

# Culture-free vs. Culture-bound: Implementing Agile Working Methods in Multinational Corporations

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### Abstract

Since the publication of the Agile Manifesto, there is a growing interest among management researchers and practitioners in agile methods. The assumed benefits of agile methods have led many MNCs to adopt these methods on a firm-wide basis. From a culture-bound perspective, this is surprising, as the implementation of agile methods in MNCs requires consideration of the cultural profile of employees, as agile methods may not be suitable for all cultures. However, the cultural prerequisites for successfully implementing agile methods have thus far only been studied insufficiently. This lack of research raises the possibility that the adoption of agile methods by MNCs is influenced by management fashion. With this paper, we aim to investigate cultural profiles of employees that are favorable for the successful implementation of agile methods. Applying the GLOBE study, we check our propositions for both the cultural value and cultural practice scores in ten country clusters. Moreover, we run a literature analysis documenting the degree of cultural spread of research on agile methods. The respective results show no culture-bound effect; rather they can be interpreted as reflections of global academic interest in and promotion of agile methods. This culture-free character is typical of management fashion trends.

Keywords: agility; agile methods; agile workforce; cultural limits; GLOBE; national culture

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#### 1. Introduction

In a world shaped by volatility, uncertainty, complexity, and ambiguity (VUCA) the challenge faced by firms to adapt quickly to changing conditions is increasingly recognized as a pivotal issue for both business research and practice. In this context, organizational agility, the ability to rapidly identify market opportunities and to make use of them in an innovative way, is since the publication of the Agile Manifesto in 2001 increasingly referred to as a key capability (Magistretti & Trabucchi; 2024). Practitioners and scholars state that agile methods foster the democratization of decision-making processes, while also promoting greater employee autonomy and participation. It is expected that this will result in faster and better decisions being made by both team leaders and the team members, while also fostering higher levels of employee motivation. For example, an increasing number of companies are embracing collaborative work structures like "sprint teams", utilizing "design thinking processes" to develop new business models, and adopting more flexible frameworks for cooperation, such as "Scrum". The proposed benefits of agile methods, such as flexibility and higher motivation, have led many large organizations to adopt agile methods at scale (Dikert et al., 2016; Paasivaara *et al.*, 2018). The fact that in 2021 38 out of 50 Euro Stoxx listed firms mention agile methods in their annual reports, coupled with extensive coverage in the popular business press, underscores the growing popularity of this new way of working.

However, thus far there are no management research results demonstrating an improved performance of firms having adopted agile methods. In this respect, taking on a critical perspective, the promotion of agile methods can be seen as another outcome of management fashion. According to Abrahamson (1996, p. 254) "management fashion setters disseminate management fashions, transitory collective beliefs that certain management techniques are at the forefront of management progress". These fashion setters, such as consulting firms, management gurus, business mass-media publications, and business schools (Abrahamson, 1996; Piazza & Abrahamson, 2020), are actively contributing to the popularity of agile methods – quite often without knowing if their implementation will increase performance. Especially for MNCs following the management fashion of agile methods can be challenging as they employ a multicultural workforce and the culture-bound or culture-free character of agile methods has not been analyzed yet.

It remains unclear how agility can be effectively managed in organizations involved in cross-border activities and therefore are confronted with employees with diverse cultural backgrounds. There is a lack of research concerning the question whether all regions of the world are suitable for the implementation of agile working methods. Whether management methods can be transferred to any culture has been the discussed in the context of the culture-free vs. culture-bound debate for decades. While universalists (supporters of the culture-free hypothesis) argue for effective management to rely on universal principles, practices and know-how and thus to be transferable to any culture, culturalists (supporters of the culture-bound hypothesis) postulate management to be a function of culture itself (Holt, 2011). Although there are arguments for both perspectives, there is vast evidence of a diversity of values represented by employees from different cultural backgrounds, especially in the realms of comparative cultural studies (Hofstede, 2001; House *et al.*, 2004; Hofstede *et al.*, 2005). Therefore, it is reasonable to assume, that employees from different cultures face different challenges when being confronted with certain elements of agile working methods.

So far comparatively few studies (e.g. Ayed et al., 2017; Šmite et al., 2021; Gelmis et al., 2022) have been dedicated to the influence of the national culture on the successful application of agile methods. However, the issue of the cultural adaptability of agile methods is gaining significant importance as highlighted by De Koning & Koot (2019), who investigate the adoption of agile methods in 17 countries. The study reveals substantial variations in the adoption of agile methods across different countries: "When comparing the survey results between different countries, we have seen that countries differ widely in their adoption of Agile. Whereas one country is quickly adopting Agile [methods] in some countries more traditional methods are everyday business" (De Koning & Koot, 2019, p. 31). Therefore, agile methods and their implementation can be assumed to be culture-bound, thus their successful adaption is influenced by cultural factors. Thus, we pose the question which cultural preconditions underlie the successful implementation of agile methods. Furthermore, we try to analyze to which degree the promotion of agile methods via academic authors (in the perspective of Abrahamson [1996] business schools) is culture bound too or - as part of the fashion game - culture free. To examine this link, we run a literature analysis; we discuss its results after the presentation of our conceptually gained cultural profiles that seem to ease or hinder the implementation of agile methods. Our respective analyses could help to transcend the management fashion character of the promotion of agile methods by showing which cultural preconditions should be given in order to implement the methods successfully. By doing this we follow the plea of Abrahamson (1996) to study the management fashion process and to explain when and how it fails to serve stakeholders of companies and business schools.

The remainder of this paper is structured as follows. To explore the "cultural sensitivity" of agile methods, i.e. whether agile methods are culture-free or culture-bound, we first describe the conceptual background of our study by examining the construct of culture applying the GLOBE (Global Leadership and Organization Behaviour Effectiveness) study and describing the nature of agile methods. Next, utilizing the GLOBE cultural dimensions, we derive an ideal-typical cultural profile of an "agile workforce". We then compare this profile with the GLOBE country clusters for both, value and practice scores in order to identify potential conflicts between cultural characteristics of employees belonging to different cultural settings and the culture-related prerequisites of agility as an organizational tool/concept. In a further step, we run a literature analysis that aims at identifying the geographical/cultural spread of the affiliations of authors that have published papers on agile methods. The respective results should allow to investigate whether those theoretically/conceptually identified cultural clusters that are more suitable and thus more prone to the adaption of agile methods are also reflected in the geographical cultural spread of academic research. Finally, our findings are discussed critically.

#### 2. Conceptual Background

#### 2.1 Conceptualizing and Measuring National Culture

Scholars have used various definitions of culture. While due to its elusive and complex nature a precise and commonly accepted definition appears to be challenging, there seems to be a general agreement among anthropologists and sociologist about what the concept should include. Hofstede (2001, p. 9) specifies culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another". Thus, culture refers to shared values, beliefs, and norms of individuals within an (imagined) community which are transmitted and passed on through generations.

