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TEAM MEMBERS' AGILE VALUES AND BEHAVIOURS:

A cross-cultural study in Italian and Dutch organisations

Master's Thesis in Business Administration

Double Degree

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"Having more cultures often makes you question what you think was obvious and you interrogate yourself about everything, including your approach to work, so it's definitely positive" (IPI8).

This quote clearly expresses my approach to the cross-cultural diversity and the mind-set that I adopted throughout this thesis, which allowed me to explore the impact of Italian and Dutch cultures on agile way of working. This thesis is, in fact, the representation of my enriching cross-cultural journey between Italy and the Netherlands, where I could gain a deeper understanding of both Dutch culture and my own Italian heritage.

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Francesca Marini

Abstract: While most studies have examined the impact of organizational culture on agile methodologies, fewer have analysed the influence of national culture on agile practices, typically using Hofstede's framework to study single cultures. However, this framework entails several limitations, such as the assumption that individual values derive from national culture ones. Therefore, this thesis addresses the literature gap by exploring the effects of Dutch and Italian national cultures on agile values and behaviours, by adopting Schwartz's framework.

A concurrent mixed-method approach was employed, simultaneously incorporating both qualitative and quantitative methods. The qualitative component involved semi-structured interview to 8 Italian and 8 Dutch participants. Only interviewees who worked agile for at least one year were selected. During the interviews a more quantitative approach has been used, namely the Q-Methodology; interviewees were asked to rank a predefined set of agile values and behaviours according to their importance.

Dutch and Italian participants were first interviewed about their individual values based on Schwartz's framework and their experiences with agile methodologies. In the second part of the interviews, participants ranked agile values and behaviours according to their perceived importance using the Q-sort methodology. The findings reveal minimal differences between Italian and Dutch participants in terms of Basic Human Values, with Italian respondents showing slightly higher Self-Enhancement values. Similarly, the rankings of agile values and behaviours were not significantly different between the two groups. Quantitative analysis identified four statistically significant items, namely: Altruism, Being physically present, Visualising status and progress, Making decisions autonomously. However, qualitative insights suggest these differences are influenced more by boundary conditions such as individual roles, team maturity, and sector-specific and organizational characteristics. The observed similarities between the two groups can be explained by social identity theory, which posits that individuals tend to align with the values and behaviours of a specific group to which they belong. In this case, agile team members prioritize agile culture over their national culture, underscoring the distinct identity of agile teams compared to standard teams.

Keywords: Agile values; agile behaviours; national culture; Basic Human Values; self-managing teams

I hereby confirm that this proposal/thesis has been written by me and is the result of my own work, with no help from generative AI.

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INTRODUCTION

In this ever-changing world, companies are increasingly required to be flexible, fast and customer-oriented (Nyandongo & Khoza, 2018). In order to address this necessity, more and more companies in the last two decades have been adopting the agile philosophy and methodologies (Khalil & Khalil, 2016). Agile has been first developed in the software industry, but it expanded in other sectors as well: nowadays agile methodologies have been successfully implemented in different types of companies, ranging from software development to entertainment, and in various departments (Hazzan & Dubinsky, 2014; Califano & Spinks, 2021). A key feature of agile methodologies are the self-managing teams that are functioning without a conventional manager, they have a *coach* or a *scrum master* (Hoda et al., 2012) who give direction, alignment and commitment (Drath et al., 2008). Usually these multi-functional teams include experts from different areas (Hoda et al., 2012).

Several studies have underlined the success factors and the challenges that companies implementing agile have faced. To begin with, in terms of success factors, one of the primary motivations for companies to embrace agile strategies revolves around sustaining competitiveness (Altuwaijri & Ferrario, 2022). This approach enables companies to be more dynamic and respond to the changing demands and expectations of their customers. Furthermore, by fostering a more dynamic and responsive work environment, firms aim to boost motivation and team productivity (Altuwaijri & Ferrario, 2022; Gelmis et al., 2022).

In regard to the challenges, some scholars mentioned the level of awareness and knowledge of agile as a central issue, as well as the involvement of customers in agile teams; ensuring that their insights and feedback are seamlessly incorporated into the development process (Altuwaijri & Ferrario, 2022). Moreover, several studies (Ayed et al., 2017; Gregory et al., 2016) also highlighted that challenges related to claims and limitations such as misconceptions, shortcomings and hype constitute the biggest problem in agile implementation. Some authors highlight the relevance of the team's dimension in the effectiveness of agile implementation (Ayed et al., 2017; Altuwaijri & Ferrario, 2022; Dikert et al., 2016). In particular, the autonomous organisation of the team can be difficult (Dikert et al., 2016; Dingsøyr & Lindsjørn, 2013). Moreover, there are coordination challenges between teams, due to the different approaches and interpretations of agile practices (Dikert et al., 2016) especially due to the fact that many of those teams are cross-

cultural teams (Bastiaansen & Wilderom, 2021; Ayed et al., 2017). Therefore, given the relevance of this dimension, the present thesis focuses on the individuals inside the team.

The literature also points out that culture can be a challenge when implementing agile (Bastiaansen & Wilderom, 2021); in particular, Ayed et al. (2017) underlined the relevance of organisational and national cultures in influencing the implementation of agile methodologies. Whilst both cultures have been proven influential factors in the transition to agile, most studies have focused on the impact of organisational culture (Kuchel et al., 2023; Gambi et al., 2015; Iivari & Iivari, 2011). However, since agile was first developed in the USA, it is based on certain national values that are more similar to those of the North American national culture (Zykov & Singh, 2020). Therefore, the national culture in which agile is being adopted can also influence the success (or failure) of the transformation to agile (Zykov & Singh, 2020). Hence, national culture is a key factor to account for when studying the implementation of agile methodologies in different countries.

However, despite the topic's relevance, the national culture perspective on agile has been rather neglected in the literature (Gelmis et al., 2022), with only little research attempting to explore its relation to agile philosophy and methodologies and its influence on organisation's agile transformation (Neumann et al., 2023). Some studies have analysed the impact of national culture on agile implementation in countries very different from the Western culture, namely Saudi Arabia (Altuwaijri & Ferrario, 2022), South Africa (Matthews & Tanner, 2022) and Turkey (Gelmis et al., 2022). Yet, these studies have focused only on one country, with only a few other authors looking into cross-cultural differences in agile implementation (Ayed et al., 2017; Alsanoosy et al., 2020). Moreover, even though European countries do show strong differences in terms of their national cultures, there is a lack of cross-cultural studies inside the European continent (Califano & Spinks, 2021; Valverde et al., 2021). Therefore, it is necessary to study how these cultures differ and if these cultural distances also affect the implementation of agile methodologies.

Furthermore, previous studies on agile implementation and national culture have mostly adopted Hofstede's framework (2010) of national culture to understand and compare the differences between countries (Matthews & Tanner, 2022; Ayed et al., 2017; Beier et al., 2012, Gelmis et al., 2022). However, this framework has been criticised for many drawbacks (Section 2.3.4), among which the fact that it does not take into account individual differences (Brewer & Venaik, 2012; McSweeney, 2002). Since these shortcomings are

addressed by Schwartz's Theory of Basic Human Values (2011) and Theory of Cultural Value Orientations (2008), this thesis deploys Schwartz's frameworks of individual and national values to explore their relationship with agile values and behaviours.

In order to address the lack of studies concerning differences across (European) national cultures vis-à-vis agile implementation, the present thesis focuses on two European countries, The Netherlands and Italy, which display some differences according to multiple cross-cultural research (Hofstede, 2010; Schwartz, 2008; Nota et al., 2011; Ulijn et al., 2011). These differences mainly concern the dimension of Individualism (Hofstede Insights 2023), and the dimension of (Affective) Independence (Schwartz, 2008). The literature suggests that some of these cultural differences can be linked to agile culture and might impact its application (Zykov & Singh, 2020; Matthews & Tanner, 2022; Gelmis et al., 2022). Hence, since culture is largely formed by values (Schein, 1985; Trompenaars & Hampden-Turner, 2012); and work values, such as agile values, direct and guide employees' attitudes and behaviours (Bastiaansen & Wilderom, 2021); this study aims at answering the following research questions (RQs):

RQ: How do agile values and behaviours vary between Dutch and Italian agile team members and impact agile implementation?

Sub-RQ1: What are team members' values and behaviours associated with the agile way of working?

By addressing the above questions, this study aims at exploring the relationship between national culture and agile adoption in Italy and the Netherlands. Particularly, the goal is to understand how employees' national culture values may affect agile implementation. Firstly, Schwartz's theory of cultural value orientation (2011) provides a clear overview of the national cultures in the two analysed countries. Secondly, Schwarz's theory of Basic Human Values (2011) is juxtaposed since it is a valuable framework to connect cultural and individual values. In this study, these theories are utilized to explore the relationship between individual values and agile adoption in Italy and the Netherlands. In order to achieve this goal, a concurrent mixed-method approach was chosen, consisting primarily of semi-structured interviews, during which a Q-methodology was also conducted among practitioners in Italian and Dutch firms.

Lastly, most of the existing studies focused on software development companies, namely Global Software Development (GDS), since these companies are deeply involved with agile

and are expanding internationally (Holmström et al., 2006). Nevertheless, agile practices have also developed in other industries (Califano & Spinks, 2021), such as manufacturing, entertainment and more; however, there is less research on these sectors which call for further research. Therefore, the present work does not limit to one specific sector, such as software development, but adopts a broader view on different industries, to provide a more comprehensive perspective and results that are more generalizable. Overall, this study offers researchers and practitioners practical insights into the implementation of agile in Italy and in the Netherlands.

The structure of the study evolves as follow: first, the theoretical background is depicted, which explains definitions of the main concepts, the framework that has been used as reference in the development of the study as well as previous literature on the topic. Section three describes the methodology that has been implemented in order to collect and analyse the data. Section four presents the results of the analysis, which will be discussed with regards to previous literature in section five; this section also includes practical implications for practitioners and finally the limitations of the present study will be addressed.

THEORETICAL BACKGROUND

2.1. Agile methodologies

Agile originates from the Agile Manifesto (Beck et al., 2001), which presents four fundamental values that align with additional twelve principles. The Agile methodology is defined as a collection of flexible techniques that emphasize principles like continuous engagement with customers, step-by-step delivery, prioritizing individuals over procedures, iterative progress, openness to change, and maintaining simplicity, as highlighted by Sun and Schmidt (2018). Initially conceived as a software development approach in the late 1980s and 1990s in the U.S., the primary focus of Agile has always been customer satisfaction. During the past decade, it has become more popular because of its flexible nature and faster response times, enabling businesses to swiftly address evolving customer needs (Nyandongo & Khoza, 2018).

The fundamental feature of agile methods lies in their short, repetitive development cycles centred around product features, with moments of reflection, collaborative decision-making and swift feedback integration (Holmström et al., 2006). The project is segmented into smaller units called sprints; and the customer is integrated into the team as subject matter

experts, describing their needs. In fact, implementing agile necessitates breaking down siloed work environments in favour of multidisciplinary teams focusing on specific customer-driven projects (Nyandongo & Khoza, 2018).

Numerous studies underline the effectiveness of agile methodologies, primarily attributing it to its ability to accelerate time-to-market and enhance quality and productivity; alongside advancements in information technology (Campanelli & Parreiras, 2015). Altuwaijri and Ferrario (2022) identified three main reasons for embracing agile: boosting team motivation, maintaining competitiveness, and aligning with senior management directives. Furthermore, Sun and Schmidt (2018) found through their research that professionals adhering to agile methodologies tend to experience higher job satisfaction. Specifically, these agile practices not only improve professional performance but also reduce work overload and work exhaustion. Interestingly, contrary to common assumptions, agile methodologies also diminish role ambiguity.

Agile methodologies are very flexible as they can be easily tailored to the customer's and the company's needs (Alsanoosy et al., 2020). This advantage allowed for the development of different approaches to agile, namely: SCRUM (Schwaber & Beedle, 2001), Crystal (Cockburn, 2004), Kanban (Kniberg & Skarin, 2010) and XP (Beck & Andres, 2004). While all these methodologies fall under the Agile umbrella, they differ in their frameworks and approaches to project management. SCRUM focuses on specific roles, events, and iterations (Schwaber & Beedle, 2001); Crystal emphasizes human interactions and adaptability (Cockburn, 2004); and Kanban prioritizes visualizing workflow, flexibility, and continuous improvement (Kniberg & Skarin, 2010). All these types of agile approaches are brought together by the presence of agile teams.

