence that highlights cognitive capabilities, analytical reasoning, and the aptitude for abstraction. The concept can be further assimilated into the rational knowledge construct, detailed in the upcoming sub-section, knowledge dynamics.

### 2.3. Knowledge Dynamics (KD)

Knowledge dynamics processes can be a strategic tool for achieving multiple organizational goals. The dynamic processes of knowledge are fundamental and continuous and represent an endless source of
innovation for employees, managers and knowmads. Organizations should implement KD to support the development of multicultural business environments through the different types of intelligence presented: IQ - cognitive intelligence, EQ - emotional intelligence, and CQ - cultural intelligence. However, KD processes from the perspective of knowmads are different, which we will explain in detail.

Knowledge management aims primarily to operationalize the KD and thus operationalize the potential of existing organizational knowledge. In line with this perspective, managers should master strategic thinking in managing the organization: “Strategic thinking is operating in the opportunity space of the organization” (Bratianu, 2022, p.12). This potential can be transformed into concrete results through KD processes. In this sense, awareness and understanding of KD processes at the individual, group and organizational level are primary conditions (Bratianu, Stanescu & Mocanu, 2021). We will present each process in detail, emphasizing the importance of their synergy.

2.3.1. SECI model

The SECI model, developed by Ikujiro Nonaka (1991; 1994), outlines four fundamental processes in KD: socialization, externalization, combination, and internalization. These processes contribute to the creation and transfer of knowledge within an organization. In the context of developing cultural intelligence, the SECI model can play a significant role in promoting a deep understanding of cultural diversity and adaptability in MBEs (Paiuc, 2021a, 2021b; Scaringella, 2016).

Socialization involves gathering practical knowledge through observation and imitation, particularly from tacit knowledge. This process is crucial in the Nonaka cycle for transmitting essential knowledge generated at the individual level. In the case of knowmads, participation in diverse social groups and direct interaction with people from diverse cultural backgrounds can train and develop CQ by learning from others’ experiences and building cross-cultural relationships (Iliescu, 2021b; Leone & Schiavone, 2019; Rienties et al., 2015).

Externalization is the process of articulating tacit knowledge and transforming it into explicit knowledge. Metaphors, analogies, gestures, and body language are employed in this process. In the context of CQ, this process can include transforming personal cross-cultural experiences into concepts and principles that can be understood and shared with others. Outsourcing can facilitate communication and a deeper understanding of cultural aspects. (Li et al., 2021; Mirbabayev, 2015; Paiuc, 2021b).

The combination is the third process, involving mixing knowledge and categorizing new explicit knowledge to integrate it with existing explicit knowledge (Nonaka, 1994; Nonaka & Takeuchi, 1995; 2019). Unlike externalization, which occurs at the individual level, the combination is a social process based on transmitting explicit knowledge within a specific organizational context. From knowmads perspective, combining cultural knowledge can facilitate the creation of a more complex and integrated framework of CQ. Individuals, as knowmads, can develop synthesis skills and a comprehensive understanding of cultural diversity (Groves et al., 2023; Le et al., 2020; Smith, 2001; Shen et al., 2023).

The final process is internalization, which involves converting explicit knowledge into tacit knowledge and is closely connected to practical learning (Nonaka, 1994; Nonaka & Takeuchi, 1995; 2019). On one hand, this process helps expand, extend, and rearrange the tacit knowledge of organizational members. On the other hand, CQ becomes an integral part of their thinking and behaviour, thus facilitating adaptability in MBEs (Berraies et al., 2021; Caligiuri & Caprar, 2023; Paiuc, 2021a, 2021b). Through these SECI processes, organizations, employees and knowmads can improve the development of CQ, facilitating adaptability and fostering a deep understanding of the cultural diversity of MBEs (Korzilius et al., 2017; Paiuc, 2021a, 2021b; Shokef & Erez, 2015). The SECI model forms a three-dimensional spiral reflecting the knowledge-creation process resulting from individual actions and the organizational context. While the model is simple and intuitive, it has limitations in explaining the complexity of organizational KD, particularly in diverse cultural and organizational contexts outside of Japan.