While Hofstede's approach to conceptualizing and measuring culture has dominated in existing literature examining cultural profiles, other popular value-based key frameworks using cultural value dimensions to measure culture have been applied. In particular, the GLOBE study is regularly used to examine cultural

prerequisites since (compared to other popular cultural value approaches) the study relies on relatively new as well as extensive data. Further, a salient feature of the GLOBE study is the differentiation between cultural value scores and cultural practice scores. While the cultural value scores ("should be" scores) represent wishful thinking within a cultural society, the cultural practice scores ("as is" scores) depict the actual presence of culture within this society. Hence, the GLOBE study allows to examine and compare the culture of a society the way it is vs. what this society is aspiring to be.

Partially based on Hofstede's six cultural dimensions, the GLOBE study differentiates between the following nine dimensions of culture (House *et al.*, 2004):

(1) Power Distance:

The degree to which an unequal distribution of power, authority, and status privileges is accepted within a society or organization

- Uncertainty Avoidance: The degree to which ambiguous situations are accepted within a society
- (3) Institutional Collectivism: The degree to which organizational and societal practices reward or encourage collaborative resource allocation and action
- (4) In-Group Collectivism: The degree to which pride and loyalty are shown for organizations or families
- (5) Gender Egalitarianism: The degree to which differences in gender roles are reduced
- (6) Assertiveness: The degree to which individuals are assertive, aggressive, or confrontational
- (7) Future Orientation: The degree to which individuals plan, act or invest future oriented
- (8) Performance Orientation: The degree to which group members are rewarded or encouraged for performance improvement
- (9) Humane Orientation: The degree to which group members are rewarded for fair behavior

As is widely recognized culture imprints on individuals within a society by shaping their values, norms and behaviors. Consequently, this cultural imprint can also be applied to organizations, as they represent groups of individuals within this culture. Hofstede (1989; 2001; Hofstede *et al.*, 2005) conducted extensive research that highlights cultural variations among nations and their impact on organizations within each nation: "The people involved [in the organizations] react according to their mental software [that is, their culture]. Part of this mental software consists about people's ideas about what an organization should be like" (Hofstede *et al.*, 2005, p. 242). Assuming agile methods to be culture-bound we examine the kind of cultural profile which is advantageous for the execution of agile methods. Agile methods require specific employee characteristics, some of which are influenced by culture. Thus, we aim to identify the cultural prerequisites of employees and match them to cultural cluster profiles. We choose to conceptualize culture by deploying the GLOBE cultural dimensions for the aforementioned advantages.

# 2.2 The Nature of Agile Methods

Originating in the software development industry, which faced an increasing complexity in the 1990s and therefore required new, dynamic approaches (Meso & Jain, 2006), agile methods nowadays are gaining more importance across various industries (Moe & Dingsøyr, 2017). Traditional project management, characterized by detailed planning and sequential realization of working steps, only allows for necessary adaptations with a great deal of effort. Projects with unclear challenges due to a high-risk or constantly changing environment therefore require a high degree of flexibility. Agile methods with their dynamic and adaptive approach can offer suitable solutions in such scenarios (Tallon & Pinsonneault, 2011; Shahrabi, 2012).

Although the "agile method box" is manifold (e.g. Scrum, Lean, DevOps, Design Thinking), making it difficult to precisely define the exact nature of agile methods, the following five core dimensions can be identified (Ayed *et al.*, 2017; Foschiani *et al.*, 2021):

- (1) Interdisciplinary and Self-Organized Teams
- (2) Open Exchange of Information
- (3) Low Degree of Formalization and Decentralized Decision-Making
- (4) Supportive Corporate Culture
- (5) Adaptive Leadership Style

However, especially in the context of MNCs, a supportive corporate culture tends to transform the national cultural profile of employees in foreign subsidiaries; this implies that a supportive corporate culture should be regarded as an instrument that facilitates the implementation of agile methods, rather than an organizational "construction element" of agile methods themselves. Hence, in the following, we provide a more detailed description of only four dimensions, while the dimension of the supportive corporate culture will be addressed later on as an enabler to implement agile methods despite cultural challenges.

#### 2.2.1 Interdisciplinary and Self-Organized Teams

Agile teams (applying agile methods) are becoming increasingly more important and embody new forms of teamwork (Dyer & Ericksen, 2005; Franken & Thomsett, 2013; Denning, 2015). Although teamwork per se is not new (project teams and work groups have been common practice in companies for decades), there is a noticeable shift in team structure and working style.

As already mentioned, agile teams differ from traditional project teams in terms of their structure, i.e. being characterized by interdisciplinarity. Several authors (e.g. Borzillo *et al.*, 2012; Longoni *et al.*, 2014; Rigby *et al.*, 2016) have emphasized the advantages of interdisciplinary within teams. For instance, bundling of diverse competencies enhances the development of new products. Different perspectives within teams improve problem-solving capabilities, foster creativity, and drive innovation. Borzillo *et al.* (2012) state that cross-functional teams enable the integration of diverse expertise which enhance current processes and the development of new capabilities to meet unfulfilled requirements. Additionally, the fact that agile teams are often regrouped (depending on the project topic) helps to span agile networks across business units within a company.

Besides interdisciplinarity, agile teams also are characterized by self-organization (Shafer *et al.*, 2001; Borzillo *et al.*, 2012; Drury-Grogan & O'Dwyer, 2013). Self-organization relates to the emergence of structures and processes in which the influencing, shaping, and constraining factors originate from the components of the self-organizing system itself (Prehofer & Bettstetter, 2005). At team level, this translates to a decentralization of decision-making, i. e. the distribution of decision-making powers to individual team members. Agile teams and networks operate without being bound to an external regulatory structure. Instead, they define their own regulatory regime. As explained by Shafer *et al.* (2001, p. 205), such teams are self-managed and possess "the flexibility to assign and carry out tasks on their own volition". Drury-Grogan & O'Dwyer (2013, p. 1097) state that "agile teams are typically [...] collaborative and empowered to make decisions". Thus, each team member contributes to the agile unit by leveraging their expertise.

#### 2.2.2 Open Exchange of Information

Agile methods are characterized by an effective management of knowledge and information (e.g. Rockart, 1998; Boehm & Turner, 2005; Charbonnier-Voirin, 2011; Winby & Worley, 2014). Open access to information and its sharing are fundamental components of agile practices. Besides the general importance of information and knowledge in today's world, the characteristics of agile methods specifically emphasize the importance of an open exchange of information. For example, flexibilization and decentralization intensify communication and cooperation, necessitating a steady flow of information (Augustine *et al.*, 2005; Charbonnier-Voirin, 2011). Cegarra-Navarro *et al.* (2016, p. 1544) note that "[...] organizational agility requires firms to quickly manage their knowledge when responding to a changing environment, and the market environment in particular". Agile methods incorporate certain aspects which facilitate the exchange of information. For instance, agile teams are characterized by informal relationships (Alavi *et al.*, 2014), which arise spontaneously; they are not planned and,

as such, are not represented in the organization's formal structure. Communication through these informal channels is both situational and variable, facilitating rapid information exchange.