Agile teams, in fact, are one of the most important characteristics of agile methodologies. A typical characterization of a team is a compact group of individuals with diverse skills who share the same objective, have a defined set of achievement targets, and a collaborative approach (Dingsøyr & Lindsjørn, 2013). Within the context of agile methodologies, this concept has to encompass a more dynamic and adaptive structure; in fact a crucial characteristic of agile teams is the diversity of skills. Unlike traditional teams that may be homogeneous in skill-set, agile teams are comprised of members with different expertise. This diversity enables comprehensive problem solving and innovation, as each member contributes with a unique perspective and set of capabilities. Moreover, rather than

operating in silos or hierarchies, members actively engage in open communication and cooperation (Peeters et al., 2022). Agile teams distinguish themselves because they are self-organised, they empower team members to take ownership of their work processes and decision-making (Bäcklander, 2019). Differently from traditional teams, agile teams are not characterised by the traditional managers, but are guided by a *coach* or *scrum master* (Hoda et al., 2012; Bäcklander, 2019). However, this might be also a cause of potential issues when implementing agile: the self-organisation is very different from the traditional hierarchical organisation, as it requires more communication, which can pose some difficulties, when going through the change. (Dikert et al., 2016; Dingsøyr & Lindsjørn, 2013). Moreover, agile teams can face challenges, as they can be also cross-cultural (Bastiaansen & Wilderom, 2021; Ayed et al., 2017).

Culture, in fact, can be an issue for companies undergoing agile transformation (Dikert et al., 2016; Ayed et al., 2017). In particular, national culture can be a challenge in the agile implementation (Dikert et al., 2016). There are different aspects to take into account; first, the cooperation with colleagues from other cultures might create issues due to cultural differences (Ayed et al., 2017; Bastiaansen & Wilderom, 2021). This poses a challenge for agile companies, particularly because most of them operate in software development. The IT sector is currently experiencing a shortage of software development experts, leading to what has been termed as a "War on Talents" (Hyrynsalmi et al., 2021). The scarcity of specialized workforce leads to the search for experts globally, resulting in the formation of more cross-cultural teams (Gandomani et al., 2021).

Secondly, agile is a set of practices that have first been developed in the culture of the USA, therefore it might be that these practices will be more difficult to implement in countries with a different national culture (Zykov & Singh, 2020). Lastly, agile is characterised by a specific agile culture, constituted by a set of agile values, which give rise to agile behaviours (Bastiaansen & Wilderom, 2021). Hence, these values and behaviours might be more challenging to implement for practitioners with very different national cultures, (Zykov & Singh, 2020; Matthews & Tanner, 2022; Gelmis et al., 2022) as well as individual values.

In order to gain a deeper understanding of how these factors interact within the context of Italy and the Netherlands, it is fundamental to first provide an explanation of both agile culture and national culture.

2.2. Agile culture

Within the several definitions of organisational culture, culture is seen as a set of norms (explicit and implicit), values and beliefs, shared by individuals in the same group (Hazzan & Dubinsky, 2014). This set not only directly influences the behaviours and interactions within the group, but also is shaped by the same activities and behaviours (Hazzan & Dubinsky, 2014). Culture is composed by a set of values, which represent the shared ideals of a group (Schein, 1985) and constitute the guiding principles in people's lives (Schwarz & Core 1996). Culture, being a significant social aspect, plays a pivotal role in agile methodologies, as agile requires substantial shifts in individual, team, and corporate culture (Gelmis et al., 2022). Recognising and addressing these cultural aspects is key to creating an environment where agile practices can be effectively embraced by teams (Ayed et al., 2017). Therefore, it is first necessary to understand what agile culture is and what are its fundamental values and associated behaviours. Agile culture can be defined as the principles and behaviours of people working in an organisation using agile practices, guided by the values and principles defined in the Agile Manifesto (Kuchel et al., 2023).

2.2.1. Agile values

Agile methodologies are based on the values and principles stated in the agile Manifesto (Beck et al., 2001), upon which develops the agile culture. The four core values are:

Table 1. Agile values (Beck et al., 2001).

1	Individuals and interactions over processes and tools
2	Working software over comprehensive documentation
3	Customer collaboration over contract negotiation
4	Responding to change over following a plan

The Manifesto also contains other twelve, more specific principles, stated as follows:

Table 2. Principles of agile (Beck et al., 2001).

1	Customer satisfaction through early and continuous delivery of valuable software.
2	Welcome changing requirements, even in late development.
3	Deliver working software frequently, with a preference to the shorter timescale.
4	Collaborate with customers and stakeholders throughout the project.
5	Build projects around motivated individuals and give them the support and environment they need to get the job done.

6	Use face-to-face communication as much as possible.
7	Working software is the primary measure of progress.
8	Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9	Continuous attention to technical excellence and good design enhances agility.
10	Simplicity is essential.
11	Self-organizing teams encourage great architectures, requirements, and designs.
12	Regularly reflect on the team's effectiveness and adjust behaviour accordingly.

Besides these lists of values and principles characterizing the agile culture, little research has been carried out on the underlying agile mind-set (Denning, 2019). An exception is the paper by Bastiaansen and Wilderom (2021), which analyses cross-cultural differences in agile implementations between a British team and two Indian teams of an IT company. The study is based on a set of both agile and generic work values, which were then ranked by practitioners and experts according to their importance. The agile values are the same as reported in Table 2, whereas Table 3 includes the *important* and *very important* generic values. The findings of their study highlight the importance, across all the teams, of two agile values, namely: *Communication* and *Helpful Leadership*. The study proves that "the roots of a productive agile work culture lie in the workers' (agile and generic) work values that determine day-to-day work behaviours and their interpretations of leaders' behaviours" (Bastiaansen & Wilderom, 2021; p. 371).

Table 3. Generic work values (Bastiaansen & Wilderom, 2021)

1	Teamwork
2	Justice
3	Equality
4	Success
5	Altruism
6	Helpfulness
7	Creativity
8	Self-discipline
9	Taking initiative
10	Curiosity
11	Experimentation

12	Variety
13	Obedience
14	Ambition

2.2.2. Agile behaviours

The behaviour of people is grounded in their values (Schein, 1984) and cultural values are the root cause of agile behaviour (Lensges et al., 2018). Since the link between culture, values and behaviour is fundamental (Kuchel et al., 2023), it is particularly relevant in this study to report the behaviours that emerge from agile values.

While many studies have shown great interest in agile practices (Matthews & Tanner, 2022; Holmström et al., 2006), only a few specifically tackle individual agile behaviour (Califano & Spinks, 2021; Sutling et al., 2014). This distinction between practices and behaviours is relevant as it reflects the difference between "being" and "doing agile". As Kuchel et al. (2023, p. 1019) define in their study, "Doing agile" refers to technical agility, it is the use of agile practices (i.e., daily stand-ups, meetings…). On the other hand, "being agile" refers to the adoption of an agile culture embedded in agile behaviours that is the representation of agile values and principles (Kuchel et al., 2023, p. 1019). In this study, we are interested in understanding the impact of national culture on agile values and behaviours. Therefore, we are also interested in companies that are "being agile".

Some studies described to some extent the behaviour of agile practitioners, however most of them focus on the behaviours of the project managers (Sutling et al., 2014; Lensges et al., 2018). The study by Sutling et al. (2014) demonstrated that the adoption by Agile Project Manager of seven specific behaviours has positive effects on the implementation of agile. These behaviours are: leadership; creative and innovative; openness; communication; result orientation; strategic and ethics behaviours. However, the study mainly focused on leadership, while in the present thesis the focus is mostly on individual behaviour inside the team. Another work that analysed project managers' opinions on agile behaviours is the one by Lensges et al. (2018). This study provides a list of behaviours that are considered most important also beyond the managers' level (Table 4).

Table 4. Agile Behaviours (Lensges et al., 2018).

1	Fail forward quickly.

2	Face-to-face communication is used when possible.
3	Individuals and interactions are more important than processes.
4	Emphasis on enabling teams.
5	Risk is discussed in daily stand-up meetings, and in retrospectives at the end of each iteration.
6	Project vision is developed and shared early.
7	The product is produced at the pace the team can produce.
8	Simplicity, the art of maximizing the work not done, is essential.
9	Agile focuses on delivering value to the customer quickly so feedback can get to the development team quickly.

The present thesis focuses on individuals in agile teams: the majority of studies focus on performance (Dingsøyr & Lindsjørn, 2013), leadership (Sutling et al., 2014), motivation (Tessem & Maurer, 2007); and decision-making (Moe et al., 2012). Hence, some of the agile behaviour can be extracted from the literature. The study by Dingsøyr and Lindsjørn (2013), based on the Big Five Team Theory by Salas et al. (2005) dimensions, found that the two most relevant items for effective agile team performance are *Team Leadership* and *Closed Loop Communication*. Whereas their study shows that *Backup Behaviour* and *Mutual Performance Monitoring* receive less attention by practitioners, therefore it could be that there is a lack of awareness (Dingsøyr & Lindsjørn, 2013). The following table comprises different behaviours found in the literature, based on the dimensions outlined by Salas et al. (2005). The literature outlines these behaviours as effective in an agile team; therefore, they can be addressed to the individual team members as well (Geldenhuys, 2012). In fact, team members have to display these behaviours among themselves to enable the functioning of the agile team.

Table 5. Agile team Behaviours.

	Dimensions (Salas et al., 2005)	Behaviours
1	Team Leadership	Leadership (Sutling et al., 2014) Planning (Dingsøyr & Lindsjørn, 2013) Shielding from interruptions (Dingsøyr & Lindsjørn, 2013)
2	Closed-loop Communication	Communication (Sutling et al., 2021)

		Transparency (Califano & Spinks, 2021)
		Open communication and open dialogue (Dingsøyr & Lindsjørn, 2013)
		Visualising status and progress (Dingsøyr & Lindsjørn, 2013)
		Being physically present (Dingsøyr & Lindsjørn, 2013)
3	Backup Behaviour	Collaboration (Califano & Spinks, 2021)
4	Mutual Performance Monitoring	Inspection (Califano & Spinks, 2021)

In conclusion, agile is characterised by its own culture, which is based on a specific set of values (Beck et al., 2001). These values, together with work generic values, generate employees' (agile) behaviours (Bastiaansen & Wilderom, 2021). Therefore, implementing agile requires changes in the individual, team and corporate culture (Gelmis et al., 2022). The literature has in fact shown that agile methodologies can be challenged by national culture.

Before diving deeper into the focus of this research, it is fundamental to understand the definition of culture and the frameworks that are mostly used to analyse national culture.

2.3. National culture

National culture can be defined as a part of the "mental software" we acquired from our context during the first ten years of our lives and hold most of our basic values (Matthews & Tanner, 2022).

There is no universally accepted definition of culture, as different authors provide various definitions of this concept. In particular, the two frameworks described in the following paragraphs, respectively by Hofstede (2010) and Schwartz (2011), adopt contrasting definitions of culture. Hence, it is fundamental to first understand how the two authors approach the concept of culture before diving deeper into their cultural frameworks. In particular, Hofstede sees culture as the "programming of the mind" (Hofstede, 1980), so it appears that culture is inside the mind of individuals. On the contrary, Schwartz (2011) believes culture to be external to the individual, so not a psychological variable. According to Schwartz (2011), social culture influences individuals' attitudes, behaviours and

thoughts, so these are consequences of culture, and not part of it as accounted for by Hofstede (2010).

2.3.1. Hofstede's framework

Despite the limitations of Hofstede's (2010) framework (Paragraph 2.3.4.), this model is very popular among researchers and practitioners (McSweeney, 2013). Indeed, the majority of studies have implemented this model since, it is one of the most well-known studies regarding national cultures (Gelmis et al., 2022). Because of this, most of the literature on agile and national culture is based on his framework (Ayed et al., 2017; Matthews & Tanner, 2022; Gelmis et al., 2022; Zykov & Singh, 2020). Therefore, the present thesis also relies on it, but only to outline a clear overview of the differences between Italy and the Netherlands.

The framework comprises six dimensions, through which the national culture is analysed and evaluated. The six dimensions and their characteristics are presented in Table 6.

Table 6. Hofstede's cultural dimensions (Hofstede, 2010).

Power Distance	Power Distance represents the degree of the acceptance of the unequal distribution of power by the less powerful members.
Individualism vs. Collectivism	Individualism refers to the degree of interdependence within the members of a society. In individualistic societies, people focus on their own needs; whereas in collectivistic societies people belong to groups that provide reciprocal support and loyalty.
Masculinity vs. Femininity	Societies that display high masculinity are characterised by competition, achievement and the main motivation is the pursuit of success. Low scores on masculinity indicate a feminine society in which people care for others and the overall quality of life; therefore, the main motivator in this case is the enjoyment of the work.
Uncertainty Avoidance	Uncertainty Avoidance is the dimension that indicates the extent to which people feel uncomfortable with uncertainty. High scores indicate that people need more rules to have more control on future events.