2.3.2. RESK model

For knowmads, the development of rational knowledge (RK), emotional knowledge (EK), and spiritual knowledge (SK) is significant, especially within the context of MBEs, whether it involves temporary work
within an organization or on an individual basis, as freelancers. In the case of knowmads, the RESK model (Rational-Emotional-Spiritual Knowledge) of KD (Bratianu, 2015) elucidates how these components influence decision-making processes. Knowmads constitute a distinct category of knowledge workers, both independent and dynamic. They are cognizant of and actively utilize the KD in their work. They comprehend that the three knowledge components in multicultural settings vary according to each individual’s culture. Knowmads working in MBEs must grasp this reality if they aim for success. This underscores the strength of the RESK model (Bratianu, 2015; Bratianu & Bejinaru, 2019; 2020). The RESK model is based on the energy metaphor and the theory of thermodynamics. In this sense, knowledge is perceived as an energy field composed of three fundamental forms: rational knowledge, emotional knowledge and spiritual knowledge. Each form of knowledge can be transformed into another form, thus generating an iterative and interactive dynamic.

Rational knowledge (RK) is the result of rational thinking, and it is objective because it is based on reflection and logical thinking. RK is the foundation of science and technology; it is concentrated in formal education due to its property of being expressed in a natural or symbolic language, it is used in the process of solving problems, and it is widely used in economics and management (Nonaka & Takeuchi, 1995; 2019). Developing CQ means understanding and integrating this RK in the context of cultural diversity (Paiuc, 2021a, 2021b, 2024). RK plays a central role in the workplace and in the decision-making process of knowmads with managerial or non-managerial positions.

Emotional knowledge (EK) is subjective because it is based on our sensory system and perception as a cognitive process. EK exists without words but plays a significant role in problem-solving processes (Hill, 2008). EK is also fundamental in motivating people and stimulating their contribution to innovation (Kahneman, 2011). Improving CQ involves recognizing and managing emotions within the team and facilitating effective communication and cooperation in MBEs (Iliescu, 2021a). Considering the knowmads decision-making process, EK directly influences emotional intelligence and competencies, as Goleman (1998) argued. For instance, when time pressure and information scarcity prevail, managers rely on emotional knowledge like intuition or intuitive decision-making, drawing on past experiences and pattern recognition (Andersen, 2000; Kahneman, 2011; Matzler et al., 2014). However, intuition is only sometimes reliable due to various psychological phenomena (Gladwell, 2010), requiring validation by rational thinking. Despite appearing logical and sequential, intuition is nonlinear and emotion-based, generating EK (Bratianu, 2015).

Spiritual knowledge (SK) is a result of culture and spirituality and is the main component of the spiritual capital of any organization (Zohar & Marshall, 2004). Values constitute the framework of reference for problem-solving and organizational behaviours (Schein, 2004). Values are essential in defining managerial objectives and in developing appropriate policies and strategies to achieve these objectives (Copeland, 2014). SK plays a crucial role in shaping organizational culture and fostering organizational justice. Concerning knowmads, SK has become a significant factor in decision-making, particularly within the realms of corporate social responsibility and transformational leadership (Barrett, 2010; Lange and Washburn, 2012).