#### 2.2.3 Low Degree of Formalization and Decentralized Decision-Making

Agile methods are characterized by a low degree of formalization as well as decentralized decision-making. The degree of formalization refers to the extent to which roles, authority, communication channels, norms, sanctions, and procedures are defined in writing through formal rules and regulations, such as organizational charts and job descriptions (Walsh & Dewar, 1987). However, (organizational) agility hardly requires such formal rules and laws. This low level of formalization must also go along with a decentralized approach to decision-making, empowering employees with the authority to take non-formalized actions and communicate with colleagues from other organizational units. Decentralization, in this sense, refers to the distribution of decision-making authority throughout the hierarchy, which entails transferring decision-making power to lower levels and thereby decreasing the concentration of power within a single central authority. (Hill *et al.*, 2000; Tata & Prasad, 2004). According to Lehn (2018), decentralization has the potential to cultivate agility and offers specific benefits: "A decentralized governance structure is likely to promote agility and be especially advantageous during periods of rapid environmental change" (Lehn, 2018, p. 67). In situations of high environmental complexity, decentralization of decision-making power is advantageous, since problems of information gathering and processing resulting from such situations can be handled more efficiently (Shafer *et al.*, 2001; Schreyögg & Sydow, 2010).

#### 2.2.4 Adaptive Leadership Style

As a natural consequence of the aforementioned characteristics, agile methods also require agile forms of leadership (Augustine *et al.*, 2005; Borzillo *et al.*, 2012; Drury-Grogan & O'Dwyer, 2013; Davidson & Klemme, 2016). The prevalent Tayloristic leadership philosophy of "instruction and control", characterized by strict hierarchical information flow and leadership, is considered as too rigid in the context of agile methods and their operational environments (e.g. self-organized teams) (Davidson & Klemme, 2016; Teece *et al.*, 2016): "With traditional approaches, everything is viewed through the prism of control – of change, risk, and, most important, people. Elaborate methodologies, tools, and practices have evolved to manage an out-of-control world. But tools fail when neat linear tasks don't easily accommodate dynamic processes and when neat schedules require frequent updating to reflect changing circumstances" (Augustine *et al.*, 2005, p. 87). This indicates that the adoption of agile methods demands a leadership approach that prioritizes the overall goal rather than providing specific instructions or work assignments (Augustine *et al.*, 2005; Teece *et al.*, 2016).

In this context, the significance of utilizing power as an essential component of leadership recedes into the background, and the focus shifts to the self-organization of those being "led". As stated by Drury-Grogan & O'Dwyer (2013, p. 1097), "in an agile team the project manager is not the accountable decision maker but more a facilitator or coordinator for the agile team". Hence, leadership within the framework of agile methods primarily focuses on ensuring the overall functionality of an agile unit (Borzillo *et al.*, 2012; Drury-Grogan & O'Dwyer, 2013; Denning, 2018). Thus, managers must acknowledge the limitations of their leadership roles and cultivate trust in the problem-solving abilities of their employees (Augustine *et al.*, 2005). A prerequisite for this kind of leadership is a deep understanding of the intricate system of agile teams, including their interdependencies, individual parties, and dynamics: "The agile manager understands the effects of the mutual interactions among a project's various parts and steers them in the direction of continuous learning and adaptation" (Augustine *et al.*, 2005, p. 86).

#### 3. Ideal-Typical Cultural Profile of Agile Methods: Does It Exist?

#### 3.1 Cultural Prerequisites for Agile Methods

The previous description of the key dimensions of agile methods revealed – at least implicitly – certain requirements for employees and supervisors that can be considered as prerequisites for their successful implementation. In the following, these requirements (for both employees and managers) will be analyzed in more detail by highlighting specifically the cultural determinants of agile methods and thus an agile workforce and matching them to GLOBEs' cultural dimensions. While the GLOBE study differentiates between nine cultural dimensions, we only focus on those we assume to have an influence on the successful execution of agile methods (power distance, uncertainty avoidance, institutional collectivism, assertiveness, humane orientation).

We disregard the four remaining dimensions (in-group collectivism, gender egalitarianism, future orientation, performance orientation) as they do not appear to have any discernible connection to the successful implementation of agile methods. With in-group collectivism primarily focusing on an individual's pride and loyalty towards a group, gender egalitarianism reflecting the state of gender roles within a society, future orientation highlighting the extent to which individuals believe their current actions to influence their future and performance orientation concentrating on job-related accomplishments, we assume no apparent connection between these dimensions and the successful application of agile methods.

# 3.1.1 Interdisciplinary and Self-Organized Teams

With teams being at the very center of agile practices, success of agile methods primarily relies on the team members and their interactions and cooperation (Oestereich & Weiss, 2008). Consequently, working predominantly in an (interdisciplinary and self-organized) group, the successful execution of agile practices presumes a cultural setting, which favors high levels of institutional collectivism. Measured by the extent to which individuals are integrated into a particular organization, or specifically a group within the organization, the cultural dimension of institutional collectivism describes a cultural setting, where the goals of the organization are valued more than individual goals and achievements (Gelfand *et al.*, 2004; Naor *et al.*, 2010; Wincel & Kull, 2013). Similarly, a strong emphasis on humane orientation can greatly benefit teamwork. Members of a society described as humane oriented generally are sensitive towards others and are characterized by a preference for collaborative work to accomplish tasks. Further, these cultures experience lower levels of competitive pressure and animosity; instead, the focus is on cooperative behavior (Kabasakal & Bodur, 2004). Therefore, we assume:

- Assumption A1. The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with high levels of institutional collectivism.
- Assumption A2. The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with high levels of humane orientation.