Long- vs. Short-Term Orientation	Long-term orientation, according to Hofstede (2010), reflects how a society must retain connections with its own history while confronting present and future challenges.
Indulgence vs. Restraint	The dimension of Indulgence is characterized by the degree to which individuals attempt to manage their desires and impulses. Societies with low scores on indulgence are more Restrained, meaning that they have strong control over their impulses.

2.3.2. National culture and agile culture

Previous studies have analysed the impact of national culture on agile implementation in one single country, while only a few studies have compared different national cultures (Ayed et al., 2017; Alsanoosy et al., 2020); additionally most of these studies implemented Hofstede's framework to define the national culture (Califano & Spinks, 2021; Matthews & Tanner, 2022; Gelmis et al., 2022; Zykov & Singh, 2020). The literature has shown that some of the cultural dimensions are particularly relevant in agile applications (Gelmis et al., 2022; Matthews & Tanner, 2022; Zykov & Singh, 2020).

For instance, Zykov and Singh (2020) demonstrated that agile values are linked and supported by an egalitarian power distribution. Agile methodologies promote collaboration, self-organizing teams and empowerment of the members; hence, there is usually no clear hierarchy in agile methodologies. As a consequence, the egalitarian control distribution favours the development of self-organizing teams and an agile mind-set (Matthews & Tanner, 2022). This means that countries with lower Power Distance scores might be more likely to effectively adopt agile methodologies. In fact, the study by Gelmis et al. (2022) demonstrated that in the Turkish culture, which has high Power Distance, agile adaptation can be very challenging, due to the strict hierarchy. The same result was also achieved by Ayed et al. (2017) in their study of the Malaysian society, however they also underline the higher acceptance of rules in this culture.

As regards the Individualism dimension (Hofstede et al., 2010), the literature (Zykov & Singh, 2020; Gelmis et al., 2022) does not clarify whether agile values support individualistic or collectivistic values. On the one hand, agile values encourage individualistic values by fostering "Individuals and interactions over process and tools" (Beck et al., 2001). Individualism is also beneficial in agile implementation as it fosters

direct communication (Gelmis et al., 2022). On the other hand, agile also encourages collaboration and teamwork, thus promoting collectivistic values. This is sustained by the study by Matthews and Tanner (2022): they demonstrated that in South African teams, that have collectivist traits, members are "better able to adhere to the Agile value of collaboration" (Matthews & Tanner, 2022, p.130).

The dimension of Masculinity, or Motivation towards achievement and success (Hofstede Insights), is also difficult to establish in relation to agile values (Zykov & Singh, 2020; Gelmis et al., 2022). On the one hand, agile requires Masculine values such as achieving goals and accomplishments (Zykov & Singh, 2020), as is reflected in the agile values of "working software over comprehensive documentation" (Beck et al., 2001) and the agile principle of "working software is the primary measure of progress." (Beck et al., 2001). On the other hand, agile also requires Feminine values, such as flexibility, adapting to change, group interactions and face-to-face communication (Zykov & Singh, 2020; Gelmis et al., 2022). In their study, Matthews and Tanner (2022) proved that newly formed agile teams usually display higher masculine values. As the team matures, more feminine values emerge, with a particular focus on consent. Therefore, the study states that lower levels of Masculinity are aligned with agile values: decisions are reached through consent and conflict resolution is achieved through confrontation (Matthews & Tanner, 2022).

Indulgence dimension is also related to agile culture, as higher levels of indulgence lead to greater team cohesiveness (Matthews & Tanner, 2020), higher team motivation and enhanced team transparency (Ayed et al., 2017).

Long-Term Orientation dimension relates to agile values such as "Customer collaboration over contract negotiation" (Beck et al., 2001). Long-term Term Orientation leads to better customer collaboration (Gelmis et al., 2022) and focuses on future and continuous improvements (Matthews & Tanner, 2020). On the contrary, agile culture also calls for Short Term Orientation (Gelmis et al., 2022). This dimension aligns with values such as "Deliver working software frequently, with a preference to the shorter timescale" (Beck et al., 2001).

Lastly, the dimension of Uncertainty Avoidance also affects agile culture since lower scores on this dimension mean that people are more flexible and can adapt more easily to changes (Matthews & Tanner, 2020), which are some of the core values of agile. In contrast, higher scores on Uncertainty Avoidance reflect the need for more rules (Gelmis et al., 2022). At

the same time, higher scores on this dimension also lead to higher commitment to agile values by the management (Ayed et al., 2017).

These studies provide evidence of the tangible impact of culture on agile methodologies, however, they still have limitations. Ayed et al. (2017) state that their study is limited by a "problematic and somehow simplistic" definition of culture in terms of nation, so it does not account for culture as dynamic, contested and emergent concept (Ayed et al., 2017, p. 161). Moreover, their study simplifies human behaviour by focusing exclusively on cultural background and not on individual mental models (Ayed et al., 2017). Moreover, most of the existing studies relies on Hofstede's framework (Ayed et al., 2017; Gelmis et al., 2022; Valverde et al., 2021) and GLOBE (Matthews & Tanner, 2022) which poses several limitations (Gelmis et al., 2022), not only because it provides a single point of view, but also because Hofstede's model has been highly criticised (Section 2.3.4.).

Furthermore, the majority of the studies focus on agile implementation in only one country (see, Matthews & Tanner, 2022; Gelmis et al., 2022; Altuwaijri & Ferrario, 2022; Zykov & Singh, 2020).This approach is also known as "emic approach" (Brislin, 2007), meaning that it focuses on one single culture, aiming at describing its peculiarities. This approach is in contrast with the "etic approach", which aims to find similarities and differences between cultures (Brislin, 2007). The latter is the one that is employed by comparative studies, such as in Hofstede's and Schwartz's models. Purely deductive and etic approaches can be limited by the lack of adaptation to the empirical circumstances (Polsa, 2013). On the contrary, focusing only on one culture can be beneficial as it allows for a deeper understanding of its values and behaviours, also taking into account the context. However, this approach does not always provide findings that are generalizable and leading to an interesting theory (Polsa, 2013). Therefore, in this thesis, there is the use of both deductive and inductive approaches for data collection, even though the overarching approach is the etic one, since the main goal is to compare two countries and find similarities and differences.

2.3.3. Italian and Dutch national cultures according to Hofstede

In order to better grasp the dissimilarities between the Dutch and the Italian national cultures, we used Hofstede's (2010) framework and Hofstede Insights[1] to display the adjourned scores for each country and compare them (see Figure 1).

Figure1. Hofstede's dimensions, scores from Italy and the Netherlands. Adapted from Hofstede Insights (www.hofstede-insights.com)
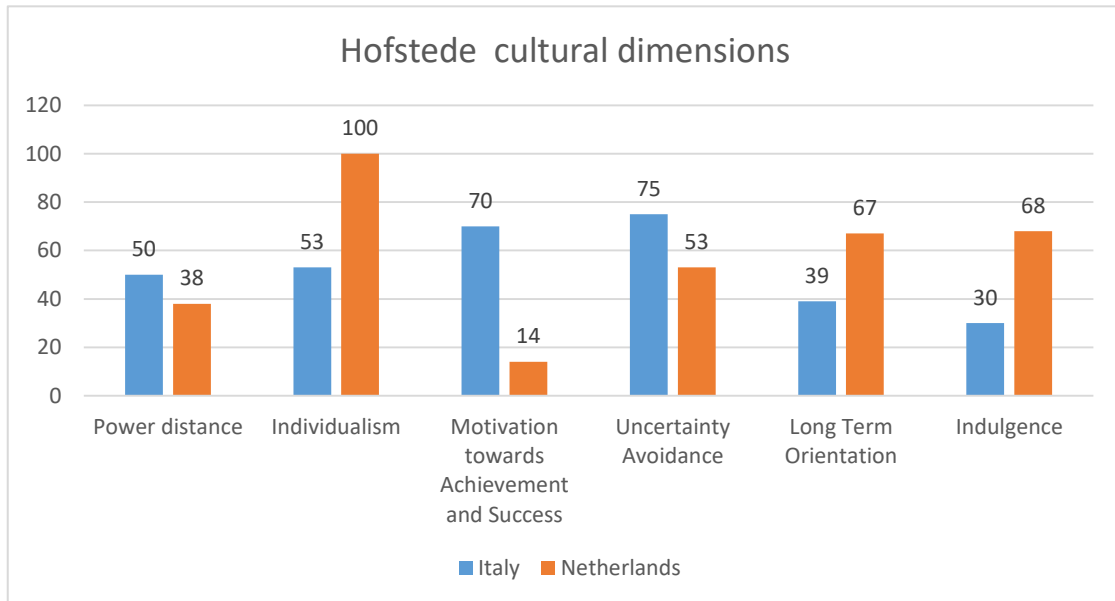
As per Figure 1, these two European countries display quite some differences in some of the dimensions. In particular, the major difference is in Motivation towards achievement and success which represents the Masculinity dimension. Italy scores very high (70) and this indicates that the society is success-oriented, so one of the goals is to be a winner, therefore, the Italian society can be very competitive. On the contrary, the Netherlands scores very low on the Motivation towards achievement and success, namely 14, which indicates a "Consensus society". In the Netherlands, people are more focused on having a good work-life balance. Moreover, in the Dutch society it is important to involve everyone also in the decision-making. In the consensus society, such as the Dutch, people value

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[1] Hofstede Insights (2023) https://www.hofstede-insights.com/country-comparison-tool?countries=italy%2Cnetherlands

solidarity and equality.[2] This dimension is also related to the generally higher levels of assertiveness displayed by Italians with respect to Dutch people (Nota et al., 2011).

Another dimension in which there is a huge difference between the two countries is Individualism. Italy displays an intermediate score of 53 in this dimension, which means that the society is not collectivistic neither individualistic. Recent studies by Hofstede Insights display a difference within the country between Northern and Southern Italy, as the Northern and Central societies are on the individualistic side, whereas in the South there is a collectivistic society. However, in comparison to the Netherlands, the Italian score is very low, as the Dutch society scores the maximum (100) in Individualism. In this individualist society, people focus on themselves (Doorduyn, 2012). Ulijn et al. (2011) associated this difference to the preference of Italian start-ups for local cooperation, contrary to the Dutch approach, which is more international.

Indulgence represents also a dimension in which Italy and the Netherlands are quite different. Italy has a score of 30, which "indicates that Italian culture is one of Restraint"[2]. Hence, people in the Italian society tend to control themselves and do not indulge their desires, and feel their actions as restrained by social norms. On the contrary, people in the Netherlands, which scores 68 in this dimension, are more willing to fulfil their impulses and they prioritise leisure.

There is some difference in the Long-Term Orientation, as Italy is short term oriented, indicating a Normative society, that respects traditions and focuses on achieving fast results. On the contrary, the Netherlands is Long Term Oriented, meaning that people are more pragmatic and have perseverance in achieving results (Doorduyn, 2012).

As regards the other dimensions, the two countries have quite similar scores. Italy displays higher (75) uncertainty avoidance than the Netherlands (53), implying that overall Italians are less comfortable than Dutch in uncertain and ambiguous situations. Lastly, as regards the Power Distance dimension, the two countries have generally medium scores, indicating that there is not a strong preference. However, the Netherlands scores lower (38), in fact people in the Netherlands overall value equality, independency and decentralised power. This dimension might also influence the feedback culture in the Netherlands that are conveyed directly (Suhoyo et al., 2014).

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[2] Hofstede Insights (2023) https://www.hofstede-insights.com/country-comparison-tool?countries=italy%2Cnetherlands

2.3.4. Limitations of Hofstede's framework

Hofstede's framework is widely used when studying national cultures (McSweeney, 2013), and understanding how these values align (or not) to the agile culture. Nevertheless, one strong limitation of this framework is its inapplicability at the individual level (Brewer & Venaik, 2012). This model is simplified (Jaakkola, 2012) and not sufficient to take into account individual mental models, when misusing the framework at the individual level, there is the risk of stereotype (Ayed et al., 2017).

In particular, McSweeney (2002) criticises Hofstede's model, by evaluating his research methodology and challenging the assumptions upon which the model is based. First of all, Hofstede assumes that his model has national validity, even though the data used concerned only some categories of IBM employees and regarded workplace issues. Then Hofstede assumes that the national is identifiable in the micro-local, he assumes national uniformity by extrapolating characteristics observed at the micro level to represent the entire nation. Moreover, McSweeney (2002) underlines the fact that Hofstede only relies on one single explanatory variable, therefore closing his model to possible non-cultural influences. Hofstede also assumes that the differences in the responses are clear manifestation of national culture, however cause and effect are not identical. In addition, Hofstede also assumes that the culture is the same in any circumstances within a nation (McSweeney, 2002). Overall, McSweeny (2002) criticises Hofstede's generalisations about national level culture starting from the analysis of limited, micro-local data; and the claims to be able to explicitly and empirically measure culture, which is instead something more complex and elusive.