We argue that KD can contribute to the adaptation and continuous learning of knowmads in a culturally diverse context, thus reinforcing CQ as an essential competency in today’s business environment. We emphasized that knowledge can be considered energy fields, and its dynamics involve the transformation between different forms, such as rational, emotional and spiritual knowledge. In this sense, mastering KD throughout the RESK model can lead to the development of cultural intelligence of knowmads in MBEs. On the other hand, exploring the concept of CQ highlights how it is perceived and valued among knowmads. Contrary to the importance traditionally given to intellectual quotient, cultural intelligence is perceived as the primary form of intelligence among knowmads.
3. DATA SOURCE AND METHODOLOGY

3.1. Bibliometric research

We have deployed a bibliometric methodology, with additional support from VOSviewer (Van Eck & Waltman, 2021), to achieve the goals of our first-stage research. By employing bibliometric techniques, we can quantitatively examine the academic contributions in the fields of intelligence assessments, types and drivers, and knowmad phenomenon, enabling a thorough evaluation of the available literature. The utilization of VOSviewer enables us to visually depict and analyze the interconnections among scholarly publications, authors, and keywords, shedding light on the structure and progression of the research domains under investigation and their associations.

The data was captured on December 03, 2023, from the Scopus database, which is recognized as one of the largest databases that curate abstracts and citations, providing extensive coverage of scientific journals, conference proceedings, and books on a global and regional scale (Baas et al., 2020) as presented in Table 1. The retrieval process employs a standard search function, and the research timeframe encompasses the typical period from the platform’s launch to the beginning of December 2023. All additional retrieval contexts have been set to Scopus's default and conventional values.

The first searched expression is “intelligence assessment”, from 1954 till December 2023, and 2579 returned results. “Knowmad” was the second researched parameter, with a more recent time span: 2012-December 2023 (55% of the results being registered in 2020-2023 and underlining the actuality of the concept); and 76 found records.

<table>
<thead>
<tr>
<th>Researched expressions in Scopus</th>
<th>Returned results</th>
<th>Researched fields</th>
<th>Time span</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence Assessment</td>
<td>2579</td>
<td>all fields</td>
<td>1954 till 03.12.2023</td>
</tr>
<tr>
<td>knowmads</td>
<td>76</td>
<td>all fields</td>
<td>2012 till 03.12.2023</td>
</tr>
</tbody>
</table>

Materials from Scopus featuring full record data were exported under CSV files – including citations, bibliographical details, abstracts and keywords, funding, and other information. VOSviewer, with its version 1.6.20, released on October 31, 2023, which also supports creating maps based on data exported from Scopus in the new Scopus file format, was employed to investigate and visualize keywords’ co-occurrence, starting from the above-mentioned plain CSV files and utilizing a full counting method.

This visualization technique enables us to gain insights into the relationships and patterns within the mentioned dataset. By analyzing the co-occurrence of keywords or terms, we can identify important concepts that are frequently mentioned together and the ones that rarely appear in the same context. This assists us in understanding the underlying themes and connections in our research area, providing a foundation for four quantitative analyses.

In Vosviewer’s maps, nodes, lines, distance, and line thickness are essential elements that help represent the relationship between keywords and terms. Nodes represent individual concepts, while lines connect nodes that frequently co-occur. The distance between nodes indicates the strength of their relationship, with closer nodes pointing to a stronger association. Line thickness signifies the frequency of co-occurrence, with thicker lines corresponding to a higher frequency (Arruda et al., 2022).

3.2. Quantitative research

3.2.1. Data source for the questionnaire

Our study also conducted quantitative research by analyzing 309 completed questionnaires answers (Table 7, in the Appendix).
The data collection process involved using a Google Form questionnaire-based survey targeting online social media platforms and personal connections. There was also a 20% snowball effect support, where respondents were encouraged to share the survey with their contacts. Questions were rooted in the own and knowmads’ main intelligence assessment and data was collected between September 2023 and December 2023. We have gathered 309 valid answers from all over the world. When all factors were considered, and no data was missing, the valid response recovery rate achieved was 78.22%. This means that out of a total of 395 answers received, 309 of them were deemed valid and satisfactory. So, 78.22% of the responses received met the criteria set for validity. This indicates a successful outcome in terms of collecting accurate and complete responses for our survey.

We proposed nine demographic interrogations and three intelligence assessment-targeted questions in order to assess and quantify the main intelligence form sequence in respondents’ evaluations.