The interdisciplinary, hence heterogeneous, composition of teams in particular places high demands on all participants, which can hinder or even question the achievement of the project goals. Thus, it is crucial for an interdisciplinary process to have a team with a collectively shared understanding of the topic. Employees must be able and willing to develop a common "language" to achieve a cooperating process and strive towards the desired overall objective (Ness & Søreide, 2014). This is of particular importance since the team task generally extends beyond the capacity of individual team members and therefore the resources of different specialists must be combined to achieve the team goal. Hence, employees must be able and willing to empathize and communicate with team members from other disciplines. In addition, there is a need for the ability to integrate new knowledge from other disciplines, which requires openness but also a basic understanding of these disciplines (Pennington, 2016). Thus, individual attributes such as openness to experiences, unconventionality, risk-taking, personal wide range of interests, a discovery orientation and tolerance of ambiguity are seen as critical success factors for interdisciplinary teams (Baer, 2015; Wieth & Francis, 2018). Building upon these prerequisites, interdisciplinary teams, in particular, require a cultural setting with low levels of uncertainty avoidance. Scoring low on this dimension implies social norms within a society, which are less concerned with the ambiguity and predictability of the situation and are neutral towards risk (De Luque & Javidan, 2004). In line with this argument, Ayed et al. (2017) found that organizations conjugated with a high level of uncertainty avoidance reported unsatisfactory levels of interdisciplinary teams. However, since these types of teams are essential for successfully implementing agile methods, we assume:

Assumption A3. The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with low levels of uncertainty avoidance.

Self-organization within agile teams is linked to certain requirements – both for the employees and for the supervisors. On the one hand, supervisors must be able to relinquish power and responsibility and transfer the decision-making competences necessary for self-organization to the employees; on the other hand, employees are expected to be able and willing to take on additional and more demanding tasks (Balkema & Molleman, 1999). Thus, in order to enable self-organized teams, scoring low on both, the power distance and the assertiveness dimension is necessary. Low levels of power distance typically imply power being shared throughout the organization. Instead of giving the authority and responsibility for all decisions to one manager,

organizations with a cultural setting of low power distance enable employees to take charge, often by working in self-organized teams (Carl *et al.*, 2004; Ayed *et al.*, 2017). In a similar manner, scoring low on assertiveness can be beneficial for agile practices. Assertiveness describes the way people deal with each other. Being aggressive, tough, highly competitive and assuming opportunistic behavior of fellow team members can be disadvantageous for self-organized teams. In contrast, scoring low on this dimension emphasizes integrity, loyalty and cooperative spirit, thus being beneficial for successful teamwork. Therefore, we assume:

- Assumption A4. The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with low levels of power distance.
- Assumption A5. The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with low levels of assertiveness.

#### 3.1.2 Open Exchange of Information

Agile methods require a shift from traditional, document-driven communication to a more informal, face-toface communication via the shortest possible path often by breaking through hierarchical levels. Instead of having to communicate with each other via a higher-level project leader (and, therefore losing precious time), employees in agile teams exchange information directly with each other. Therefore, to facilitate an open exchange of information low levels of uncertainty avoidance and power distance are crucial. Scoring low on the uncertainty avoidance dimension, members of a society have a tendency to be more informal in their interaction with others (De Luque & Javidan, 2004). In addition, a low degree of power distance is a prerequisite for the team as well as the team leader. Instead of information being localized at the top of the hierarchy, in low-level power distance society's information is shared among the group members (Carl *et al.*, 2004). Further, members from a society scoring low on power distance are more open to expose problems and address difficulties (Ayed *et al.*, 2017), thus having an open exchange of information. We therefore conclude:

Assumption A6.	The successful implementation of an open exchange of information requires a cultural
	setting with low levels of uncertainty avoidance.
Assumption A7.	The successful implementation of an open exchange of information requires a cultural

setting with low levels of power distance.

On the one hand, informal communication requires the willingness to share all information with other team members (and to possibly break through hierarchical levels). On the other hand, an open exchange of information also places high demands on the communication skills of the employees (Hennel & Dobmeier, 2020). In a similar vein, a cultural setting with low levels of assertiveness and high levels of institutional collectivism is characterized by openness, spontaneity and flexibility. Since members from highly assertive cultures assume others to act and think opportunistically, information might be withheld from fellow team members as a mean of protection (Den Hartog, 2004). Similarly, high levels of institutional collectivism might be beneficial for an open exchange of information. As mentioned earlier, institutional collectivism encourages the sharing of resources, such as information, within a group. Further, prosocial behavior is more prevalent in institutional collectivistic cultures (Gelfand *et al.*, 2004). Thus, we assume:

Assumption A8.	The successful implementation of an open exchange of information requires a cultural
	setting with low levels of assertiveness.

Assumption A9. The successful implementation of an open exchange of information requires a cultural setting with high levels of institutional collectivism.

#### 3.1.3 Low Degree of Formalization and Decentralized Decision-Making

Agile methods are characterized by a low degree of formalization. In agile approaches, rules are typically not rigidly defined in written form but are flexible and kept to a minimum. Reports, evaluations, protocols and any other kind of documentation are assessed for their necessity and omitted if not needed. Since the work process itself is not predetermined by extensive rules, but is adapted iteratively if needed, team members are required to have a certain adaptability and flexibility (Amanda, Wicaksana & Hanifah; 2024). As described earlier, a low degree of uncertainty avoidance goes along with a preference for informal interactions and informal norms. Rather than relying on formalized policies, procedures and norms, societies who are less uncertainty avoidant

tend to show less desire to establish fixed bureaucracy and are more comfortable with higher risk taking through minimal planning and documenting (De Luque & Javidan, 2004). Thus, we assume:

Assumption A10. The successful implementation of a low degree of formalization and decentralized decision-making requires a cultural setting with low levels of uncertainty avoidance.

Decentralized decision-making in agile teams results in a dilemma for managers regarding the delegation of power and control. As employees' self-organization becomes more prominent, direct control becomes increasingly challenging. When dealing with complex tasks, delegating decision-making authority becomes particularly beneficial as it allows for the utilization of employees' knowledge and skills. However, according to the agency theory, information asymmetry between managers and employees can lead to suboptimal decisions by the decision maker (in this case the employee), since he or she may follow his or her personal goals (Jensen & Meckling, 1976). Attempting to exert precise control over an employee's decision-making process would counteract the intended benefits of delegation. In such situation, managers need to place more trust in their employees. Similarly, employees must also possess the willingness and the ability to make decisions independently. Consequently, there might also be some employees who are reluctant to assume more responsibility than required and view work merely as a "necessary evil". Such employees, despite their qualifications, are not suitable for the application of agile methods. Furthermore, the newfound freedom in the workplace that accompanies agile methods can evoke fears and a sense of being overwhelmed by the burden of decision-making. Overseeing one's own decisions (via decentralized decision-making) comes with a risk of failure, and these failures cannot be blamed on higher levels of hierarchy (so called "external attribution"; Heider, 1958). As the level of accountability for decisions increases, so does the fear of making mistakes. Thus, in order to establish a practice of decentralized decision-making with not only one but multiple decision-makers willing to take on responsibility, power distance levels must be low. This is because within more power distant cultures power is seen as providing social order and stability, lower levels of power distance imply teams that allow informal power sharing (Carl et al., 2004). We therefore assume:

Assumption A11. The successful implementation of a low degree of formalization and decentralized decision-making requires a cultural setting with low levels of power distance.

