

Master Universitario en Gestión de Recursos Humanos, Trabajo y Organizaciones

Trabajo Fin de Master

Curso: 2022/2023

Convocatoria: Junio



Orientación: Revisión Bibliográfica / Literature Review

Título: El funcionamiento de los Global Virtual Teams (GVT) en proyectos de consultoría internacional: revisión de la literatura / The Dynamics of Global Virtual Teams (GVT) in international consultancy projects: a literatura Review

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Elche a 6 de junio de 2023

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Resumen / Abstract

(200 palabras)

La literatura ha estudiado ampliamente el funcionamiento y la dinámica de los equipos de trabajo. Sin embargo, existe una brecha sobre las características y el funcionamiento en los equipos de trabajo virtuales. Además, y tras la pandemia del Covid-19, los equipos de trabajo virtuales se han globalizado, permitiendo la ampliación de su ámbito. De este modo, los equipos de trabajo virtuales han facilitado la dispersión geográfica, temporal y social de sus integrantes y, por lo tanto, su internacionalización. Este trabajo tiene como objetivo la revisión de la literatura sobre los equipos virtuales globales (GVT) en proyectos de consultoría internacional. Se revisan 118 artículos científicos y se propone una clasificación de los equipos de trabajo en cuanto a características de los equipos, dinámicas, actividades y rendimientos. Se extraen conclusiones e implicaciones para la investigación y para la práctica.

Palabras clave: Equipos Globales Virtuales, Equipos multiculturales, Procesos de equipos virtuales, revisión de la literatura

While much has been covered in the literature regarding the workings and the dynamics of teams, much less is known about the characteristics and the workings of virtual teams. The Covid-19 pandemic amplified the globalization of virtual teams, while they simultaneously became more common in an increasing range of disciplines. Global virtual teams have enabled individuals to collaborate despite wide ranging geographic, temporal and social dispersion. The focus of this literature review is on global virtual teams (GVT) as applied to international consultancy projects. Based on an analysis of 118 academic articles, a conceptual framework is developed that incorporates team characteristics, team activities and dynamics, and team performance. Conclusions and implications for future research and practice are extracted.

Key Words: Global Virtual Teams, GVT; Multi-cultural teams, Virtual team processes, Literature Review

1. Introducción/Introduction

The overriding objective of this work is to understand the state of the art with respect to the dynamics of global virtual teams (GVT) in international consultancy projects. Pre-pandemic, a significant proportion of such projects were delivered in-country, with only some of the supporting phases handled virtually. Post-pandemic, the virtual component of this type of project has remained high and some projects continue to be delivered almost 100% virtually. What characterises these GVT and how do they operate? What are the key factors that influence team dynamics? What does a well performing GVT look like? Since global virtual teams have become ubiquitous in recent years and are created for a range of purposes, we focus our enquiry on GVT in the context of international consultancy projects, where individual consultants are brought together for a specific assignment for a limited period of time and disbanded after the project. They are ad-hoc, as opposed to the intact teams characterised by a stable membership over an indefinite lifespan (Brown et al, (2021).

Much of the literature focuses on global virtual teams in an organisational setting, frequently a multinational, often involving team members from different business units or divisions (Pangil & Moi Chan, 2014). This provides an institutional structure within which pre-existing hierarchies and loyalties can influence the dynamics of virtual teams (Dulebohn & Hoch, 2017). International consultancy projects typically bring together a multidisciplinary and multicultural team of independent consultants, usually without prior experience of working together, under the aegis of a consultancy company that manages the project and the client relationship, as a result of which the institutional structure associated with GVT embedded in an organisation is absent.

Another stream of research in the literature focuses on teams of master or graduate students working on practical assignments in global virtual teams, often for a “client” organisation to which they have no prior connection. Gibbs et al (2017) notes that the characteristics of GVT in an educational setting differ from those in organisations, leading to differences in team processes and dynamics. The independence of team members in the international consultancy setting, together with the essentially transient, project focused nature of their work, means they have some elements in common with this type of GVT. This is especially the case when one considers that a significant proportion of the student team members come from different disciplines and different cultures, have work experience, and generally have no prior knowledge of their team members. Motivation to perform in these GVT derives from the fact that the assignment usually contributes significantly to their overall grade.

To the best of the author’s knowledge, there is no body of literature that specifically addresses the dynamics of ad-hoc professional teams in the context of international consultancy projects. However, drawing from the two streams of the existing literature provides a sufficient basis for the development of a framework that can subsequently be used to guide more in-depth empirical research.