### 3.2.2. SPSS analysis

In our study, we used IBM SPSS Statistics 25 (SPSS 25) software, a well-regarded and robust social science research tool for statistical analyses. SPSS 25 is highly regarded for its user-friendly interface and efficient handling of large datasets, making it an ideal choice for our research that involves numerous variables and categories (Pallant, 2007).

To analyze the connection between categorical variables, we utilized the Chi-Square test. This test is suitable for examining the relationship between two nominal variables. It involves comparing the observed frequencies in each category to the expected frequencies, assuming no association between the variables. We chose to utilize the Chi-Square test because it is a non-parametric test. Furthermore, it is generally recommended that all expected cell frequencies be greater than 5 to ensure the test has sufficient power. This adherence to the rule of thumb was based on the work of Yates, Moore, and McCabe (Yates et al., 1999; Moore, 2011).

### 3.2.3. SmartPLS analysis

SmartPLS 4 version 4.0.9.6 uses regression analysis, which is warranted given its ability to manage complex models and perform well in theoretical testing and predictive modelling (Hair et al., 2017; Rigdon, 2016). As a variance-based structural equation modelling approach that emphasizes prediction, SmartPLS (Partial Least Squares-Structural Equation Modelling) is particularly useful in exploratory research where the theory is still being developed (Hair et al., 2017). Unlike covariance-based SEM, SmartPLS does not require large sample sizes or normally distributed data, which makes it more flexible and accessible. Furthermore, this adaptability is emphasized by Joseph F. Hair Jr., who states that PLS-SEM is ideal for complex models since it can handle formative and reflective aspects with fewer restrictions (Hair et al., 2017).

Furthermore, the regression analysis features of SmartPLS 4 are effective at identifying correlations between variables, particularly in cases where such associations are opaque. Rigdon (2016) asserts that PLS-SEM is better for theory building and extension since it employs regression analysis for evaluating the direct, indirect, and total effects in models (Rigdon, 2016). According to Sarstedt et al. (2014), the bootstrapping technique is an essential component of SmartPLS, making it more straightforward to assess these correlations' importance comprehensively. This method provides a non-parametric approach to evaluating hypotheses (Sarstedt et al., 2014).

Consequently, SmartPLS 4 was employed in the study to evaluate the last research hypotheses. The importance of these hypotheses has been tested using regression analysis (Hair et al., 2017). The study used a 5% significance level with a 95% confidence interval; therefore, the t-value should be higher than +1.96, and the p-value should be lower than 0.05 to reject null hypotheses (Sarstedt et al., 2014).
4. RESULTS AND DISCUSSIONS

4.1. Results of the bibliometric analysis

In the methodology chapter, we have explained that the co-occurrence process utilized by VOSviewer to detect specific keywords appearing together is indicative of the current areas of high interest within our "intelligence" and "knowmads" researched fields. In all the 2579 "intelligence assessment"-related publications, we identified 9908 keywords altogether. Of them, 699 keywords showed up a minimum of 5 times and met the threshold, which accounts for 7.05%. Much more limited by existing specific literature, the "knowmad" search, with its 76 results, accumulated 438 keywords. Only three keywords met the threshold of 5 as a minimum number of occurrences of a keyword, and only 50 met the more relaxed threshold of 2. In this context, we were forced to accept the total 438 keywords with a threshold of 1 (328 linked together) in order to maximize relevance. Table 2 displays the results of the co-occurrence analysis of our keywords, which formed the basis for our bibliometric analysis.