#### 3.1.4 Adaptive Leadership Style

As previously mentioned, leadership in agile teams is characterized by the fact that it is less about "instruction and control", i.e. giving specific instructions and work assignments to individual team members but rather about ensuring the team's overall functioning. This requires that the manager is able to withdraw him-/herself and merely create the framework conditions as a kind of coach or mentor for the agile team. As a result, the manager has to distance him-/herself from a rigid hierarchical thinking by opening up space for a respectful and cooperative collaboration in which decisions are made on an equal level. Thus, having a leadership style based on control (as is associated with a high degree of power distance) rather than featuring the idea of being a coach or mentor to the employees (as preferred in humane oriented cultures) might be damaging for the implementation of agile methods. In a similar vein, low levels of assertiveness are necessary in order for the leader to function as an enabler rather than emphasizing "instruction and control". Thus, we assume:

- Assumption A12. The successful implementation of an adaptive leadership style requires a cultural setting with low levels of power distance.
- Assumption A13. The successful implementation of an adaptive leadership style requires a cultural setting with high levels of humane orientation.
- Assumption A14. The successful implementation of an adaptive leadership style requires a cultural setting with low levels of assertiveness.

To be an effective leader within an agile context also requires the ability to recognize and acknowledge the ideas of others and the willingness to empathize with other people's attitudes. As the agile environment has an increased complexity, leaders should be able to implement necessary changes and adaptations despite (or even because of) uncertainty. Therefore, cultures that are less uncertainty avoidant might be better equipped for implementing an adaptive leadership style. With openness, innovation and adaptability being important qualities for this kind of leadership, scoring low on uncertainty avoidance is beneficial for coping with complexity and ambiguous situations. Thus, we conclude:

Assumption A15. The successful implementation of an adaptive leadership style requires a cultural setting with low levels of uncertainty avoidance.

Figure 1 provides a graphical overview of our proposed model with assumptions.

Figure 1. Proposed model and assumptions



Summarizing our assumptions, we derive the following propositions, representing the cultural ideal type for agile methods:

Proposition P1.	For the successful implementation of agile methods, a cultural setting of low power distance is beneficial.
Proposition P2.	For the successful implementation of agile methods, a cultural setting of low uncertainty avoidance is beneficial.
Proposition P3.	For the successful implementation of agile methods, a cultural setting of high institutional collectivism is beneficial.
Proposition P4.	For the successful implementation of agile methods, a cultural setting of low assertiveness is beneficial.
Proposition P5.	For the successful implementation of agile methods, a cultural setting of high humane orientation is beneficial.

Table 1 shows an overview of our assumptions and propositions.

	Power Distance	Uncertainty Avoidance	Institutional Collectivism	Assertiveness	Humane Orientation
Interdisciplinary and	low	low	high	low	high
Self-Organized Teams	(A4)	(A3)	(A1)	(A5)	(A2)
Open Exchange of	low	low	high	low	
Information	(A7)	(A6)	(A9)	(A8)	
Low Degree of Formalization and Decentralized Decision-Making	low (A11)	low (A10)			
Adaptive Leadership	low	low		low	high
Style	(A12)	(A15)		(A14)	(A13)
Propositions	low	low	high	low	high
	(P1)	(P2)	(P3)	(P4)	P(5)

# Table 1. Assumptions and resulting propositions

# 3.2 Matching the Ideal-Typical Cultural Profile for Agile Methods with Globe's Cultural Clusters

The aim of this study is to identify national cultural settings that favor or restrain the successful implementation of agile methods. Based on our propositions, the ideal-typical cultural profile for agile methods should be scoring low on power distance, uncertainty avoidance, and assertiveness while scoring high on institutional collectivism and humane orientation. As a next step we assess via a conceptual approach whether and to what extent this proposed ideal-typical culture exists by examining both, country clusters' value and practice scores.

Since MNCs often operate in various countries with diverse cultures, it is crucial to determine whether agile methods can be implemented in foreign subsidiaries, a question which also aligns with the ongoing debate on culture-free versus culture-bound approaches (Maurice, 1976). However, since conducting a direct comparison between the ideal cultural profile and the cultural profile of each individual country would increase complexity and reduce the transparency of our findings, we choose to apply cultural clusters. Clustering countries into cultural zones based on their relative similarity in terms of their cultural value orientations allows to analyze and/or compare multiple countries without the need to examine every country respectively, thus reducing complexity. Moreover, this approach aligns with the practices commonly adopted by most MNCs to coordinate their subsidiaries within regional clusters (Amann *et al.*, 2014).

Table 2 shows the cultural value scores of each country cluster ranked by their fit to the proposed ideal type.

Power Distance		Uncertainty Avoidance		Institutional Collectivism		Assertiveness		Humane Orientation	
Germanic Europe	2,51	Germanic Europe	3,46	Latin America	5,32	Germanic Europe	3,07	Nordic Europe	5,76
Nordic Europe	2,55	Nordic Europe	3,76	Middle East	5,08	Middle East	3,38	Latin Europe	5,58
Latin Europe	2,57	Anglo	4,09	Southern Asia	5,03	Latin America	3,54	Germanic Europe	5,48
Southern Asia	2,78	Latin Europe	4,36	Latin Europe	4,84	Nordic Europe	3,56	Sub- Sahara Africa	5,46
Eastern Europe	2,84	Confucian Asia	4,74	Germanic Europe	4,69	Latin Europe	3,72	Confucian Asia	5,45
Anglo	2,86	Eastern Europe	4,94	Sub- Sahara Africa	4,66	Eastern Europe	3,78	Eastern Europe	5,43
Sub- Sahara Africa	2,86	Latin America	4,98	Confucian Asia	4,43	Anglo	3,89	Anglo	5,4
Confucian Asia	2,98	Sub- Sahara Africa	4,99	Eastern Europe	4,34	Sub- Sahara Africa	3,99	Latin America	5,33
Middle East	3,03	Middle East	4,99	Anglo	4,32	Confucian Asia	4,54	Southern Asia	5,32
Latin America	5,25	Southern Asia	5,16	Nordic Europe	4,08	Southern Asia	4,65	Middle East	5,31

1 able 2. Clusters and their cultural value scores ranked by proposed fit (most advantageous to lease	their cultural value scores ranked by proposed fit (most advantageous to )	east)
-------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------	-------

Clusters

Anglo: Australia, Canada, England, Ireland, New Zealand, South Africa, USA

Confucian Asia: China, Hong Kong, Japan, Singapore, South Korea, Taiwan

Eastern Europe: Albania, Georgia, Greece, Hungary, Kazakhstan, Poland, Russia, Slovenia