The rest of this paper is structured as follows. First, the concept of GVT is defined and a theoretical framework is used to structure the literature review, focusing on: key GVT characteristics and how

they interact with one another; key aspects of GVT day-to-day functioning; and GVT performance. Following a brief overview of the methodology employed for the literature review, the key factors drawn from the literature are integrated into an IPO-inspired framework in Figure 3. The final section provides conclusions, briefly discusses limitations and implications for research and practice.

2. Marco Teórico/Theoretical Framework

Given our interest in the dynamics of virtual teams, the identification of key groups of factors, potential relationships among them, and the characterisation of the dynamic processes within virtual teams, the literature search initially focused on identifying relevant conceptual frameworks or models to guide the analysis. The input-process-outcome (IPO) framework, originally developed by Hackman and Morris¹, considers initial conditions (inputs), such as the characteristics of the team and its members; processes that take place within the team (processes), and results or performance (outcomes), and is used by Magnusson et al. (2014) and Dulebohn & Hoch (2017). Other authors have adapted the framework, including Han & Beyerlein (2016), who subdivide processes into socioemotional and task related. Marlow et al. (2017) and Wei et al. (2018), following Ilgen et al (2005)², focus on interactions among inputs and processes. Schulze & Krumm (2017) and Gilson et al. (2015) further extend the IPO framework to incorporate mediators and moderators. This work takes the IPO approach as its starting point for the development of the conceptual framework.

GVT are characterised in different ways, as identified by a content analysis of definitions of virtual teams from 265 articles published between 2006 and 2014 (Orhan, 2017). The most frequently cited characteristics of GVT were technology mediated interactions and the geographic dispersion of team members. Temporal dispersion of members and minimal or no face-to-face interaction were also relatively common. More recent authors continue to highlight the geographic dispersion of members (Belbaly et al, 2022; Davaei et al, 2022, Flavián et al, 2022; Johnson et al, 2022; Lauring et al, 2022), temporal dispersion (Flavián et al, 2022; Lauring et al, 2022), and technology mediated interactions (Belbaly et al, 2022; Davaei et al, 2022, Flavián et al, 2022, Gilli et al, 2022; Handke et al, 2022; Johnson et al, 2022; Lauring et al, 2022). Authors also highlight the diversity of team members, based on a combination of the following characteristics: functional, national, cultural and linguistic (Belbaly et al, 2022; Davaei et al, 2022, Gilli et al, 2022; Lauring et al, 2022). Some authors acknowledge the structural flexibility of GVT (Flavián et al, 2022), their project focus and temporary nature (Flavián et al, 2022, Gilli et al, 2022). Although there is still no consensus on the definition of GVT, there is a degree of convergence on a limited number of key dimensions. Bearing in mind the

¹ Magnusson et al (2014) draw on the IPO framework originally developed by: Hackman, J. R., & Morris, C. G. (1975). Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. *Advances in experimental social psychology*, 8, 45-99.

² Marlow et al (2017) build their model focusing on communications in virtual teams from Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annu. Rev. Psychol.*, 56, 517-543.

focus of this paper, the following definition of GVT is adopted: *ad-hoc, flexible teams whose members are diverse; geographically, temporally, socially, culturally and linguistically dispersed; and who interact with information and communications technologies to work towards common goals.*

Key Characteristics of Global Virtual Teams (Team Characteristics)

Team Diversity. GVTs tend to be more heterogeneous than their co-located counterparts (Marlow et al., 2017), particularly as regards nationality (Kirkman et al., 2016; Tavoletti et al., 2022) and culture (Kirkman et al., 2016; Klitmøller & Luring, 2013; Kramer et al., 2017). Diversity occurs on multiple dimensions, including surface, deep and functional (Pinjani & Palvia, 2013). Surface level diversity is based on demographics, while deep level diversity relates to personal characteristics, such as personality traits (Dennis et al., 2022; Flavian et al., 2019). Findings on the impact of personality traits are mixed, with extroversion positively associated with trust in the team leader, which in turn increases commitment to the team (Flavian et al., 2019). However, (Dennis et al., 2022) found that a higher mean score of team extroversion had a negative impact on team performance. Functional diversity derives from the professional background of team members and underpins their respective areas of expertise (Pinjani & Palvia, 2013), skills and abilities (Schulze & Krumm, 2017), including emotional and cultural intelligence (Davai et al., 2022; Mangla, 2021). The degree of functional diversity among team members was found to foster innovation, but was moderated by the absorptive capacity of the team as well as team members' ability to collaborate (Batarseh et al., 2017).