<table>
<thead>
<tr>
<th>Researched expressions</th>
<th>Results [Scopus]</th>
<th>Number of keywords [VOSViewer]</th>
<th>Keywords meeting the threshold for a minimum number of occurrences of a keyword of 5</th>
<th>Keywords meeting the threshold for a minimum number of occurrences of a keyword of 2</th>
<th>Keywords meeting the threshold for a minimum number of occurrences of a keyword of 1</th>
<th>Selected number of keywords as per VOSviewer suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>intelligence assessment</td>
<td>2579</td>
<td>9908</td>
<td>699</td>
<td>n/a</td>
<td>n/a</td>
<td>699</td>
</tr>
<tr>
<td>knowmads</td>
<td>76</td>
<td>438</td>
<td>3</td>
<td>50</td>
<td>448</td>
<td>448</td>
</tr>
</tbody>
</table>

The general bibliometric map for intelligence assessment is displayed in Figure 1.

As represented by Figure 1, the intelligence assessment focuses on its three main vectors: intellectual intelligence, emotional intelligence and cultural intelligence – all explicitly underlined in the above bibliometric map.
Table 3 details the regrouping and consolidation of the vectors of intelligence. The total link strength of the "intelligence assessment" map is 93384. Intellectual intelligence – represented by wordings and expressions such as IQ, Wechsler intelligence scale (Maharani et al., 2021), or intellect has the most significant link strength share of 5.05%. Second in place, with a share of only 2.12% - is emotional intelligence backed by emotion/s and interpersonal sensitivity. In the third position, we found cultural intelligence with only a 0.37% link strength share in the total. At this phase, our first research question is answered.

<table>
<thead>
<tr>
<th>Regrouped under:</th>
<th>Link strength</th>
<th>Link strength share in total &quot;intelligence assessment&quot; link strength of 93384</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural intelligence</td>
<td>17</td>
<td>0.37%</td>
</tr>
<tr>
<td>Cultural factor</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Cross-cultural comparison</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>730</td>
<td>2.12%</td>
</tr>
<tr>
<td>Emotion/s</td>
<td>608</td>
<td></td>
</tr>
<tr>
<td>Emotion regulation</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Interpersonal sensitivity</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Sensitivity and specificity</td>
<td>528</td>
<td></td>
</tr>
<tr>
<td>Intellectual intelligence</td>
<td>1318</td>
<td>5.05%</td>
</tr>
<tr>
<td>Intellectual impairment/disability</td>
<td>1138</td>
<td></td>
</tr>
<tr>
<td>Critical thinking</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Judgement</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>Mental capacity/performance/test</td>
<td>563</td>
<td></td>
</tr>
<tr>
<td>Mental deficiency/complex problem solving</td>
<td>372</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>594</td>
<td></td>
</tr>
<tr>
<td>Knowledge dynamics</td>
<td>96</td>
<td>0.21%</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Knowledge base systems</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Knowledge management</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

At this stage, using the bibliometric analysis, we have demonstrated that the most relevant and utilized form of intelligence is IQ, followed by EQ in second position and CQ in third.

Also, knowledge dynamics – accounts for 0.21% of the total link strength and serves as a catalyst and enabler of the above three intelligence concepts (Bratianu & Paiuc, 2022).

Figure 2 reflects the “knowmads” bibliometric map as analyzed by VOSviewer. As visualized in figure 2, CQ, EQ and IQ are also represented on the knowmad’s bibliometric map, which has a total link strength of 2672.

However, according to Table 4, the main knowmad’s portraited intelligence is CQ, fueled by expressions such as cultural intelligence, culture blending or intercultural competence/s – and having a 2.88% share in the total map’s link strength. In the second position, we find EQ with a share of 1.2%, while IQ is placed only in third place with a 0.94% share, so the second research question is answered.