Germanic Europe: Austria, Germany, Netherlands, Switzerland

Latin America: Argentina, Bolivia, Brazil, Columbia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Venezuela

Latin Europe: France, Israel, Italy, Portugal, Spain

Middle East: Egypt, Kuwait, Morocco, Qatar, Turkey

Nordic Europe: Denmark, Finland, Sweden

Southern Asia: India, Indonesia, Iran, Malaysia, Philippines, Thailand

Sub-Sahara Africa: Namibia, Nigeria, South Africa, Zambia, Zimbabwe

Note: Country clusters and their cultural value scores are derived from the GLOBE-Study's openly accessible data

When examining the cultural value scores, we note that none of the country clusters fully align with the proposed ideal-typical cultural profile across all five cultural dimensions. However, we can identify two clusters that demonstrate a clear inclination towards the ideal profile. We find the "Germanic Europe" and "Nordic Europe" clusters exhibit a strong cultural fit in four out of the five relevant dimensions (see Table 2). Thus, we assume these cultural clusters to be most suitable for the successful implementation of agile methods. Similarly, none of the country clusters show cultural values which are a complete misfit in all five cultural dimensions. Though, two out of ten country clusters, "Middle East" and "Southern Asia", show opposing characteristics to the ideal profile in three cultural dimensions. In this respect, we assume that the application of agile methods in these clusters may encounter challenges.

Further, when considering the practice scores ("as is" scores) of the GLOBE dimensions instead of the value scores ("should be" scores), we cannot identify a country cluster that fully aligns with the ideal-typical cultural profile for agile methods (see Table 3). However, it is worth noting that the cultural practice scores of the "Nordic Europe" cluster seem to partially align with the proposed ideal cultural profile in three out of the five dimensions. Thus, there appears to be a discrepancy between the managerial preference (value scores) and the actual cultural setting an employee is embedded in (practice scores).

Power Distance		Uncer Avoio	tainty dance	Institu Collec	itional tivism	Assertiveness		Humane Orientation	
Nordic Europe	4,54	Eastern Europe	3,56	Nordic Europe	4,88	Nordic Europe	3,66	Germanic Europe	3,55
Germanic Europe	4,95	Latin America	3,62	Confucian Asia	4,8	Southern Asia	3,86	Latin Europe	3,71
Anglo	4,97	Middle East	3,91	Anglo	4,46	Latin Europe	3,99	Eastern Europe	3,85
Confucian Asia	5,15	Southern Asia	4,1	Southern Asia	4,35	Confucian Asia	4,09	Confucian Asia	3,99
Latin Europe	5,21	Latin Europe	4,18	Middle East	4,28	Anglo	4,14	Latin America	4,03
Middle East	5,23	Sub- Sahara Africa	4,27	Sub- Sahara Africa	4,28	Middle East	4,14	Nordic Europe	4,17
Sub- Sahara Africa	5,24	Anglo	4,42	Eastern Europe	4,1	Latin America	4,15	Anglo	4,2
Eastern Europe	5,26	Confucian Asia	4,42	Germanic Europe	4,03	Sub- Sahara Africa	4,24	Middle East	4,36
Latin America	5,33	Germanic Europe	5,12	Latin Europe	4,01	Eastern Europe	4,33	Sub- Sahara Africa	4,42
Southern Asia	5,39	Nordic Europe	5,19	Latin America	3,86	Germanic Europe	4,55	Southern Asia	4,71

Table 3. Clusters and their cultural	practice scores ranke	d by proposed fit	(most advantageous to least)
	1		

Clusters

Anglo: Australia, Canada, England, Ireland, New Zealand, South Africa, USA

Confucian Asia: China, Hong Kong, Japan, Singapore, South Korea, Taiwan

Eastern Europe: Albania, Georgia, Greece, Hungary, Kazakhstan, Poland, Russia, Slovenia

Germanic Europe: Austria, Germany, Netherlands, Switzerland

Latin America: Argentina, Bolivia, Brazil, Columbia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Venezuela

Latin Europe: France, Israel, Italy, Portugal, Spain

Middle East: Egypt, Kuwait, Morocco, Qatar, Turkey

Nordic Europe: Denmark, Finland, Sweden

Southern Asia: India, Indonesia, Iran, Malaysia, Philippines, Thailand

Sub-Sahara Africa: Namibia, Nigeria, South Africa, Zambia, Zimbabwe

Note: Country clusters and their cultural practice scores are derived from the GLOBE-Study's openly accessible data

Therefore, we assume that certain countries, particularly those in the "Nordic Europe" and "Germanic Europe" clusters, are more favorable to the implementation of agile methods compared to others, specifically the countries in the "Middle East" and "Southern Asia" clusters. In countries from the "Nordic Europe" and "Germanic Europe" clusters, such as Denmark, Sweden or Germany, the cultural setting of the employees appears to be more compatible with an agile mindset. As a result, the acceptance and implementation of agile methods are likely to be faster and more effective. This observation aligns with the fact, that agile methods are pioneered in the West (Ramesh et al., 2017). Nevertheless, we emphasize that agile methods can still be successfully implemented in less culturally suitable clusters, albeit employees might help to overcome this obstacle.

In line with the GLOBE study, our analysis also revealed that value scores and practice scores do not always coincide. Value scores serving as a form of managerial preference represent what managers expect from their employees, while practices scores represent the actual cultural setting of their employees. Countries with value scores which are favorable for agile methods may have less favorable practice scores. Thus, when implementing

agile methods within MNCs which are confronted with different cultural clusters, this discrepancy must be taken into account. It may be necessary to implement suitable measures, such as workshops and trainings, to support the development of an agile mindset. Most importantly, cultivating a suitable corporate culture is crucial (Ivari & Iivari, 2011; Alavi *et al.*, 2014; Denning, 2016). An agile corporate culture, which promotes and enables the necessary conditions for agile methods among employees, has the potential to mitigate or even compensate for an unfavorable national cultural setting. Thus, a supportive corporate culture that emphasizes the importance of mutual trust between managers and employees, embraces a tolerance for mistakes, and cultivates learning processes can serve as a valuable tool for disabling negative cultural influences.