Team Dispersion. Dispersion is most commonly interpreted as the geographic dispersion of team members (Avolio et al., 2014; Han & Beyerlein, 2016), but may also incorporate temporal dispersion, related to the number of time zones that team members work across (Avolio et al., 2014; Orhan, 2017) as well as social dispersion, based on the extent of the opportunities to engage synchronously, whether in person or virtually. Psychic distance is introduced into the virtual teams literature by Magnusson et al, (2014), and defined as "the aggregate of the subjective distances between countries as perceived by the members of the team. Psychic distance influences the perceived composite dispersion of the team. Kramer et al, (2017) propose that a team member's culture will impact how they experience virtual working, identifying key cultural dimensions that impact how team members ascribe value to information as well as their preferences in terms of virtual tool use and synchronous communication, all of which interact with the perception of psychic distance within GVT.

Technology. Technology is ubiquitous within the context of GVT, and may be considered an enabler (Avolio et al., 2014) or a set of electronic tools on which team members depend (Han & Beyerlein, 2016). A dimensional approach to conceptualising technology considers the increasingly sophisticated role of technology within a virtual team setting (Larson & DeChurch, 2020). At one extreme, technology is described as part of the context within which the GVT operates, potentially imposing constraints. There are two intermediate points on the continuum: one focusing on the state of interdependence between team and technology, the other, similar to Avolio et al, (2014) views technology as an enabler of team operations. At the other end of the spectrum, technology is conceptualised as a team-mate, impacting team performance. Media richness (Ben Sedrine et al.,

2021) availability of synchronous or asynchronous modes (Glikson & Erez, 2020) and real time communication (Altschuller & Benbunan-Fich, 2013) impact the role of technology within a GVT.

Key aspects of the day-to-day functioning of Global Virtual Teams (Team Activities)

Teams engage in both substantive (technical) work and support activities that enable the team to function. The role of these support activities is more pronounced in GVT.

Communication. The diversity and dispersion of ad-hoc GVT as well as the reliance on technology can complicate communication, particularly since the institutional context of an organisation is absent. Findings from the literature as they related to GVT communication are mixed, potentially due to the limited attempts to disaggregate the concept of communication into elements such as quality, frequency and content (Marlow et al., 2017). However, communicating relational content in early messages was found to positively affect the climate for asynchronous communication (Glikson & Erez, 2020), while team-focused rather than individual, objective feedback about performance and team processes was found to be important to the functioning of teams (Handke et al., 2022).

Leadership. Leadership of GVT, particularly ad-hoc teams, is different than traditional leadership. A participative leadership style (Gibbs et al., 2017) and a focus on relationships rather than tasks (Brown et al., 2021) have been linked to greater effectiveness in GVT. Multicultural brokers, whether they are leaders or not, contribute to improved knowledge sharing in GVT by identifying subgroups and mitigating any potential threats to team cohesion (Eisenberg & Mattarelli, 2017). The social capital and networks of team members may affect the locus of leadership (Avolio et al, 2014). Furthermore, it can be difficult to disentangle the co-evolution of e-leadership and the digital tools being used, as well as the extent to which e-leaders can mandate the choice of technologies (Avolio et al., 2014). This is likely to be more complex for independent ad-hoc teams, where access to and familiarity with different tools may vary widely, thereby creating another layer of complexity.

Transactional Memory Systems. Ad-hoc GVT members need additional mechanisms to build on effective communication, create a conducive working climate and better exploit their combined cognitive assets. The barriers to rapidly understanding the expertise of fellow team members and trusting in their credibility are greater in GVT, as a result of which they fail to leverage potential synergies. The creation of a Transactional Memory System (TMS), enables individual member specialisations and expertise to be mapped and better understood, leading to greater mutual respect as team members begin to recognise one another as credible contributors to the team (Belbaly Aissa et al, 2022). This is further underpinned by coordination to foster information, knowledge exchange and growing collaboration. Communication has been positively associated with better coordination and higher levels of credibility, with credibility in turn positively impacting on knowledge sharing within the GVT (Belbaly Aissa et al., 2022). At the same time, knowledge sharing among team members, also has a positive impact on trust (Alsharo et al., 2017). A willingness to share knowledge, critical to the exploitation of cognitive assets, was positively associated with higher cultural intelligence, cultural openness and self-efficacy among GVT members. Nonetheless, willingness was not

necessarily sufficient to translate into associated behaviours (Collins et al, 2017), with leadership or trust issues thought to be possible reasons for this mismatch.