The same Hofstede was aware of this "ecological fallacy" (Hofstede, 1980), that indicates the inference of individual characteristics from the ones of an aggregate (McSweneey, 2013). In fact, he admitted that only a small percentage of individual differences are due to national differences (McSweeney, 2013). However, it appears that the same Hofstede, and not just the followers, applied the national framework to the individual level (Brewer& Venaik, 2012; McSweeney, 2013). This is due to the misconception that national culture creates lower level culture and behaviour (McSweeney, 2013).

Given the numerous limitations of Hofstede's model, this thesis aims at enriching the present literature by using the more comprehensive framework developed by Schwartz (2011). In fact, Schwartz's model, unlike other taxonomies like Hofstede's, was developed

deductively (Schwartz, 2011). The deductive approach tests a hypothesis through empirical data; hence, it is less susceptible to biases and stereotypes (Bryman, 2016). Furthermore, Schwartz's theories enable the circumvention of one of the drawbacks of Hofstede's model, which involves inferring individual characteristics from national ones (McSweeney, 2013) by generating two distinct theories one for the individual level and the other for the national level. In addition, Schwartz's framework also used a quantitative method, giving more validity to the results. This framework will allow a better understanding of the link between the national culture and the individual one, as well as to grasp the individual values and behaviours of agile teams.

2.4. Schwartz's frameworks

To get a richer understanding of human behaviour across societies, Schwartz (2011) deemed it necessary to distinguish between individual basic values and cultural value orientations. He created two interrelated theories, namely Basic Human Values Theory and Cultural Value Orientation Theory that are to be distinguished but also taken into account together when understanding human behaviour. Basic values form part of individuals' personality system, and represent goals that are rooted in human nature. These basic values emerge from the necessity of individuals to adapt to the group's demands (Schwartz, 2011). Cultural value orientations represent a part of a society's cultural system and embody goals that arise from the nature of societies, the needs that societies must address in order to survive (Schwartz, 2011).

2.4.1 Basic Human Value Theory

The first of the two theories proposed by Schwartz (2011) concerns the individual level, the author identified *"a comprehensive set of values that help to explain individual differences in attitudes and behaviour"* (Schwartz, 2011, p. 2). These are called "Basic values" and represent 10 values that are universal, so they function across societies, because they are based on universal requirements of human existence, namely: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups (Schwartz, 2011).

Table 7. Basic Values (Schwartz, 2011).

1	Power	This is the value of social status and control.

2	Achievement	This value aims at personal success through demonstration of competence.
3	Hedonism	This is the value of pleasure and sensuous gratification.
4	Stimulation	Excitement and novelty are the goals in this value.
5	Self-direction	This is the value of independence both of the mind and the actions.
6	Universalism	This value aims at understanding and protecting all people and nature.
7	Benevolence	This value refers to the enhancement of the welfare of one's closest people.
8	Tradition	This is the value of respect and commitment to the ideas of the traditional culture or the religion.
9	Conformity	This value that aims at restraining actions and impulses that may disturb others or breach societal norms.
10	Security	This value aims at safety, harmony and stability of relationship and self.

These 10 Basic Values have relationship between each other, since they can either clash or be congruent, so that these relationships create a circular structure, a continuum of values. This continuum follows two bipolar dimensions: in the first dimension there are Self-enhancement values, which focus on the self, in contrast with Self-transcendence values, which care more for others. In the second dimension, there are Openness values, which encourage change, in contrast with Conservation values that aim at maintaining the status (Schwartz, 2011). This continuum represents the conflict or the congruence that individuals feel in pursuing simultaneously these values (Schwartz, 2011).

Figure 2. Basic Values (Schwartz, 2011)
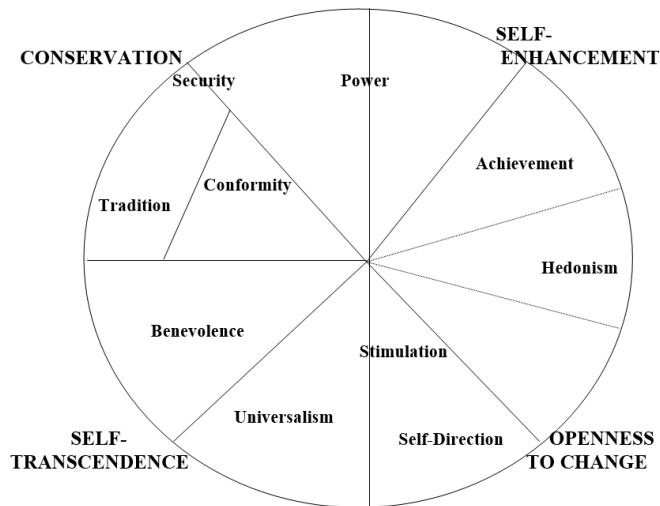
2.4.2 Cultural Value Orientations Theory

The second of the theories developed by Schwartz (2011) is the Cultural Value Orientations, in which he described the values that reflect societies. By looking at the way societies are organised and how they tackle some main issues, it is possible to detect the underlying cultural value emphases (Schwartz, 2011). In particular, Schwartz (2011) describes seven universal cultural orientations, that are in dichotomous relations. First, societies are defined based on their values of Autonomy vs Embeddedness. Societies that value Autonomy treat people as autonomous, defined identities. Within this value, there can be Intellectual Autonomy and Affective Autonomy. On the contrary, there are societies that value Embeddedness, meaning that people are considered as part of the group. Then societies are distinguished based on their degree of Egalitarianism vs Hierarchy. In egalitarian societies, people are considered as moral equals and encouraged to cooperate for the society. In hierarchical societies, there is a strict hierarchical order of the individual that ensures the functioning of the society. Finally, there is the distinction between Harmony and Mastery. Societies that value Harmony believe that the social and natural world should remain unchanged; therefore, people should accept and preserve it. On the contrary, societies that value Mastery encourage people to control and change the social and natural environment (Schwartz, 2011). These cultural orientations are also interrelated based on the compatibility of their basic assumptions (Schwartz, 2011). Therefore, the structure of these orientations is also circular.

Figure 3. Cultural Orientations (Schwartz, 2011)

2.4.3 Italian and Dutch national culture according to Schwartz

Schwartz (2008) provides a comprehensive list of all the cultural orientations of 80 countries, based on teachers' and students' evaluations. The following table displays the results for the countries of interest in the current study, Italy and the Netherlands.

Table 8. Cultural orientations. Italy and Netherlands (Schwartz, 2008).

Cultural orientations	Harmony	Embeddedness	Hierarchy	Mastery	Affective Autonomy	Intellectual autonomy	Egalitarianism
Italy	4,62	3,46	1,6	3,81	3,3	4,91	5,27
Netherlands	4,05	3,19	1,91	3,97	4,13	4,85	5,03

According to Schwartz (2008), Italy and the Netherlands display greatest difference in the Affective Autonomy, where the Netherlands score 4,13 while Italy scores 3,3. This indicates that on average, people in the Netherlands express more their own preferences and feelings, seek arousing and positive personal experiences. This result seems to be in line with the one from Hofstede Insights (2024) that showed that the Netherlands have higher level of Individualism with respect to Italy.

The Cultural Orientations outlined by Schwartz (2011) can thus be compared and confronted with Hofstede's (2010) framework of national culture, some authors have in fact analysed the similarities between these two frameworks in different organisational contexts and cultures (Maleki et al., 2014; Van Dun et al., 2023).

For instance, the core elements discussed by Van Dun et al. (2023) have been adapted in the present thesis, and compared to the aforementioned agile values (Beck et al., 2001) and behaviours. To provide a comprehensive understanding of the interrelations between these cultural levels and agile methodologies, the agile values and behaviours collected from the literature have been linked to the corresponding individual and cultural values (Table 9).

Table 9. Comparative table between Agile values and behaviours and the cultural frameworks.

National level		Individual level		
Hofstede (2010)	**Schwartz (2011) Cultural Orientations**	**Schwartz (2011) Basic Human Values**	**Agile values (Beck et al., 2001)**	**Agile behaviours**
High Power Distance	Hierarchy	Power	Responding to change over following a plan	Mutual Performance Monitoring (Salas et al., 2005) Shielding from interruptions (Dingsøyr & Lindsjørn, 2013)
Masculinity	Mastery	Achieveme nt		Planning (Dingsøyr & Lindsjørn, 2013)
Individualis m	Autonomy	Stimulation ; Self-Direction		Fail forward quickly (Lensges et al., 2018); Visualising status and progress (Dingsøyr & Lindsjørn, 2013)
Low Power Distance	Egalitarianism	Universalis m	Individuals and interactions over processes and tools	Enabling teams (Lensges et al., 2018); Team Leadership (Salas et al., 2005)
Femininity	Harmony	Benevolenc e	Customer collaboration over contract negotiation	Open Dialogue (Dingsøyr & Lindsjørn, 2013)
Collectivism	Embeddednes s	Tradition; Security; Conformity		Back up Behaviour (Salas et al., 2005); Face-to-face communication (Lensges et al, 2018)

In summary, in the present thesis Schwartz's framework (2011) will be used to investigate participants' Basic Human Values and Cultural Orientations and explore any potential difference between Dutch and Italian participants. Moreover, agile values will be analysed as described in the Agile Manifesto (Beck et al., 2001). Finally, since values directly affect behaviours (Bardi & Schwartz, 2003) agile behaviours are studied in the present thesis and compared between the two national groups.

The literature on agile methodologies points out that agile implementation can often be challenged by the national culture (Dikert et al., 2016; Ayed et al., 2017). Most of the literature analysing the influence of national culture on agile implementation used Hofstede's framework (Califano & Spinks, 2021; Matthews & Tanner, 2022; Gelmis et al., 2022; Zykov & Singh, 2020). In addition, most of these studies focus only on one country, whereas the cross-cultural ones are scarcer (Ayed et al., 2017; Alsanoosy et al., 2020). Hence, this thesis wants to contribute to the literature, by comparing agile implementations in two culturally different countries, Italy and the Netherlands.

The cultural differences between these two countries have been presented according to the most popular framework by Hofstede (2010). However, given the limitations of this model (McSweeney, 2002; Brewer & Venaik, 2012), it was deemed necessary to provide a more precise analysis of the culture of Italy and the Netherlands that was comprehensive of both Basic Human Values as well as Cultural Orientations, therefore Schwartz's theories (2011) have been deployed. This framework is helpful in the conduction of this study, as it explains the associations between national and individual values. In the end, the results from Schwartz's framework will be used to explain potential similarities and differences in agile values and behaviours in the two groups.

METHODOLOGY

3.1. Research Design

The present research aims at explaining how agile values and behaviours vary in Italian and Dutch national cultures and how these may affect agile implementation. The research was conducted using a concurrent mixed-method approach (Bell et al., 2022), which includes qualitative and quantitative analysis conducted simultaneously. This approach allows for more rigour and depth in the analysis of the data by interpreting and enriching the

quantitative results using the qualitative data gathered through the interviews (Ramlo, 2015).

A qualitative approach has been chosen to answer the exploratory research question (Saunders et al., 2007), since it overcomes one of the problems of purely quantitative research, such as helping to identify previously unknown variables (Kelle, 2006) and to better understand the explanations of the already known ones. Moreover, qualitative methods such as interviews are well suited to investigate human complex system of values and behaviours (Corbin & Strauss, 2014). A quantitative method, the Q-methodology, is also applied during the interview, as it allows deepening the discussion towards the ranking of agile values and behaviours (Ramlo, 2015). This method provides a set of results, which are analysed through statistical testing, enhancing the comparability of the two groups.

3.2. Data collection

3.2.1. Sampling

The sample of this study comprises of 8 Italian and 8 Dutch employees from different companies working agile (Guest et al., 2006). Given that previous studies mostly focus on software companies, this thesis aims at giving a broader perspective, since the agile methodologies have been adopted in several different industries (Holmström et al., 2006; Trier & Treffers, 2021). Therefore, since the aim of this study is to assess the cultural differences and to understand whether they influence agile values and behaviours, various firms have been included in the study. The majority of the participants were involved in the consultancy sector (44%), and in the IT department (50%). This approach enabled the collection of a more comprehensive perspective and improved the generalizability of the results.