# 4. Geographical Spread of Research on Agile Methods: Is There a Reflection of Favoring Cultural Conditions?

#### 4.1 Management Scholars as Culture-bound Promotors of Scientific Output

From the perspective of Critical Rationalism, scientific theories and other knowledge claims can and should be open to rational scrutiny – especially in the field of empirical sciences, theories ought to be tested in a way that allows for the possibility of falsification (Popper, 1968). However, in the given context there are several reasons why a direct empirical test of our propositions can't be run. Some of the most important reasons are data availability, reliability and validity. As our research focuses on cultural factors favoring or impeding the successful implementation of agile methods in MNCs we would have had to gather data not only from the headquarters of MNCs, but also from their subsidiaries that are localized in diverse cultural regions. Gathering data from numerous headquarters and subsidiaries to minimize the risk of producing empirical results by chance would demand a substantial commitment of manpower, financial resources, and time. Nevertheless, justifying such an investment would be difficult, as our research is still in its early stages and can be considered premature. Further knowledge is needed to consolidate the basic assumption that there is a relationship between cultural conditions and the successful implementation of agile methods. In this context, pre-tests offer an effective way to prevent costly investments in an extensive empirical survey while still promoting knowledge advancement in the field. Consequently, we decided to run a pre-test with researchers on agile methods and respective publications as promoters of their implementation. This approach is based on two major assumptions: i) publications serve as an instrument to bring scientific knowledge into practice and ii) researchers themselves are not free from cultural influences. Researchers as individuals are at least imprinted by their national culture; more importantly in the given context, they also belong to a culture defined by the affiliation and scientific network they are part of (Di Leo, J. R. 2003). According to Brunner (1997, p. 9) "ways of knowing, seeing, and perceiving are culture-bound. Researchers' values and position in culture and the researcher's own practices permeate the inquiry" (p. 9). Furthermore, Getz (2007, p. 361) adds, that "knowledge generated is contextual, being value and culture-bound". Consequently, "studies of affiliation are always already cultural studies" (Di Leo, J. R. 2003, p. 4). Thus, our pre-test approach is grounded in the understanding that researchers' perspectives are inevitably shaped by their cultural and institutional contexts. While direct empirical testing of our propositions may be challenging at this stage, the pre-test serves as a crucial step in advancing our understanding of the relationship between cultural conditions and the implementation of agile methods.

#### 4.2 Methodology

We try to identify whether the conceptually identified cultural clusters that are more suitable and thus more prone to the adaption of agile methods are also reflected by the geographical cultural spread of academic research. As mentioned above, we assume that the cultural influences coming from the affiliations of authors are reflected in their tendency to do research and publish on agile methods. Based on this, we conduct a literature analysis to investigate whether our result of certain cultural clusters to be more suitable and thus more prone to the adaption of agile methods is also reflected in the cultural spread of academic research, represented by affiliations of authors having published on agile methods. According to our focus on the adaption of agile methods in the field of business management, we conducted our analysis exclusively on papers authored by researchers whose contributions have been published in the domain of management. The literature analysis was conducted using Business Source Premier (via EBSCOhost) in early 2023. We searched for "workforce agility" or "agile workforce" and "success" or "performance" in the title and abstract in academic journals without applying any filter regarding publication year or impact factor. However, we excluded journals in the realms software development and information systems, in order to focus our analysis on management

related and organizational issues dealing with agile methods. Through this search, we identified a total of 75 articles published between 1996 and 2023.

#### 4.3 Findings and Discussion

We find an increasing number of publications in this field over the last decade (see figure 2). Considering the respective first author affiliations, it is apparent that the topic of agility is not only gaining prominence over time but also appears to be relevant on a global scale. Similar results have been presented by Moh'd, Gregory, Barroca, & Sharp, (2024). In our sample, first author affiliations can be assigned to 30 countries with some countries being more represented than others. The most represented countries are the USA (20 %), India (16 %) and UK (11 %) (see figure 3). For the USA and the UK this can be explained by the Anglo-American origin of agile methods. This assumption is reinforced by the geographical distribution of research on agile methods over time (see figure 2). We observe that initially it was almost exclusively the USA and the UK affiliations that published on the subject of agile. It was not until the beginning of the 2010s that agile methods were also explored by researchers affiliated with institutions. Despite the relatively late onset of Indian publications in our sample, they emerge in a significant quantity. Notably, India has consistently produced the highest number of publications over the past four years. For this, the growing national software industry in India might serve as an explanation.

Based on our assumptions that research on agile methods predominantly occurs within cultural clusters that closely align with our presumed ideal-typical profile, the clusters that emerged as dominant in the previous affiliation analysis – namely, the Anglo-American cluster (comprising the USA and UK) and the Southern Asia cluster (notably India) – should correspond to this profile. Thus, these findings do not align with our conceptually developed assumptions. While the Anglo-American and Southern Asia clusters together account for a total of 48 publications (64%; 26 from the Anglo-American cluster and 22 from Southern Asia), the cluster we identified as most fitting – Germanic Europe – is only represented by 6 publications (8 %) in total. The Nordic Europe cluster, which we also identified as fitting is not represented at all. Given the significant variation in the number of higher education institutions across different countries (Statista 2024), we have adjusted the absolute numbers of publications in relation to the total number of institutions in each respective country. We find, although Germany has fewer institutions compared to other countries, the publication-to-institution ratio is higher than that of the USA and India (Germany: 0,87; USA: 0,47; India: 0,22). This suggests a relatively stronger research focus on agile methods within German institutions, thereby reinforcing our initial assumptions.

However, the fact that research on agile methods is not solely confined to specific cultural clusters is not surprising especially when taking into perspective that papers on agile methods and their promotion by these publications could be another outcome of management fashion. Abrahamson (1996, p. 257) defines management fashion as a "relatively transitory collective belief, disseminated by management fashion setters, that a management technique leads rational management progress". According to neo-institutional theory, legitimacy is achieved by applying management techniques that generally are believed by organizational stakeholders to be rational ways of managing organizations and employees (Meyer & Rowan, 1977; Abrahamson, 1996). Management fashions promise progressive and improved solutions for organizations, thus ensuring external legitimacy within the institutional environment. The dissemination of management fashion is facilitated by institutional isomorphism, whereby the perception of what constitutes progressive and rational management concepts is primarily shaped by fashion setters. In the context of agile methods, academics can be viewed as fashion setters. Hence, the construct of management fashion may serve as an explanation for the fact that research on agile methods is being conducted globally. But if agile methods are (as we analyzed) not suitable for all clusters, it is more than questionable whether these methods can be implemented successfully in all cultural settings. Empirical research should be undertaken to prove this. On a general level MNCs should be cautious when considering the implementation of agile methods.