Transition processes. The coordination activities that form part of the creation of the transactional memory system must be underpinned by a more strategic vision. Understanding how transition processes – goal identification, strategy formulation and planning activities – contribute to the effectiveness of GVT (Gilson et al., 2015) can fill this gap. Ad-hoc teams have been found to benefit from shared goals (Eseryel et al., 2021) and from explicitly focusing on how the team should work together (Johnson et al., 2022). Despite some positive associations with planning activities, teams spanning larger geographical and cultural distances and wider time zones were associated with a negative impact on the effectiveness of plans (Kiely et al., 2021). Gilson et al (2015) call for more research into transition processes, particularly in understanding the interaction of these activities in GVT as well as their potential impact on performance.

Key aspects of the day-to-day functioning of Global Virtual Teams (Team Dynamics)

The support activities outlined in the previous section both influence and are influenced by the interpersonal dynamics among team members, giving rise to the working climate of a GVT.

Trust. There is a significant level of agreement about the importance of team trust in Global Virtual Teams in the literature, conceptualised as “aggregated trust in the team shared among the team members” (Breuer et al., 2016). Trust has been found to mediate between leadership styles and performance (Ben Sedrine et al., 2021). However, “free-agent consultants in temporary employment relationships” operating virtually were considered to have reduced levels of trust and support³, indicating that the lack of a shared corporate context in ad-hoc teams may complicate the development of norms. Trust is important, not only for the smooth functioning of the team, but also because of its positive impact on information and knowledge sharing (Breuer et al, 2016). Considering that trust is an emergent state arrived at via “collective sensemaking about shared perceptions, attitudes and experiences”⁴, the use of explicit sensemaking strategies to develop shared mental models is posited to have a potentially beneficial effect (Maynard & Gilson, 2014). Cultural intelligence also has a positive impact on trust building (Mangla, 2021).

Team Cohesion. The relationship between team cohesion and team trust was highlighted by several authors (Ben Sedrine et al., 2021; Breuer et al., 2016; Wei et al., 2018). Developing shared mental models can not only foster trust but also lead to greater cohesion (Eseryel et al., 2021; Liao, 2017; Maynard & Gilson, 2014). Both transformational and transactional leadership styles are also positively associated with the development of aspects of cohesion (Ben Sedrine et al., 2021). The

³ Avolio et al, 2014, p115, quoting Merriman, K. K., Schmidt, S. M., & Dunlap-Hinkler, D. (2007). Profiling virtual employees: The impact of managing virtually. *Journal of Leadership & Organizational Studies*, 14(1), 6-15.

⁴ (Breuer et al, 2016, p.1152, after De Jong, B. A., & Elfring, T. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *Academy of Management journal*, 53(3), 535-549

observation that the members of very cohesive teams may be more inclined to conform (Wei et al., 2018) may suggest that highly diverse teams may require greater efforts to become cohesive, without losing the potential benefits, such as innovation and creativity, that diversity can bring.

Team Conflict. GVT diversity and the associated multiple identities of team members can lead to the formation of subgroups that coalesce around shared aspects of identity. Conflicts take different forms, and are most often categorised as related to tasks, processes or relationships. Conflict can impact team dynamics differently, and either positively or negatively (Davaei et al., 2022; Gibbs et al., 2021; Gilli et al., 2022). When subgroup identities within a team are felt to be under threat, knowledge sharing behaviour may reduce and conflict increase (Eisenberg & Mattarelli, 2017).

Performance of Global Virtual Team

Performance. A key output measure is team performance (Magnusson et al., 2014; Marlow et al., 2017). Bartelt & Dennis (2014) operationalise performance as decision quality, perceived effectiveness, and enjoyment. Some authors distinguish between individual and team performance (Dulebohn & Hoch, 2017; Gilli et al., 2022). Gilli et al (2022) assessed individual performance on the basis of communication, collegiality and the intellectual contribution of team members, while team performance was based on expert assessments of the main output of the team, in this case, reports produced. Criteria for assessing reports in the literature ranges from the quality of content and report format (Davaei et al., 2022; Eisenberg et al., 2021; Magnusson et al., 2014), the extent to which instructions were followed in the preparation of the report, the depth of analysis (Eisenberg et al., 2021), to the innovativeness and economic feasibility of the proposed solution (Davaei et al., 2022). Brown et al (2021) distinguish between external, objective performance scored by superiors on the basis of productivity or efficiency; and subjective assessments based on the opinions of GVT members. Similarly, Eisenberg et al (2019) combined stakeholder (external) and team member (internal) evaluations of performance. The former focused on whether the team was able to follow through on its plans, how many issues arose and whether management had to intervene, as well as the perceptions of the stakeholders. The latter used items such as whether expectations were met, innovation and timeliness of the team and an assessment of interactions.