A selection criterion for the companies is that they are small and medium enterprises (SMEs), since agile methodologies have been developed from the start in SMEs (Boehm & Turner, 2005) In fact, it is easier to implement agile methodologies in smaller organizations, where there is generally lower hierarchy, less bureaucracy and they are overall more adaptable (Dikert et al., 2016). This implies that agile values and behaviours would be more present in the organization and therefore more easy to detect during the analysis. However, this criterion has been slightly adapted to be able to gather a sufficient amount of data, by

integrating four participants who work in larger organizations. Finally, only the interviewees who have been working agile for at least one year were selected, so they have enough experience to identify agile values and behaviours (Gregory et al., 2020).

The sampling process involved purposive sampling, since only employees who have been working agile for at least one year were selected (Creswell & Creswell, 2018). However, no other criterion such as gender, age and position within the company was specified in the selection criteria, as the aim of the study is to get different perspectives on agile values and behaviours, enhancing the generalizability of the results. Moreover, the participants were selected mostly via the LinkedIn App, through posts and personal messages. This method constituted snowball sampling (Heckathorn, 2011) as both interviewees and other experts forwarded the invitation to other possible participants.

The interviewees voluntarily took part in this project and their contribution will remain anonymous. Moreover, a copy of the findings, as well as the final paper will be delivered to them.

The present thesis received consent from the Ethics Committee of the University of Twente to conduct the interviews and surveys.

3.2.2. Sample

A description of the participants' general information is reported in Table 10 to better understand the sample.

Table 10. Sample demographics.

IP	NATIONALITY	AGE	GENDER	ROLE	SECTOR	FIRM SIZE
IPI1	Italian	27	Male	Software Developer	IT department	SME
IPI2	Italian	33	Female	Agile coach (consultant)	Consultancy	Large
IPI3	Italian	25	Female	Agile coach (consultant)	Consultancy	Large
IPD1	Dutch	36	Female	COO	Consultancy	SME
IPD2	Dutch	45	Male	Director in the Higher Education	Higher Education	Large
IPI4	Italian	40	Male	Lead UX Designer	IT department	SME
IPD3	Dutch	29	Female	Lead consultant (of specific platform)	IT department	Large
IPD4	Dutch	28	Male	Scrum master (consultant)	IT department	SME
IPD5	Dutch	36	Male	Agile coach (consultant)	Consultancy	SME
IPI5	Italian	34	Male	Agile coach (consultant)	Consultancy	SME
IPI6	Italian	38	Male	Agile coach/Scrum master (consultant)	Consultancy	SME

IPD6	Dutch	52	Male	Agile coach/Scrum master (consultant)	Consultancy	Freelance
IPI7	Italian	35	Male	R&D manager	IT department	SME
IPI8	Italian	26	Female	Product Owner & Data Analyst Lead	IT department	SME
IPD7	Dutch	37	Female	Product Owner	IT department	Freelance
IPD8	Dutch	33	Male	Product Owner	IT department	Freelance

The IP of the participants indicates the Interviewed Person, the letter which follows IP indicates whether the participant is Italian (I) or Dutch (D).

The interviewees have an age comprised between 25 and 52 years old. The sample is composed by 37,5% female and 62,5% male participants. 44% of the interviewees work in the Consultancy sector, 50% work in the IT department, while only 6% work in a different sector, namely Higher Education. Some agile consultants are working within the IT sector, and with specific platforms and clients, therefore they were distinguished from the other agile consultants who have a more diverse set of projects.

3.3. Research Instruments

3.3.1. Semi-structured interviews

For the qualitative approach, semi-structured interviews were used in order to accurately grasp all the nuances and differences in the interviewees' values and behaviours (Corbin & Strauss, 2014), since this approach guarantees some level of standardisation, while allowing also for flexibility (Miles & Hubermann, 1994). The interviews were conducted in the online platform Microsoft Teams, as it is more convenient for all parties, both economically and in terms of time consumption. The main downside of this online approach regards the connection between interviewer and interviewee and challenges when dealing with sensitive topics (Sah et al., 2020). The interviews lasted, on average, an hour and were recorded and transcribed directly on Microsoft Teams. The choice of the language was English for the Dutch-speaking employees, while interviews were held in Italian for the Italian-speaking employees since the interviewer is Italian native speaker and is proficient in English.

The interview guide (Appendix 1) shows a set of questions that were asked to the interviewees and upon which the whole conversation was based. Depending on the answers, the flow of the interview varied. The set of questions started with a general introduction and open questions on the interviewee's background and experience with agile. The

interviewees were asked some more personal questions to assess their personal values, in order to explain some potential differences in the perception of agile values and behaviours. The questions regarding individual and cultural values were based on Schwartz's framework and his guidelines (Schwartz, 2021). Afterwards, the Critical Incidents Technique (Flanagan 1954; Urquhart et al, 2003) was used to capture additional agile behaviours: interviewees were asked to narrate events in which they describe agile behaviours within their team. This approach is particularly useful to inductively gather insights and clear examples of behaviours.

3.3.2. Q-methodology

During the interview, the experts were provided a list of both agile values and behaviours and were asked to rank each item according to their importance. This is called Q-methodology (Appendix 1), it involves the forced ranking of predefined items into a normal distribution, by addressing it with high, low or medium importance (Watts & Stenner, 2012). The data gathered through Q-methodology is used to provide a deeper and more rigorous understanding of how the participants perceived each value and behaviour. Since it was conducted online during the interview, the participant could explain each positioning with respect to the others, allowing for additional insights about their choices (Ramlo, 2015, Bell et al., 2022). Furthermore, by looking at the items' descriptive statistics, results were easily compared between the two groups of Italian and Dutch employees (Alsanoosy et al., 2020).

The platform used for the online Q-methodology was Miro, where participants were asked to answer the question: "Which of these values (behaviours) are most important for you within an agile team?". To address the question, interviewees were invited to rank 24 predefined agile values and 24 behaviours into two distinct distributions, on a scale from - 4 to 4, with -4 indicating the least important values (behaviours) and 4 the most important ones. The list of the 24 values comprises agile and work values mentioned in the Theoretical Background (Appendix 1). The list of the 24 behaviours includes the agile behaviours described in the Theoretical Background as well as in the study by Yukl (2012) (Appendix 1). The paper does not detail specific agile behaviours, but instead discusses general leadership behaviours. Agile teams are self-managing, with shared leadership and consensus-based decision-making. Consequently, it is expected that team members will recognize and adopt these leadership behaviours (Durskat & Wheeler, 2003).

3.4. Data Analysis

3.4.1. Qualitative data analysis

The semi-structured interviews were analysed through Thematic Analysis (Braun & Clarke, 2006), in combination with the Gioia Method (Gioia et al., 2013), which allowed for the identification of common themes. The transcribed interviews were coded following both a deductive and an inductive approach. More specifically, the quotes regarding the values were analysed through the framework by Schwartz (2011), with a more deductive approach. On the contrary, the quotes of the interviewees regarding their agile values and behaviours, including the explanation of the Q-Methodology, were analysed through an inductive approach, to faithfully represent the employees' point of view and to perceive any additional information on the topic. In the end, the coding process was conducted through Atlas.ti (Corbin & Strauss, 2014). Moreover, the codes were reviewed by a second person, who is expert on the topic, to assure an unbiased opinion.

3.4.2. Quantitative data analysis

The results from the Q-methodology provided quantitative data on agile values, hence it was possible to analyse it through statistical tests. The results were first adjusted to positive numbers, shifting the scale from -4 to 4, to a scale from 0 to 8 in order to avoid any issues when computing the data into the software. The data was prepared and analysed through the software RStudio.

In order to identify the significance in the potential differences, simple statistical tests were run (Saunders et al., 2007, Van Dun et al., 2023). More specifically, depending on the nature of the data gathered, different tests were considered. The most common ones are the parametric tests, like t-tests, which are adopted when data is normally distributed and not skewed (Saunders et al., 2007).

Looking at the Q-Q plot of the distribution of the data, it was proven that the data was not normally distributed. Therefore, a non-parametric test, the Mann-Whitney U test, was run on the data to analyse the difference between groups (Dancey & Reidy, 2008, Van Dun et al., 2023).

Overall, these results were useful especially when comparing the Italian and the Dutch groups, in order to answer the research question.

FINDINGS

The aim of this thesis is to answer the research question, namely, "How do agile values and behaviours vary between Dutch and Italian agile team members and impact agile implementation?" The present section provides an overview of the results. Since the data has been gathered through concurrent mixed method approach (Bell et al., 2022), the results are also displayed in a similar way, by interlacing the qualitative and the quantitative results.

This section is divided following the aggregated dimensions identified during the qualitative analysis and is organised as follows. First, a presentation of the overarching theme of the Agile way of working is presented; then the qualitative findings regarding Schwartz's dimensions are shared. Afterwards, the reader will find the chapter on agile values and the one on agile behaviours, which describe first the quantitative findings and then the qualitative explanations gathered throughout the interviews. Finally, the last chapter of the findings is devoted to the aggregated dimension of the Boundary conditions, a dimension that has been inductively identified during the qualitative analysis.

The table of the data structure is presented in the Appendix 2.

4.1. Agile way of working

It is important to consider that agile values and behaviours are presented within the context of the agile way of working, where teams are structured in particular ways, distinguishing them from conventional teams. Agile teams are self-managing teams (SMT), in which members do not follow instructions from a superior; on the contrary, they have autonomy on their projects. As the literature explains, there can be SMTs that have an external leader, like an agile coach (or Scrum master) who is responsible for giving the team direction until the team can manage itself. Alternatively, there can be teams without a formal leader, which usually employ shared leadership (Spiegler et al., 2021).

Moreover, as mentioned in the theoretical background, cross-cultural teams are quite widespread within the agile way of working. Most of the interviewees (from both groups) mentioned that they work in a mono-cultural team. However, some participants do engage in cross-cultural teams or even work abroad. The experiences of team members in cross-

cultural environments highlight advantages such as Enriching diversity "*Having more cultures often makes you question what you think was obvious and you interrogate yourself about everything, including your approach to work, so it's definitely positive*." (IPI8). However, some challenges have also been identified, regarding communication and language; the perception of time and of roles and the attitude towards work. One participant gave an example of the difference in role perception: "*She was shocked just by me being present at the job interview. Because in Spain it never happens that the director is present at the job interview and is talking about the weekend*" (IPD2).

4.2. Schwartz Values

In order to assess the individual values of the participants and confirm the existing literature on Italian and Dutch values, some questions based on Basic Human Values (Schwartz, 2012) and Cultural Orientations (Schwartz, 2011) were posed. This investigation enables the understanding of potential differences also in the agile values and behaviours.

Basic Human values. Regarding the Individual Values, participants were asked questions on their Openness to change. Most of the interviewees declared that they are comfortable with change and they pursue it in their lives. For example, IPI2 revealed that "*Stability scares me, so I really like the change*". And also a Dutch participant mentioned: "*Yes I like change, probably that's why I feel comfortable with agile. I think I'm responsive to change and can change very quickly*" (IPD4).

Some other interviewees instead were inclined towards Security, expressing a preference for environments that are familiar and well-known to them. For instance, one of them noted: "I *am more comfortable in a situation I know. But I'm trying to change myself to be confident in new areas*" (IPD4). Hence, this dimension varied slightly between individuals, but there is no pattern indicating a substantial difference between the Dutch and the Italian groups. Overall, everyone agreed that in order to succeed in an agile environment you have to be able to cope with change.

Interesting answers regarded the Self-enhancement. In fact, the only participants who displayed stronger levels of Achievement were the Italians (IPI2, IPI3, IPI7, IPI8). For example, IPI3 claimed that: "*I'm very focused on the work, I mean if I get a request (...) to help or do something that I have never done before, and they give me this opportunity that*

I value as interesting, I take it. Even though I know that I could maybe use that half an hour a day to do something else". Whereas the rest of the interviewees declared they value work-life balance and being able to enjoy themselves. One Dutch participants said for example: "*I really value work life balance highly because I'm really into sports and I think that's what is more fulfilling for me. I really love my job but I think that I work to live, I don't live to work*" (IPD3). However, also some Italians value work-life balance "W*ithout my free time, without being able to do things outside of work, I would really go into burnout immediately*" (IPI1).

Another parameter that was investigated was the Conservation value, in which participants were asked their opinions on traditions. Across the two groups, some interviewees deemed traditions to be quite relevant at a societal level in order to have a sense of belonging (IPD6; IPI4). However, none of the participants highly cherished traditions. Especially in the working context, Dutch and Italian participants agreed that habits and traditions like "*We have always done it like this*" (IPI8; IPD4) prevent innovation and improvement inside a company.