Figure 3. Geographical distribution (absolute and relative numbers) of papers (affiliations) included in the literature review



# 5. Conclusion

#### 5.1 Summary

In the previous sections, we highlighted the role of culture for implementing agile methods at a scale. Assuming that all employees, regardless their cultural background, exhibit a cultural mindset necessary for agile methods falls short. For the successful implementation of agile methods, we propose a cultural setting of low power distance, low uncertainty avoidance, high institutional collectivism, low assertiveness and high humane orientation to be beneficial. Drawing from the characteristics of agile methods and the cultural dimensions of the GLOBE framework, we selected relevant four criteria and five dimensions to derive 15 assumptions, which ultimately culminated in five propositions (see table 4). However, comparing the ideal-typical cultural profile with the GLOBE country clusters we cannot confirm one specific cluster to be suitable in all relevant dimensions. In terms of the cultural value scores ("should be" scores), we find the "Germanic Europe" and "Nordic Europe" clusters to be the most fitting for the successful implementation of agile methods. Considering the practice scores ("as is" scores), only the "Nordic Europe" cluster exhibits a cultural profile aligning broadly with the ideal cultural profile. This discrepancy needs to be taken into account when striving for the successful implementation of agile methods, although we found certain cultural clusters to be less suitable for the implementation of agile methods, our literature analysis shows that research on agile methods is being conducted globally. This fosters our assumption of agile methods being another management fashion.

Table 4. Summary of assumptions and propositions

	Power Distance	Uncertainty Avoidance	Institutional Collectivism	Assertiveness	Humane Orientation
	Distance	Oncertainty Avoluance	Concentrism	Assertiveness	Oricitation
Interdisciplinary and Self- Organized Teams	A4 The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with <b>low</b> levels of power distance.	A3 The successful implementation of interdisciplinary and self- organized teams requires a cultural setting with <b>low</b> levels of uncertainty avoidance.	A1 The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with <b>high</b> levels of institutional collectivism.	A5 The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with <b>low</b> levels of assertiveness.	A2 The successful implementation of interdisciplinary and self-organized teams requires a cultural setting with <b>high</b> levels of humane orientation.
Open Exchange of Information	A7 The successful implementation of an open exchange of information requires a cultural setting with <b>low</b> levels of power distance.	A6 The successful implementation of an open exchange of information requires a cultural setting with <b>low</b> levels of uncertainty avoidance.	A9 The successful implementation of an open exchange of information requires a cultural setting with <b>high</b> levels of institutional collectivism.	A8 The successful implementation of an open exchange of information requires a cultural setting with <b>low</b> levels of assertiveness.	
Low Degree of Formalization and Decentralized Decision-Making	A11 The successful implementation of a low degree of formalization and decentralized decision-making requires a cultural setting with <b>low</b> levels of power distance.	A10 The successful implementation of a low degree of formalization and decentralized decision-making requires a cultural setting with <b>low</b> levels of uncertainty avoidance.			
Adaptive Leadership Style	A12 The successful implementation of an adaptive leadership style requires a cultural setting with <b>low</b> levels of power distance.	A15 The successful implementation of an adaptive leadership style requires a cultural setting with <b>low</b> levels of uncertainty avoidance.		A14 The successful implementation of an adaptive leadership style requires a cultural setting with <b>low</b> levels of assertiveness.	A13 The successful implementation of an adaptive leadership style requires a cultural setting with <b>high</b> levels of humane orientation.
Propositions	P1 For the successful implementation of agile methods, a cultural setting of low power distance is beneficial.	P2 For the successful implementation of agile methods, a cultural setting of low uncertainty avoidance is beneficial.	P3 For the successful implementation of agile methods, a cultural setting of high institutional collectivism is beneficial.	P4 For the successful implementation of agile methods, a cultural setting of low assertiveness is beneficial.	P5 For the successful implementation of agile methods, a cultural setting of high humane orientation is beneficial.

#### 5.2 Limitations

While this study offers new insights into the cultural application of agile methods, it is not without limitations. Firstly, the utilization of the GLOBE dimensions subjects us to the constraints and limitations of that particular study, including potential sample biases. Moreover, having conducted our study on a country cluster level, our investigation primarily focused on a macro level analysis. However, as described before, an organizational culture, i. e. the meso-level, can also impact the suitability for agile methods. A further limitation lies in neglecting the individual level, i. e. the micro-level. Due to globalization and tendencies towards the global socialization of persons, the individual culture, i.e. the values, norms and beliefs of an individual, does not necessarily represent national culture (Kamakura & Mazzon, 1991). However, we choose this approach as organizations are embedded in the national culture and this cultural setting influences the behavior of individuals within organizations (Hofstede, 1986; Webster & White, 2010). Moreover, focusing on cultural clusters is a common practice in cultural management research as it helps to simplify and reduce complexity. Ronen & Shenkar (1985, p. 435) emphasize the benefits that clustering countries brings to managers and academics: "Managers in multinational corporations (MNCs) can better understand the basis for similarities and differences between countries. With this knowledge, they can more effectively place international assignees, establish compatible regional units, and predict the results of policies and practices across national boundaries [...]. Clusters also can help academicians by defining the extent to which results should be generalized to other countries. Properly employed results from one country can be generalized to the entire group of countries sharing a particular variable within the same cluster." Lastly, as it is the nature of a conceptual paper, we cannot empirically test our propositions. Our pre-test regarding the first authors affiliations and geographical spread of research on agile methods can be seen as a first step towards such an endeavor. Nonetheless, our approach has limitations, as research does not always accurately capture the real-world application of agile methods. Additionally, we considered only the affiliations of the first authors, excluding a focus on business schools, which are often more inclined to specialize in this area of study.

### 5.3 Implications for Future Research and Practice

Based on the previously described limitations, several implications for future research can be identified. This study examines the cultural prerequisites for agile methods by conceptually developing an ideal-typical cultural profile and linking it to the dissemination of academic research as a proxy for interest in and application of agile methods across cultural clusters. Therefore, future research should empirically test the direct relationship between culture and the acceptance of agile methods in organizations. An empirical investigation into the acceptance of agile methods across diverse cultural contexts should capture the adoption of agile practices at the organizational level and analyze the cultural characteristics of employees, potentially even at the individual level. Surveys and interviews represent plausible methodologies for such an analysis. In particular, interviews offer the advantage of uncovering deeper insights, such as culturally driven challenges associated with the implementation of agile methods.

From a practical perspective, this study aims to raise awareness among managers about the implementation of agile methods on a firm-wide basis. Agile methods should be utilized with caution, especially in MNCs. This applies not only to intercultural teams but also to seemingly "homogeneous" teams composed of members with similar cultural backgrounds that diverge from the ideal-typical profile necessary for the successful implantation of agile methods. In this context, training employees in agile methods proves valuable, both to address potential reservations about agile practices and to further enhance agile competencies. Furthermore, assessing the acceptance of agile methods among employees who use them, as well as their satisfaction, is essential to identify and mitigate potential negative aspects at an early stage.

Given the limitations and implications outlined above, and considering the relatively early stage of this field of research, we hope that this study contributes meaningfully to the ongoing discourse and encourages further exploration and development. By shedding light on the interplay between cultural characteristics and the adoption of agile methods, we aim to inspire both researchers and practitioners to delve deeper into this area, ultimately enhancing the understanding and effective implementation of agile practices in diverse organizational contexts.

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