Team activities, team dynamics and team performance. The appropriate use of computer mediated communication was found to be important, with a positive impact associated with medium levels of electronic portrayal and the ability to read others' message formulation in real time (Altschuller & Benbunan-Fich, 2013). Castellano et al, (2021) found that performance was affected by the impact of leadership styles, with Brown et al, (2021) establishing a positive association between both relationship focused and task focused leadership, and task performance. The relationship is not always direct, but found to be moderated by team size and task interdependence (Brown et al., 2021) and mediated by factors such as trust and commitment (Castellano et al., 2021). Ben Sedrine et al, (2021) also found the positive impact of transformational leadership on performance to be mediated by team trust and cohesion.

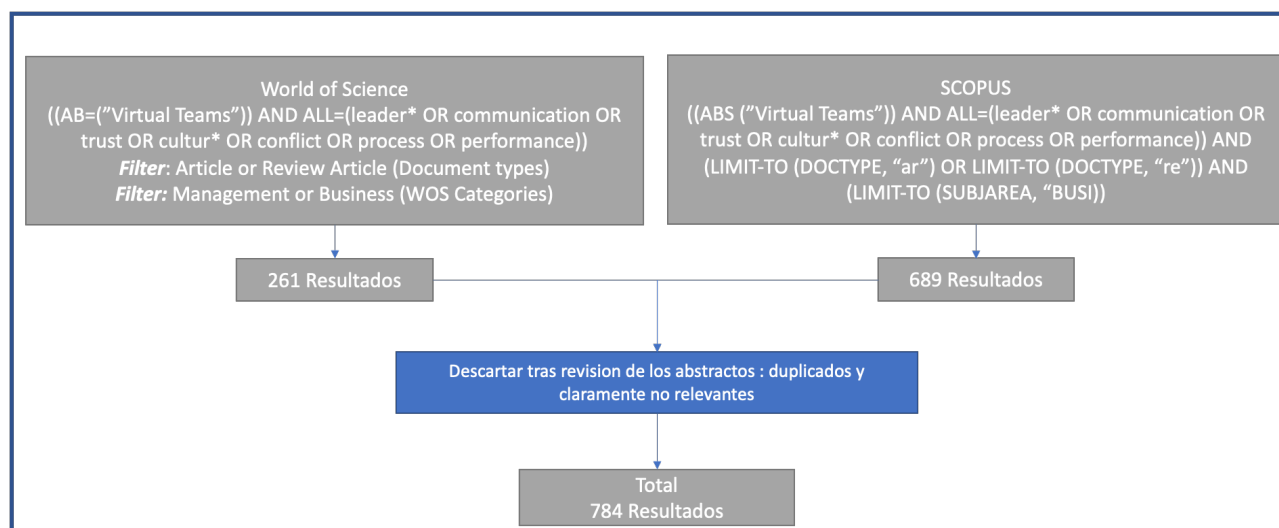
There is some evidence, albeit inconclusive, of both direct and indirect relationships between trust and performance. While Breuer et al (2016) found the relationship between team trust and effectiveness to be stronger in virtual teams compared to traditional co-located teams, Alsharo et al (2017) found no direct impact on the effectiveness of the team, although trust positively influenced collaboration. Carlson et al (2013) established a positive relationship between cohesion and team effectiveness, whereas Ben Sedrine et al (2020) found that operational cohesion and trust acted as mediators between leadership styles and team performance. Cultural adaptation and interpersonal trust were found to have a positive impact on performance (Chang et al., 2014). The presence of shared team mental models and task models were found to mediate the relationship between receiving feedback, reflecting on performance, and performance improvement (Konradt et al., 2015). Relationship (Liao, 2017) and process conflict (Davai et al., 2022) were found to be associated with a negative impact on team performance, whereas limited levels of task related conflict were found to potentially encourage diversity of opinions, leading to beneficial outcomes (Liao, 2017).

3. Metodología/Methodology

A systematised approach to a qualitative literature review was employed in order to examine what is known about the dynamics of global virtual teams. The review included theoretical papers, literature reviews as well as empirical studies. The previously identified variations on the input-process-outcome model provided a useful framework for the literature research, guiding the selection of key concepts. The initial literature search performed used both “global virtual teams” and the abbreviation GVT linked with the Boolean operator “OR”. The abbreviation GVT was subsequently removed as the search picked up a large number of irrelevant articles from a range of other disciplines. The word “global” was dropped from the “global virtual teams” as this had led to important articles being excluded because “global” was not included in the title or abstract. Initially studies from educational contexts were excluded, but this decision was subsequently reversed, since many of the articles focused on teams of professionals were grounded in a single organisational context. In contrast, many articles in the educational domain focus on graduate or post-graduate student teams working on practical assignments whose team members were usually from different universities, different countries and did not know one another. In this respect they share a number of characteristics with ad-hoc international consultancy teams.