Finally, the last individual value that was analysed is that of Self-Transcendence. Overall, across both groups, participants considered essential helping others, both in their private and work life. For example, IPI1 said that "*Helping others is fundamental, I think it's very useful if there is someone who is stuck and you are able to help them in their work; and I also ask for help when I need it, so it's reciprocal (...). In my personal life even more so, because if a person needs me there's no problem, but obviously I have to be able to do it, otherwise I do more damage*". A different point of view on this topic, was also given by IPD1, who claimed that "(Helping others) *For me that's the main reason I do this job and I don't really care about titles or things like that. I just want to make it happen and I want to see people grow and becoming what they want to be and to be able to make room for that or to enable that*".

Cultural Orientations. As regards the Cultural values, the focus was on the value of Hierarchy. Across both groups, individuals mentioned that hierarchy can be useful as it gives structure and clarity, however it also brings staticity and longer times due to the bureaucracy (IPD1; IPI2; IPD7). The main point that the majority of the participants made is that it is essential to have a defined leader, someone who is responsible for the end decision: "*You need someone who presses the red button in the end*" (IPD2).

At the same time, interviewees all agreed that it is fundamental to be able to make your own decisions, so Mastery over their own actions is important to all of the participants, independently of their national culture. However, no one deemed important being able to make decisions for others.

In conclusion, the participants belonging to these two different cultures do not display much difference in their Basic Values (Schwartz, 2012) and Cultural Orientations (Schwartz, 2011), except for higher Achievement in the Italian participants.

4.2. Agile Values

The second part of the interviews was devoted to interviewees displaying values and behaviours on the Miro board. The following table (Table 11) reports the descriptive statistics for the agile values in the two groups as well as the results of the Mann-Whitney U test.

Table 11. Quantitative results of the interviewees' perceived importance of agile values.

Values	Mean IT	SD IT	Mean NL	SD NL	Mann-Whitney Test
Motivated individuals	6,0	1,9	5,0	1,9	0,312
Supportive environment	5,8	1,8	4,5	2,0	0,264
Working software as primary measure of progress	2,8	1,6	2,1	2,8	0,310
Continuous customer collaboration	5,1	1,4	5,9	2,1	0,422
Welcome changing requirements	5,3	1,6	5,1	2,0	0,826
Customer satisfaction	4,6	2,6	5,6	1,9	0,337
Shorter timescale for delivery of software	1,9	2,2	4,0	2,9	0,098
Sustainable development: constant pace	4,8	2,1	2,9	1,8	0,090
Technical excellence	2,4	2,1	2,6	2,3	0,872
Simplicity	4,0	2,1	3,9	0,8	1,000
Transparency	6,1	2,2	5,6	1,8	0,487
Teamwork	6,4	1,8	6,4	1,8	0,869
Justice	3,9	1,2	2,8	2,4	0,263
Equality	3,0	1,8	3,1	1,7	1,000
Success	3,1	1,4	3,9	3,4	0,630

Altruism	4,3	1,3	1,4	1,3	**0,012**
Helpfulness	4,0	2,5	4,4	1,2	0,831
Shared responsibility	6,0	1,5	5,4	1,7	0,476
Self-discipline	3,8	2,1	4,5	1,7	0,419
Taking initiative	3,5	2,2	5,3	1,6	0,111
Curiosity	3,5	1,6	4,4	1,3	0,260
Experimentation	4,3	2,3	3,8	1,5	0,788
Obedience	0,1	0,4	0,5	0,9	0,487
Ambition	1,6	1,7	3,3	2,4	0,202

Note: in bold the statistically significant value. The values and behaviours were scored on a 8-point Likert scale.

Interviewees from both groups deemed fundamental in an agile team the values of Teamwork (mean Italian: 6,4; mean Dutch: 6,4) and Transparency (mean Italian: 6,1; mean Dutch: 5,6). In addition, the value of Continuous customer involvement is ranked quite high by both groups.

Similarities are also on the other side of the distribution, in fact Obedience was considered the least important value by both groups (mean Italian: 0,1; mean Dutch: 0,5). Participants generally ranked as least important values Technical Excellence (mean Italian: 2,4; mean Dutch: 2,6) and Working software as primary measure of progress (mean Italian: 2,8; mean Dutch: 2,1).The Mann Whitney U test results show that the only value that is statistically significant between the Dutch and Italian groups is Altruism ($p < 0.05$).

Relational values. By looking at the qualitative data gathered, it is possible to understand the reasons behind this distribution, hence, why some values are deemed more important than others by both groups. Indeed, overall, participants displayed Teamwork as an important value, as well as Transparency. Regarding Teamwork, this quote illustrates the importance of working in a team "*Because solo work is no good, solo thinking in a team, it destroys the team*" (IPI7). IPI5 also shared this interesting example, which clearly represents these values: "*I started working with teams, where the various departments in the organization (…) didn't communicate, there was a manager who oversaw the work and acted as communication channel between different aspects of the development, and everything went through him. So we introduced daily 15-minute meetings, the Daily stand-ups, where all the people, the team, talked to each other and aligned. It created a lot more transparency on what colleagues were doing and a lot more alignment and collaboration*

between them". This quotation clearly depicts the importance of having Transparency, which allows for better Alignment, hence better collaboration. The inductive approach enabled to identify additional values that were not reported inside the Q-method. One of these is the value of Trust. This is an important component in an agile team, which is linked to the values of Teamwork and Transparency, as a participant says: "*I put teamwork there because you need to be able to trust your team to do the right thing as well, because you can't do everything on your own*" (IPD2).

On the contrary, one Relational value, Obedience, is particularly low in the distribution. This is because interviewees said that if a team member has the other values like Responsibility and Teamwork, one should not need Obedience. This value might be helpful when complying with the organisational rules or standards; however, this is not a fundamental value in an agile team, rather the opposite. As one interviewee said: "O*bedience, I think is a bit of an anti-pattern to working in agile because it will bring somebody else saying what you have to do. Whereas if you have the other values in place, for instance, you have the responsibility, you have to focus on success for your clients; then the team will work at its best. And listening to your boss, complying towards your boss' saying, will slow you down and will bring actually a lot of faith in the knowledge and the skills of one single person*" (IPD6).

The quantitative results depict that Altruism is statistically significant. The Italian participants on average considered Altruism as an important value, whereas Dutch interviewees deemed this value as less essential.

A potential explanation could be found looking at the interviews. Italian participants declared sentences like "*Altruism, absolutely something important*" (IPI7). Quotes from Dutch interviews report: "*I will put all these things in the lower ones because they are so broad and these are way more specific*" (IPD3). These broad values includes also Altruism. Moreover, the meaning of this word puzzled other Dutch interviewees, whereas it is quite a common word in Italian.

On the other hand, the value Helpfulness is considered more important by Dutch participants; despite the difference in these two terms, it was perhaps a more clear definition and specific value. Therefore, it is possible to assume that some Dutch interviewees ranked Altruism on a lower position as it was quite broad and hence it was challenging to identify with this value.

Task-based values. Working software as primary measure of progress is a Task-based value that reports lower scores, hence is generally considered less important than other values, like Customer satisfaction. "*Functioning software as a measure of progress, yes, but in the end customer satisfaction is more important anyway*" (IPI2). In this case, the goal is that the customer is satisfied of your product, that usually coincides with a software that is working; however you are not measuring your progress with the fact that it is working, but rather on the satisfaction of your client. Another point of view is given by IPD8: "*Working software as a primary measurement of progress. No, I don't think so. (...) It could be that we have multiple sprints to actually release something, a bigger feature or whatsoever to get something working. But in the end, (...) if we can already see a part of it either working or we can already see the progress that we've made in terms of codes, it should also be OK, so it doesn't have to be like already a working software from the start it can be like draughts or, wireframes or whatsoever.*" Hence, the progress is not measured through the whole working software, rather by achieving smaller increments.

Through the inductive approach, it was possible to identify other values that were not presented in the Q-Methodology, one of these is the value of Alignment. One of the interviewees declared that one of the essential characteristics of agile teams is "*definitely alignment. whether it's a Daily because maybe you're following scrum or regardless of the framework you're following, you have moments where you align, align on the goal, so from then on you start even before giving yourself (the team) clear, shared goals*" (IPI2).

Challenge is another Task-based value that was detected inductively. Different participants mentioned it throughout their interviews, either in their personal experience or as a characteristic of the agile team: it is essential *"to be able to challenge and be allowed to challenge*" (IPD1). Challenge makes you more adaptive in such a changing environment like agile. The value of Challenge also relates to a typical Scrum value: Courage, as one of the interviewees mentioned (IPI2).

To summarise, as regards agile values, Italian and Dutch participants did not display great difference in their rankings, the results show similarities in the most and least important values. Overall, interviewees deemed essential the Relational Values of Teamwork and Transparency. On the contrary, other values such as Obedience and Working software as primary measure of progress were considered less important. Only one value, namely

Altruism, was identified as statistically significant since it was considered important by the Italian group, while it was less relevant according to the Dutch participants.

4.3. Agile Behaviours

The following table (Table 12) reports the means and standard deviations for each agile behaviour, as well as the results of the Mann Whitney U test.

Table 12. Quantitative results of the interviewees' perceived importance of agile behaviours.

Behaviours	Mean IT	SD IT	Mean NL	SD NL	Mann-Whitney Test
Fail forward quickly	5,5	1,8	5,1	3,1	0,958
Face-to-face communication	4,8	1,9	5,3	0,9	0,479
Frequently analyse risks	2,5	1,9	2,6	2,0	0,915
Project vision is developed and shared early	5,0	2,0	5,8	2,1	0,489
The product is produced at the pace the team can produce	3,6	2,0	2,8	2,3	0,520
Making decisions autonomously	2,9	2,0	5,6	1,2	**0,014**
Planning	3,9	2,6	2,8	2,1	0,553
Clarifying	3,0	1,8	3,8	1,8	0,628
Problem solving	4,3	0,7	4,5	2,5	0,551
Showing concern for others	4,8	2,5	3,9	1,2	0,277
Recognizing other's contribution	3,5	2,0	3,4	1,5	0,957
Shielding from interruptions	3,6	2,6	1,8	1,3	0,119
Open communication	7,4	0,7	6,4	1,2	0,089
Visualising status and progress	3,4	1,7	5,6	1,6	**0,017**
Being physically present	0,8	0,9	3,3	2,4	**0,015**
Mutual help	6,3	1,7	4,1	2,3	0,070
Continuous feedback	7,1	1,4	6,9	1,4	0,611
Advocating and envisioning change	3,3	1,6	3,9	2,0	0,455
Promoting innovative ideas	3,5	2,1	3,3	2,6	0,671
Facilitating collective learning	4,3	2,0	3,9	1,6	0,552
Networking	3,5	1,5	2,3	1,5	0,092
External monitoring	1,5	1,8	2,0	1,9	0,543
Monitoring operations	2,8	2,0	3,3	1,5	0,419
Regularly reflecting on the team's effectiveness and adapting behaviour accordingly	5,1	2,2	6,1	1,4	0,362

Note: in bold the statistically significant behaviours. Agile Behaviours were scored on a 8-point Likert scale.

Analysing the quantitative results of agile behaviours, both Dutch and Italian participants ranked Open Communication (mean Italian: 7,4; mean Dutch: 6,4) and Continuous feedback (mean Italian: 7,1; mean Dutch: 6,9) as most important behaviours in agile teams. Whereas participants ranked External Monitoring (mean Italian: 1,5; mean Dutch: 2,0) as the least important behaviour. Moreover, Frequently analysing risk (mean Italian: 2,5; mean Dutch: 2,6) and Networking (mean Italian: 3,5; mean Dutch: 2,3) were generally deemed less important behaviours by both groups.

The results of the statistical test point out that there are only some significant differences between the groups. The only significant behaviours identified are: Being physically present ($p<0.05$), Making decisions autonomously ($p<0.05$) and Visualising status and progress ($p<0.05$). All the other variables are not statistically significant. Hence, when looking into the results of the qualitative analysis, particular attention will be given to these variables, as they could entail cultural differences between the Italian and Dutch group.

Relational behaviours. As viewable also from the qualitative analysis, participants gave particular importance to the Relational behaviour of Open communication and Continuous Feedback. "*Open communication is really important because if you can communicate openly, that means you trust each other. And I think that's a sign, that's what a successful team is. They (team members) trust each other, and they can say anything they want. They can give each other feedback and can be honest with each other" (*IPD3). As mentioned in this quote, Trust emerges again as an essential value in an agile team that enables transparency and open communication. Participants agreed also on the relevance of Continuous feedback. "*Clearly without that, without feedback, you go back to planning and moving forward into the unknown, so you then lose the concept of agility*" (IPI5).