This proves that knowmad’s main intelligence is CQ, followed by EQ and IQ in the third and last position. The research question is also answered at this bibliometric analysis stage. Knowledge dynamics, powered by expressions such knowledge transfer or knowledge management – plays a pivotal role, much more developed in knowmads’ case, accounting for a share of 3.03% in the total link strength, and answering our third research question, backed by also (Bratianu & Paiuc, 2022).
4.2. Results of quantitative research

4.2.1. Results of the SPSS analysis

Table 5 examines the respondents' self-perception of the main intelligence type in parallel with their estimated knowmads the main intelligence form.
There is a significant pattern in the alignment with KNOWMADS’ intelligence types (Chi-Square = 12.955*). Respondents identify Cultural intelligence as the dominant KNOWMADS intelligence type (56.0%). This supports the hypothesis that Cultural intelligence is highly valued among Knowmads, consistent with their need to navigate diverse cultural landscapes (Ang & Van Dyne, 2008). On the second estimated position, our respondents identified EQ. On the third, IQ – as the main intelligence form of knowmads – and in this way, we have also answered our third research question via SPSS.

On a more exciting note – when analyzing the answers from the 40 respondents who identified themselves as knowmads – we have directly confirmed our two first research questions. As per below figure – 47.5% of the knowmads positioned IQ as their main intelligence form, 37.5% CQ and 15% EQ.

However, the 40 knowmads, reinforcing the findings from our first research question – estimate that the first intelligence form of the knowmads in general, should be CQ (65%), followed by EQ (22.5%) and IQ (12.5%) as reflected by below figure.
This might be explained by the societal stigma and bias of IQ, which is portrayed as one of the key success factors in personal, family, academic, and professional life (Mishra, 2022). That is also why the utilization of IQ tests across various contexts and the ongoing debate surrounding their validity and ethical implications shed light on society’s strong emphasis on intellect and our quest to comprehend, quantitatively assess it and brag with the results (Martschenko, 2018).

4.2.2. Results of the SmartPLS analysis

In order to answer our research question number 4, we will analyze via SmartPLS the relationships that describe own respondents’ intelligence driver/s in conjunction with the intelligence type that most reflects knowmads’ quotient and with the knowmadism desire.

The regression analysis exploring the relationship between individuals’ perception of their intelligence, their view on the intelligence that best describes knowmads, and their dream of being a knowmad reveals some intriguing patterns. The standardized coefficient for one’s own intelligence is [0.071], with a T value of [1.261] and a P value of [0.208]. This indicates a mild positive relationship between how individuals perceive their own intelligence (whether it be Cultural Intelligence, Emotional Intelligence, or Intellectual Intelligence and their aspiration or dream of being a knowmad. However, the significance level (P value) suggests this relationship is not strong enough to be considered statistically significant. This could mean that while there is a slight tendency for individuals who rate their intelligence highly to aspire to the knowmad lifestyle, this is not a decisive factor. So, research question number 4 is answered.

In contrast, the perception of the intelligence that best describes knowmads (CQ, EQ, or IQ) has a stronger and statistically significant relationship with the dream of being a knowmad, as indicated by a standardized coefficient of [0.114], a T value of [2.016], and a P value of [0.045] – as presented in Table 6. This suggests that individuals who believe that a specific type of intelligence is predominant among knowmads are likelier to aspire to this lifestyle. It reflects that the perceived intelligence traits of knowmads - be it their cultural adaptability, emotional acumen, or intellectual capabilities - play a more influential role in shaping individuals' aspirations to adopt a knowmad lifestyle. In essence, the qualities that people associate with knowmads, whether the ability to adapt culturally, manage emotions effectively, or think and reason intellectually, are key in determining their desire to emulate this way of life.
In Figure 5, below, is the model for the last two research questions:

At this stage the last two research questions were answered, enhancing on the correlation between the perception of intelligence, whether it is measured by CQ, EQ, or IQ, and the aspiration to become a knowmad is stronger and statistically significant.

Despite considering IQ their main intelligence for, 72% of the respondents considered, thought or dreamed of becoming a knowmad – that is considered by same survey participants to be driven by CQ (65%). This enhances the key role of CQ in developing multicultural leadership and fulfils next-generation work-life balance expectations.