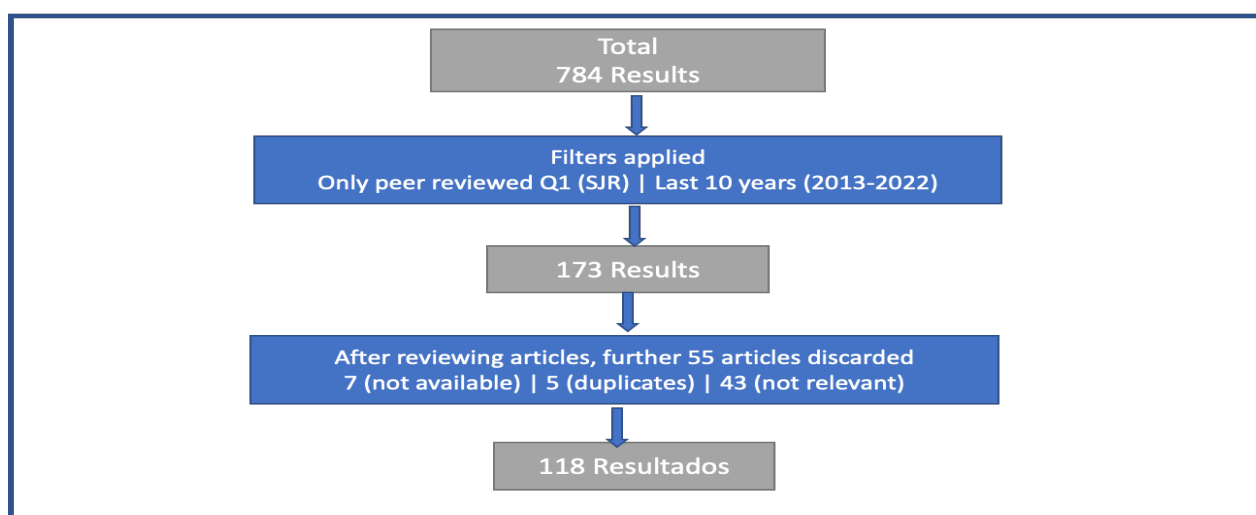
A revised literature search was performed, using both World of Science and Scopus, employing the search term “virtual teams” in the abstract, combined with one or more of the following terms using the Boolean operator “OR”: leadership, communication, trust, culture, conflict, process or performance in any field. To increase the chances of capturing different variations of the relevant terms, some of the terms were truncated. The search was limited to peer-reviewed journal articles. The two databases yielded a total of 950 results. Once duplicates and clearly irrelevant articles were discarded, 784 articles remained. Figure 1 provides an overview of the search.

Figure 1: Literature search



To reduce the number of articles to a more manageable number, two further filters were applied (see Figure 2). First, only journals classified as Q1 in the Scimago Scientific Journal Rankings (SJR) were selected. Second, a temporal filter was applied, covering the period 2013-2022⁵. This yielded 173 articles, the full texts of which were then obtained, using a combination of the platforms supported by UMH, as well as ResearchGate, Academia and Sci-hub, and direct requests to authors. These articles were skim-read in order to ascertain their relevance, and a further 55 were discarded, 43 as not relevant and 5 as previously undetected duplicates. The final 7 articles were not included as the full texts were unavailable, despite repeated attempts to obtain them. This left 118 articles for more detailed review.

Figure 2: Final Filter



The creation of a matrix permitted the capture of key data about each study, including bibliographic details about the paper, focus/objective, key concepts, theoretical bases, proposition/hypotheses, methodology or approach, data set, research context and paper type. Almost three quarters of the