Interestingly, a statistically significant difference between the Italian and Dutch participants was the Relational behaviour Being physically present. From the quantitative and qualitative results, Italian interviewee did not think of it as an essential behaviour in an agile team. As one participant said "*to be physically present, clearly when you meet in person it is better. But there are also other aspects of quality of life that working remotely allows you to have. So (...) I can perhaps stay at home, but knowing that 1-2 times a week I can see my colleagues, it gives me so much value*" (IPI6). The advantages of flexibility enabled by the agile working and smart working, has been addressed also by another Italian participant (IPI1). "*It allows you to manage your working time differently, if for example I have to leave*

for an hour because of a doctor's appointment, I don't have to take time off, I can easily do an hour later".

On the contrary, the quantitative results show that Dutch participants had a preference towards working in presence. However, when examining the individual results for each participant, the majority ranked this value as less important, the only exceptionally high rating came from a participant in the education field. In this sector, it is nearly indispensable to work in person, as the fundamental aspect is the relationship with students, which may be compromised by remote work. The other Dutch participants considered this behaviour less important with respect to the others. "*I don't think being physically present is really important. I think if you have good communications going with your team, you can do it online, that's fine*" (IPD3). IPD5 also claimed that: "W*e are working with so many multinational teams so you cannot always be physically present, but if you have the option then I would always choose for that*". Hence, this agile behaviour is not particularly significant in the distinction between Italian and Dutch team members. Overall, interviewees from both perspectives considered this behaviour desirable but not essential for the effective functioning of an agile team.

Task-based behaviours. Looking at the means and standard deviations, a Task-based behaviour that was ranked quite high is Regularly reflecting on team's effectiveness and adjusting behaviour accordingly. Many participants recognized this behaviour as belonging to the practice of Retrospective. "*Yes, I think it's important this retrospectives kind of thing. It makes your team faster if you reflect.*" (IPD7) And also "*the event that I like most is the retrospective. There is a moment at the end of the sprint where the team, in a scheduled time so an hour, an hour and a half brings out what happened in the sprint; you read it, you interpret it and together you identify corrective actions. This is for me an agile team for how, how I also like to bring my experience.*" (IPI6). As it is understandable, this behaviour of reflection on the team effectiveness is also linked to another important behaviour that is Continuous feedback.

Through the inductive approach applied on the qualitative data, it was possible to identify other agile behaviours that were important according to some of the participants, namely Working at increments. This behaviour is one of the core characteristics of agile and interviewees claimed it is one of the aspects they appreciate the most about this approach. Working at increments allows for more flexibility in the project and more adaptation: "*The*

reviews allowed us to work in increments, instead of bringing everything finished at once, and thus to better adapt what we had" (IPI3).

Moreover, participants mentioned that Adaptation, together with Inspecting and Transparency, constitute the three pillars of Agile (IPD5). When working at increments, like in agile, you have to be very adaptive and change according to the requirements and the dynamic context. You can adapt only if you have inspected first and can inspect, only if you have transparency (IPD5).

On the contrary, External monitoring was deemed overall least important behaviour inside an agile team. The reason for this is that it does not really affect the single agile team per se, but rather there are dedicated departments or other teams that are responsible for the external monitoring. "*Not least because you have to look at what other companies are doing, competitors and so on. So yes it is important but not too much in a team*" (IPI1). "*External monitoring is something that I would do with other stakeholders normally*" (IPD8).

Visualizing status and progress represented significant divergence between the two groups, as Dutch participants considered it more pivotal in an agile team compared to their Italian counterparts. Within the Italian group, some participants considered that this behaviour was less significant than others, such as Continuous feedback. In fact, when ensuring Continuous feedback through values like Continuous costumer collaboration, consequently it becomes easier to observe the constant progress. For example, IPI5 said that "*It (Visualising status and progress) is important, but if you live within your team, especially in our context, that we do continuous validation with the customer. So you can constantly assess the quality that makes you feel that you are progressing*". Other Italian participants instead, interpreted the behaviour of Visualising status and progress as a controlling behaviour. For example, IPI4 says: "*Progress visualisation. Yes, that also can help the team to understand where it stands and to measure itself; but it doesn't have to be something that comes from above and controls. The top should make sure that the value released by the team is always high and the customer is satisfied. Then, how this is done, should be left to the team*". In this case, visualising status and progress was interpreted more as a monitoring function of the leader on the team, therefore it was put at the end. "*The progress visualisation goes a bit, maybe hand in hand with an internal monitoring, so more for the manager or the product owner (...) to understand the future timelines. But for the team, it's more important to just work at the pace that the team can produce and make sure that they talk openly*" (IPI8). Also

according to this Italian participant, Visualising status and progress is responsibility of a specific role, the Product owner.

Decision making behaviours. The last statistically significant behaviour was Making decisions autonomously: Italian participants ranked it as least relevant, while Dutch interviewees defined it as an important behaviour.

Diving deeper into the qualitative results, it is possible to perceive the nuances in the interpretations of this behaviour: Italian interviewees perceived the autonomous decision-making at an individual level. Whereas the Dutch participants interpreted it as the autonomous decision-making of the team. In fact, an Italian interviewee declared that: "*Making decisions autonomously, I put it as less important because (...) knowing that I can make decisions myself is important, but within a team less so, for me it's better to make them as a team*" (IPI3). Another participant also shared the same perspective: "*Is autonomy important? Yes and no, if it regards small things, one should have autonomy. However, if it concerns bigger issues, one should also discuss with others, because maybe one's decision impacts three other people, so maybe it is better to share before taking an important decision*" (IPI7). On the contrary, a Dutch interviewee said: "*So as a team, you should be able to make a decision autonomously. So if you as a team work on something, but you can't make certain decisions on it because you have a supervisor who has the last word on it, then it doesn't make any sense*" (IPD3). Nevertheless, it is clear that the message was the same from both groups, but there were two different ways of perceiving it.

In conclusion, there are some similarities between Dutch and Italian participants as regards the ranking of the most and least important behaviours. The quantitative results point out that there are also some differences, however, by looking into the qualitative analysis it seems that these discrepancies are due to specific issues in the individuals' role and their interpretations.

4.4. Boundary conditions of agile values and behaviours

In addition to these valuable insights, the inductive approach enables the identification of additional characteristics that seem to have influenced participants' perception of agile values and behaviours.

4.4.1. Team members' roles

One notable contribution comes from a Dutch interviewee (IPD1) who excluded both Visualising status and progress and External monitoring from the distribution. They claimed that these two behaviours, together with Planning, are all behaviours pertaining to the domain of project management and therefore cannot be compared to the other ones. The interviewee (IPD1) claimed: "*Well, you have project management with planning and monitoring and visualizing that are really important. And then you have team collaboration and in team collaboration you have things like, the communication and continuous feedback. I think it's two different things and you cannot really compare them. They are next to each other. So the one enables the other. So if your project management is in place and that is clear, than it's easier to collaborate*." This is an interesting point, which reflects also the aggregated dimensions of Relational and Task-based values and behaviours. Indeed, their statement is accurate: values and behaviours reinforce each other. You need a strong team to achieve your goals, and a clear structure and defined goals are essential for having an effective team. However, IPI1's perspective likely reflects their role as COO. Being one of the company's leaders provides a different viewpoint, making this team-level task potentially challenging for someone accustomed to working with a broader, more global approach.

Moreover, also another participant displayed some differences in ranking from the mean of the Dutch group. This interviewee underlined the importance of Task-based values like Technical Excellence and Working software as primary measure of progress, which were instead considered less important by the rest of the Dutch participants. Looking at the distribution of the behaviours, this interviewee also ranked Being physically present and Promoting innovative ideas as the most important behaviour, in opposition to all the other Dutch (and Italian) participants who ranked it much lower in the distribution. The reason for this difference probably lies in their particularly technical role. This interviewee was, in fact, a lead consultant for a specific platform so they were responsible for the successful implementation of the platform and were expert of the IT architecture.

4.4.2. Team maturity

The diverse sample allows the interviewer to gather opinions from various roles within the agile team. Many participants were agile coaches and/or Scrum masters, so they provided a unique perspective, as they were responsible for leading the team and guiding its growth. These participants emphasized the importance of team maturity in shaping agile values and behaviours within the team. They observed that certain values and behaviours were ranked as less important due to the team's maturity level. Specifically, these participants explained that a more mature team can engage in experimentation and innovation, which is not a priority for less mature teams (IPI6, IPD6). For example, an agile coach explained: "*Innovation, of course it's related to problem solving and it's fundamental, but it comes later. The behaviours in -1 are related to the maturity of the team in my opinion, that is the theme of velocity, so the constant pace and autonomy in decision-making*" (IPI6).

Another participant explained that the maturity of the team also influences the way both the team and the agile coach behave. "*Again, it depends on the maturity of the team. If they have a very low maturity, I will start teaching, start telling them and giving them the right examples and the best practises from the industry as well as from my own backpack. And when they are getting more mature than they have their own benchmark where they can reflect on. And then I will challenge them with questions on how to get to their best desired outcome.*" (IPD5).

Interestingly, two agile coaches shared their perspective on team maturity and its importance. "*Teams that are not so mature yet, they are also looking for a leader or a manager to tell them what to do and how to do it. And then it is up to the leader to understand at what moment the hierarchy has to stop, or when he has to step in it. It's a bit of situational leadership and so if you have a very immature team, then maybe you have to step up and tell them a bit more about how to do it, because then they cannot do that themselves. But once they have learned it, (...) then you have to step back and you let them learn, because then they'll be much quicker productive, then if you keep holding their hand all the time*" (IPD6). The more immature teams need a stronger presence of a leader, someone who can guide them through the process. Later, at a second stage, when the team learns and grows, the leader has to step back and let the team guide itself to become autonomous, as in the quote "*I first show how it's supposed to be done. Then I do it together with somebody, and then I let the other person do it, and then I help them from the back. That's a way to do it*"

(IPD6). This concept of gradually letting the team lead itself and just supporting it, is defined by Spiegler et al. (2021) as the leadership gap. This approach is shared by another interviewee who explains: "*There are three levels of application: initially you apply the rule as it is, you apply it you understand it and at that point you are ready to break the rule, in the sense that for me in this there is the maturity of the team. You have a team that starts applying things, why would you do that? You understand better what that rule means, that event, that practice, and at that point the team arrives at the ability to make them themselves*" (IPI6).

4.4.3. Sector & organizational characteristics

Lastly, the sector in which participants work had an impact on the way they perceived some values and behaviours. In the present sample, the majority of the participants worked in the consultancy sector or in the IT sector, whereas there was only one participant who was active in the education field. The sector in which he worked shaped his answers regarding the behaviour Being physically present, which is a behaviour that is more essential in the education field compared to other sectors, like IT.

Organizational characteristics like the size of the company and the structure influence agile way of working and, as a consequence, agile values and behaviours. One interviewee (IPD8) mentioned that, in his experience, multinational companies face more challenges when it comes to agile implementation. These organizations need in fact more hierarchy to ensure the process flow; but higher hierarchy and more bureaucracy hinder the implementation of agile. Furthermore, IPI1, who worked in a start-up, claimed that he could freely discuss any issue directly with the CEO, as the organization was very small and the structure quite flat. Therefore, values like Transparency and behaviours as Open communication, might be more easily transmitted in SMEs.

Two interviewees, who belonged to a multinational company, demonstrated similar values and behaviours compared to other interviewees. However, in their interviews they placed greater importance in values like Alignment and Facilitating collective learning, as shared in this example. "*When there is someone who asks for my help, before I would just help. Now, I think that maybe it can be useful to everyone. So, we created a channel on our chat, in which everyone can share about this topic. If you asked me for a document, instead of*

sending the document only to you, I put it in a folder shared with everyone. (...) I want to create a mechanism in which everyone can help each other" (IPI2).

DISCUSSION

The aim of this thesis was to explore the relationship between national culture and agile adoption in Italy and the Netherlands, particularly by assessing team member's opinions regarding agile values and behaviours.

5.1. Theoretical implications

5.1.1. National culture and agile values and behaviours

Schwartz's theory of Basic Human Values (2012) was used to analyse participants' individual values, together with some dimensions from Schwartz's Cultural Orientation Theory (2011). The results show that there is actually very little difference between the responses of Italian and Dutch interviewees regarding their Basic Human values. The majority of the participants (both Dutch and Italian) declared having high Self-Transcendence, high Openness to Change, and low Conservation. However, the only difference that was identified during the analysis is that the interviewees who displayed higher degree of Self-Enhancement were Italians. Higher Self-enhancement in Italian interviewees could be linked to the fact that this value is already embedded in the Italian education system, students are encouraged and expected to perform well and get high grades, which might be also due to the competitiveness in the job market (Quintano et al., 2012; Steca et al., 2012).