5. CONCLUSIONS, POSSIBLE LIMITATIONS, AND FUTURE DIRECTIONS

In a world where digital leadership is becoming the norm (Klein, 2020; Paiuc & Iliescu, 2022), this study sheds light on the prominence of Cultural Intelligence as the primary form of intelligence among knowmads, alongside Emotional Intelligence and Intellectual Intelligence. While IQ remains the most relevant and commonly utilized form of intelligence overall, the findings emphasize that CQ emerges as the dominant intelligence among knowmads.

The alignment between intelligence types and knowmads is supported by statistical analysis, suggesting that Cultural Intelligence holds significant value in navigating diverse cultural landscapes, which is essential for knowmads operating in globally interconnected environments. Additionally, these findings challenge societal biases and the emphasis on IQ by highlighting the importance of other forms of intelligence, especially CQ and EQ.

It is worth noting that individuals’ self-perceived intelligence is not a decisive factor in driving the aspiration to become knowmads. However, their perception of the intelligence that best characterizes knowmads (CQ, EQ, or IQ) significantly influences their aspirations to adopt a knowmad lifestyle. This highlights the role of intelligence traits associated with knowmads in shaping individuals’ aspirations and decisions.

The study reveals the significance of Cultural Intelligence as a key asset for developing multicultural leadership skills and meeting the next generation’s expectations. It also emphasizes the need to prioritize work-life balance in the knowmadic lifestyle. Future research can focus on exploring the practical implications of these findings and further developing strategies to prepare individuals for the challenges and opportunities presented by the knowmads' way of working and living.
Limitations of the study include small sample size and the reliance on self-reported data, which may introduce bias. Further research could address these limitations by using larger and more diverse samples and incorporating objective measures of cultural intelligence, emotional intelligence, IQ and work-life balance.

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CULTURAL INTELLIGENCE: A CORE COMPETENCE OF KNOWMADS IN MULTICULTURAL BUSINESS ENVIRONMENT


**Appendix (the questionnaire)**

Please read the below definitions before answering the survey - and only when acknowledged - start answering:

Knowmad = a digitally connected, nomadic professional who leverages technology to work and collaborate from various places or geographies.

Cultural intelligence = the ability to understand and adapt to different cultural norms and behaviours.

Emotional intelligence = the ability to understand and manage one’s own and others’ emotions and effectively navigate interpersonal relationships.

Intellectual intelligence = the capacity to think, reason, problem-solve, and acquire knowledge through logical and analytical thinking.

**TABLE 7 - THE QUESTIONNAIRE**
## Description of variable | Coding instructions
---|---
1. Gender: | Male=1, Female=2, Non-binary=3
2. Age: | 18-25= 1, 26-40 =2, 41-60= 3, >61=4
3. Geography (actual living continent): | Europe = 1, Asia =2, Africa= 3, North America = 4, South America = 5, Australia=6
4. Education level: | High School only = 1, University graduate =2, Master Graduate= 3, PhD graduate = 4
5. Employment status | Full-time employee = 1, Part-time employee = 2, Entrepreneur OR self-employed (but no KNOWMAD) = 3, KNOWMAD = 4, Student = 5, Unemployed =6, Retired = 7.
6. Main sector of activity | Retail=1; Production =2; Trade =3; Services =4; Other =5
7. Do you have more than one source of revenue? | Yes= 1, No =2, Prefer not to say =3
8. Number of spoken languages: | One=1, Two= 2, Three=3, More than 3 = 4.
9. Number of countries in which you worked: | One=1, Two= 2, Three=3, More than 3 =4
10. Which of the 3 intelligences describes YOU the best: | Cultural intelligence = 1, Emotional intelligence = 2, Intellectual intelligence = 3
11. Which of the 3 intelligences describes KNOWMADS the best: | Cultural intelligence = 1, Emotional intelligence = 2, Intellectual intelligence = 3
12. Have you ever considered, thought or dreamed (at any time) of becoming a KNOWMAD? | Yes = 1; NO = 2.