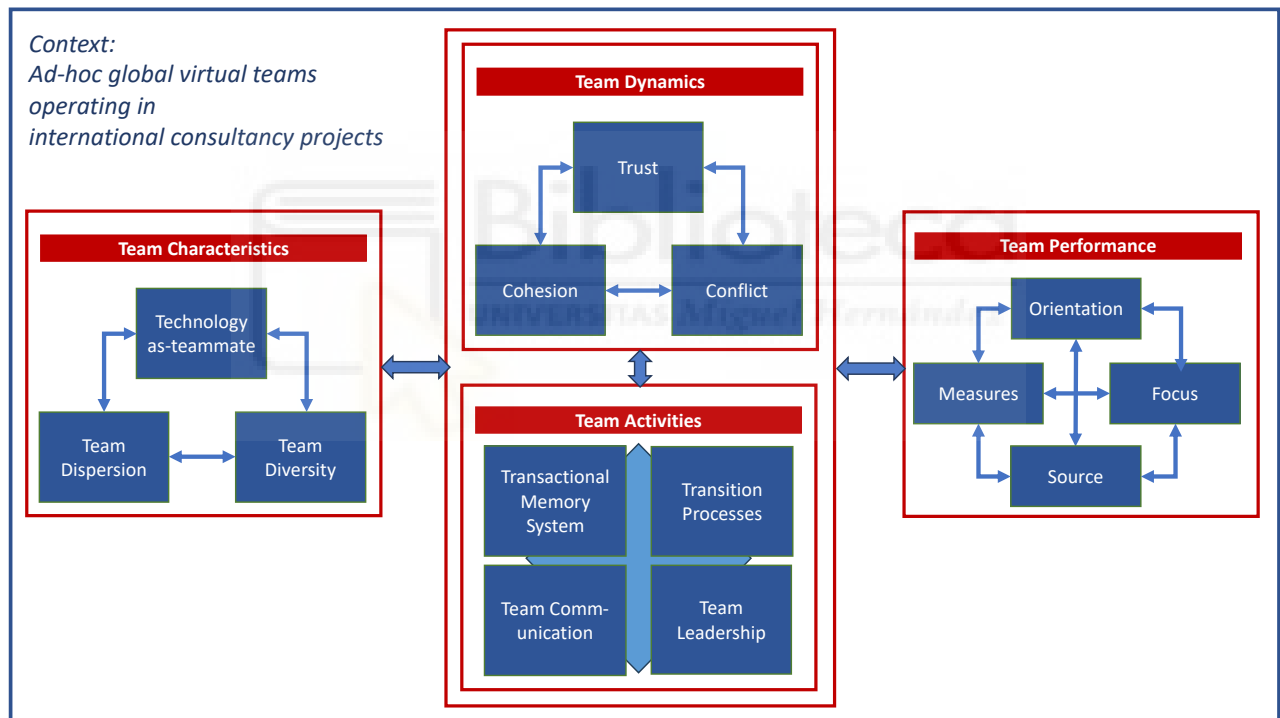
⁵ The search has a cut-off date of 31.07.2022.

final 118 articles were empirical in nature (74%). Of these, the majority employed quantitative methodologies (71%), followed at a distance by qualitative methodologies (16%) and mixed methods (11%). One paper based on an experiment used model building. The remaining quarter of the articles were fairly equally spread among conceptual (12%) and literature reviews (12%). Three papers were editorials providing an overview of the literature as an introduction to special editions of journals. These were included due to their contributions to structuring the field of study.

4. Resultados/Results

Figure 3 summarises the theoretical framework developed from the literature, adopting multidimensional and dimensional-composite approaches to conceptualising virtuality (Handke et al., 2020), and using the IPO model as an overall framework, with team characteristics (inputs), team activities and dynamics (processes) and team performance (outcomes).

Figure 3: Overview of Framework



Team Characteristics. Three team characteristics identified from the literature that distinguish GVT from their co-located counterparts are diversity, dispersion and the use of technology. These factors not only influence the way in which GVT work, but they also interact with and influence one another throughout the lifetime of an ad-hoc GVT. In order to be able to understand their impact, we unpack each factor further. First, we conceptualise diversity using the multi-level approach, including surface, deep and functional diversity (Pinjani & Palvia, 2013). Following the literature, dispersion is conceptualised as multi-dimensional, encompassing geographic, temporal, social, cultural and linguistic dispersion. Psychic distance (Magnusson et al., 2014) is incorporated in order to capture the importance of team member perception of the degree of composite dispersion, although more

research is needed to tease out the interrelationships among the dimensions. Technology is conceptualised as a team-mate, following Larson & DeChurch, (2020). The ubiquity and sophistication of technology surrounding GVT engaging in complex and knowledge intensive projects, together with recent advances in the evolution of artificial intelligence (AI) are further reasons for considering technology as more than a tool or an enabler.

Team Activities & Team Dynamics. Instead of considering team processes in the IPO model as a single black box, the framework focuses on two groups of factors: a set of four activities that team members engage in to support the functioning of the team, and three elements that reflect the state of team dynamics, denominated “emergent states” by Marlow et al, (2017). Key team activities are communication and leadership activities, the creation of transactional memory systems, and the implementation of transition processes (Gilson et al., 2015). Following Marlow et al, (2017), communication is broken down into frequency, quality and content. Leadership may take different forms, including transactional or transformational, shared or distributed. Both communication and leadership interact with technology, which influences channel choices and degree of synchronicity.

Communication and leadership are important to any team, but they have additional roles to play in GVT as more effort needs to be dedicated to facilitating effective team operations, particularly in ad-hoc teams not operating within an organisational structure. Spending time on the identification of the specialisations of team members and on coordination helps to foster mutual credibility and builds Transactional Memory Systems (Belbaly Aissa et al., 2022). Dedicating time to transition processes ensures members of GVT have a common direction, by focusing on goal setting, strategy formulation and planning. Additional research is needed to understand how these four sets of activities interact with one another and contribute to improving team dynamics.

Team Dynamics. Activities impact team dynamics. Key components of team dynamics are trust (Marlow et al., 2017; Wei et al., 2018), cohesion (Dulebohn & Hoch, 2017), and conflict (Davai et al., 2022). Of the three, trust is the most developed concept in the literature to date, although some of the relationships among all three states have been highlighted in the literature. Team activities and team dynamics interact, with further research necessary to understand how they contribute to the functioning of GVT.

Team Performance. The final link in the chain is team performance. The literature review has provided some insights into how performance is defined and assessed, predominantly focusing on satisfaction and quality of execution and outputs, rather than results or impact. The contextual nature of GVT performance emerges from the literature, as do a number of dimensions to consider when defining and planning to measure performance are: the focus, or level at which performance is to be measured (individual or team); the source of data with which to evaluate performance (internal or external); the orientation of the assessment (is it based on objective or subjective elements) and the type of measures to be used (qualitative or quantitative).

4. Conclusiones/Conclusions

Many of the studies reviewed focus on a limited number of concepts, such as trust, communication, culture, or leadership. The majority of the studies are quantitative in nature, seeking to establish relationships among different sets of concepts. Many of the conflicting findings in the literature are due to the differing contexts of the GVT under study (organisational vs educational), different types of teams (ad-hoc vs intact), variations in concept definitions, the selection of different variables used to generate hypotheses, and differing levels of analysis. Although the findings from the literature do provide a partial picture of the phenomenon, it is difficult to gain a real understanding of how GVT function. The literature does confirm that there is a high degree of interconnectivity among the different concepts, with some connections more explicit than others. Nonetheless, there are still calls for a better understanding of the interactions among the different elements (Gilson et al., 2015).

Qualitative research in this field has been much more limited. Furthermore, of the eight qualitative studies included in this review, only two were specifically focused on developing case studies. One focused on a 12 month case study of a virtual team, but with a relatively narrow focus on the impact of text messaging (Baralou & McInnes, 2013). A second case study was set in the IT service outsourcing industry (Cheng et al., 2021). A third study used the multiple-case approach to better understand leadership in 8 GVT within two global software companies (Nordbäck & Espinosa, 2019).

To date no study has focused on the type of GVT that informed the focus of this literature review: ad-hoc GVT undertaking complex, knowledge-based assignments in the international consultancy sector. This qualitative review of the literature has enabled confirmation of the gap in our understanding and the development of a conceptual framework (Figure 3) that can guide future exploratory empirical research, with a view to better understanding the factors that characterise ad-hoc GVT in international consultancy, the dynamics of such global virtual teams, and what distinguishes a well performing GVT.

Given the need to study the phenomenon in context in order to develop real insights, and the need for more exploratory research to help unlock the “black box” that currently characterises the functioning of ad-hoc GVT operating in international consultancy projects, it is suggested that future research be qualitative, with the unit of analysis one or more international projects, as a single case study, or multiple cases (Yin, 2018). The theoretical framework can be used as a starting point from which to develop key propositions for empirical testing and to guide exploratory case study research.

Limitations of the study. Time and resource constraints required a fairly focused approach to the selection of the literature, including the incorporation of temporal and quality constraints. Although they were not explicitly excluded from the literature review, publications in languages other than English were not proactively sought out. These shortcomings can be remedied with a more in-depth literature review using a systematic approach to fully identify the state of the art, using the conceptual framework as a starting point.

Practical Implications of the research. International consultancy for technical assistance is focused on supporting developing and transitional economies to reach the SDG. The rapid and radical changes in delivery of such projects, brought about by the switch to virtual means of delivery for significant components, created certain additional barriers to their efficient and effective implementation. If practitioners are able to overcome these barriers, the potential impact of projects will increase. Furthermore, optimising the balance of virtual and face-to-face components in the implementation of international development projects will reduce excessive travel and have a concomitant positive impact on the environment.

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