Despite individual differences, the majority of participants shared these Basic Human Values. Moreover, these values are linked with the agile way of working (Fagerholm & Pagels, 2014). Agile requires adaptability to changing requirements and an incremental approach, fostering an inclination to change. Another key characteristic of agile teams is their cross-functional nature, necessitating cooperation and communication among team members to achieve common goals. Consequently, the value of Self-Transcendence as well as generally high Openness to Change were identified in all participants, regardless of their national culture.

In addition to the similarities in their Basic Human values, both Italian and Dutch participants perceived similarly the importance of agile values and behaviours. Looking at

the results, the two groups display high relevance for values like Teamwork and Transparency; in fact, also behaviours such as Open Communication and Continuous feedback have been deemed most important in an agile team. These findings confirm not only that the agile values affect agile behaviours, but also demonstrate that, overall, the values and behaviours of Dutch and Italian interviewees do not differ.

In other words, the results display that there are no fundamental differences between Dutch and Italian participants regarding agile values and behaviours. This could be due to the fact that the individuals who work in an agile organization, are part of the same group, which has the same mind-set: the agile way of working. This phenomenon is also called Social Identity Theory (Tajfel & Turner, 1979) that is the identification, the perception of oneness with a specific group. The literature proves that this identification shapes individuals' perception of the world, their values (Ashforth & Schinoff, 2016); moreover, it also influences people's behaviours (Scheepers & Ellemers, 2019). In fact, when identifying with a community, individuals will adopt the behaviours similar to the usual or common ones inside the community (Scheepers & Ellemers, 2019).

In this specific context, it means that individuals working in an agile environment identify with the agile working group. Consequently, they will adopt the agile mind-set and corresponding values, behaving according to the group's standards. This theory extends current research across cultures, corroborating findings similar to those of Van Dun et al. (2023). Although their study focused on a lean context, they demonstrated that Brazilian and Dutch lean leaders exhibit similar lean behaviours, in line with Identity theory. In the agile context, this theory explains why Italian and Dutch team members generally display similar values and behaviours.

Proposition 1: When adopting agile, individuals identify with the values and behaviours typical of the agile methodology, favouring them over those of their national culture.

Despite these similarities, Italian and Dutch interviewees seem to perceive differently the importance of a few, specific values and behaviours. According to the quantitative results, the two groups display differences as regards the value of Altruism and the behaviours of Being physically present, Visualising status and progress as well as Making decision autonomously.

Altruism. To explain the discrepancies found regarding the perceived importance of Altruism it is useful to analyse Schwartz's Cultural Value Orientation Theory (2011), specifically looking into the dimensions measured thorough his study (2008). In fact, as shown in Table 8 (in the Theoretical Background), Italians display lower levels of Affective Autonomy with respect to the Dutch; hence, it could be possible that Italians value more personal relationships and social norms, reflecting into higher levels of Altruism. However, this is not supported by the Basic Human Values (Schwartz, 2012) identified in the sample of this thesis, as both groups demonstrated high Self-Transcendence.

In order to be able to understand the difference between the two groups, it is important to distinguish its definition before analysing its influence. Altruism is defined by the Cambridge Dictionary as "*the attitude of caring about others and doing acts that help them although you do not get anything by doing those acts*"[3]. A similar value that was presented in the Q-sort methodology is Helpfulness. Helpfulness is described as the "*Quality of being helpful*"[4]. Hence, both values include the act of helping others, however, Altruism represents a broader value including also concepts such as caring for others and not expecting anything in return. Some of the Dutch participants claimed that Altruism is a broad value; on the other hand, Helpfulness, is on average ranked a bit higher by the Dutch interviewees. The importance of Helpfulness, might be linked to one of the Dutch Christian values of Charity (Enklaar, 2007). Therefore, it is understandable that the low ranking of Altruism could be due to the fact that Dutch culture is a low context culture (Meyer, 2014) and hence it is more prone to using direct language, preferring definitions that are more precise, like Helpfulness. On the contrary, Italian culture is high-context, hence indirect communication and broader definitions are generally preferred (Meyer, 2014). Additionally, high context and low-context cultures are linked respectively with relationship- and task-oriented cultures (Doorduyn, 2012). Hence, Italians, which belong to a relationship-oriented culture, placed higher importance in the value of Altruism, with respect to the Dutch culture that is more task-oriented (Doorduyn, 2012).

Moreover, the different levels in Affective Autonomy (Schwartz, 2008) and the relationship- and task-oriented difference, do not match with the results obtained in the ranking of another behaviour: Being physically present.

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[3] Cambridge Dictionary. https://dictionary.cambridge.org/dictionary/english/altruism
[4] Cambridge Dictionary. https://dictionary.cambridge.org/dictionary/english/helpfulness

Being physically present. As explained in the results, Italians seem to rank this behaviour as less essential in an agile team, whereas interestingly, Dutch participants ranked this behaviour as more important. This result contrasts with both the Affective Autonomy scores (Schwartz, 2008) as well as the above-mentioned distinction between relationship- and task-oriented cultures (Meyer, 2014).

Examining the quantitative results for each participant, this behaviour was ranked as least important by most Dutch participants, although two interviewees considered it relevant for an agile team. One of them works in the Higher Education sector, where physical presence is crucial for establishing a bond with students (Ucok-Sayrak & Brazelton, 2022). The other outlier was an interviewee, who holds the position of COO, a role in which physical presence is also highly valued. Consequently, the factors "Individual Role" and "Sector" influence individuals' perceptions of the importance of this agile behaviour.

Additionally, it is interesting to note that Italy generally shows low scores for the importance of Being physically present, which contrasts with its relationship-oriented culture (Meyer, 2014). This behaviour can also be explained by social identity theory (Tajfel & Turner, 1979): when working agile, group values and behaviours, such as agile ones, become more significant than national cultural ones. Furthermore, the low importance attributed to physical presence can be explained by the flexibility that agile methodologies provide. As participants highlighted, this flexibility is a key advantage of agile way of working, particularly appreciated by Italian participants (Biasi et al., 2022).

Visualising status and progress. It could be possible to explain the difference between the Dutch and Italian groups regarding this behaviour by looking into Schwartz's value of Security (Schwartz, 2011). Individuals who display higher levels of Security might have a higher desire to understand and visualise the progress, in order to have more certainty about the status of the project and the future steps. However, in the present research, participants in both groups claimed a preference towards changing environments. Despite the fact that there were of course some individual exceptions in the value Openness to Change, these were not linked to the discrepancies in Visualising status and progress.

As explained, it is challenging to link these contrasts to Schwartz's theories. However, as revealed by some quotations in the qualitative analysis, these differences are related to specific Boundary conditions. The same Dutch participant who is in the role of COO declared that some behaviours such as Visualising status and progress, Planning, External

Monitoring belong to the domain of Project management and it was therefore difficult to rank these values compared to the others that are related to team's dynamics. In addition to this, as regards Visualising status and progress, Italian participants, who on average considered it less important, had different interpretations of this behaviour. Most of them interpreted this concept as monitoring and controlling from a coach or leader. Hence, also this difference is not linked to a cultural difference between Dutch and Italian participants.

Making decisions autonomously. This statistically significant behaviour could be associated to specific values in the Cultural Value Orientation Theory (Schwartz, 2011), especially to the degree of Hierarchy. However, when inquired about hierarchy and decision making power, all participants, regardless of their national culture, expressed that they value the ability to make their own decisions and take action accordingly. They also emphasized the importance of achieving consensus within the team. At the same time, they acknowledged the necessity of having a leader, someone who not only guides the team but also takes responsibility in challenging situations. This indicates that participants were primarily referring to an external leadership approach.

Finally, due to the similarities that have been found in the Basic Human Values of participants, it is difficult to associate any of the differences in agile values and behaviours to a particular dimension in the participants' cultural values. The qualitative findings, in fact, provide alternative explanations to the statistical results, especially underlying the role played by other factors, namely the Boundary conditions, such as the individuals' role and the sector in which they work.

5.1.2. Emerging model

From the results of this research, it was possible to derive a model (Fig. 4), which depicts the relationships between the various dimensions.

Figure 4. Agile values and behaviours' model.
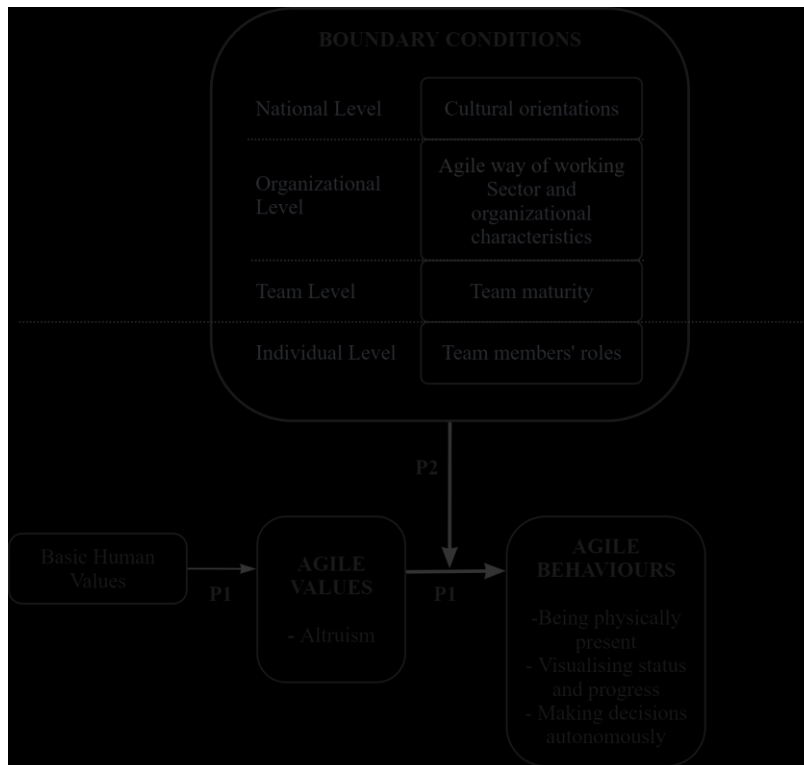
Note. Thicker lines indicate stronger relationships. The dotted lines represent the division between the three levels. P1 and P2 stand for the two propositions.

The findings of this thesis demonstrate that the relationship between agile values and behaviour is affected by the presence of certain Boundary conditions, which directly influence the strength and direction of the relationship between variables. In this study, they are categorized into four levels: the individual, team, the organizational and the national level.

At the individual level, these results align with the current literature, by demonstrating that individuals' role affect their values and behaviours. The study by Gaile et al. (2020) proves that employees display different values and behaviours from entrepreneurs. Moreover, another study found that job position is a moderator between employee motivations and customer attitudes (Amin et al., 2024); hence confirming that individuals' role does affect their values and behaviours. In the context of the current thesis, at the individual level, the role of the team member influences their (agile) values and behaviours inside an agile team.

At the team level, particularly relevant is the team maturity. In fact, as many participants described, depending on the maturity of the team some values and behaviours are more important than others. For example, experimentation was identified as something that the team can pursue after becoming more mature. In fact, the literature shows that team maturity

affects team members' agile adoption, as more mature teams adopt more easily agile values and behaviours (Gren et al., 2015).

Moreover, the team maturity also influences the behaviour of the team as well as of the agile coach. In line with the interviewees' quotes, the literature explains that there is the need for a "role transfer" from the leader to the team members (Spiegler et al., 2021, Moe et al., 2012). This transfer happens throughout different stages of team maturity: at first, the team has to observe the role, then it has to take the leadership gap generated by the leader, finally the team can play the role. In order to enable this, the leader has to be able to Empower the team, and transfer the role (Bäcklander, 2019). This is achieved through three steps: first demonstrating the role, than provide the leadership gap and finally support the team (Spiegler et al., 2021). The study also demonstrates that the leadership gap together with a supportive internal climate are facilitators of the role transfer process. It is evident that interviewees also agree on the importance of the role transfer through the creation of a leadership gap. Moreover, when studying the components of the Internal Environment it is visible that some of the values and behaviours defined by the participants as fundamental, foster the Internal Team Environment. Spiegler et al. (2021) mentions as enablers of this environment: Equality, Transparency, Team orientation, Monitoring themselves and Team learning. In line with the literature, the findings of this study also demonstrate that agile team members deem Transparency and Teamwork as essential values inside an agile team. On the contrary, Monitoring does not seem to be very important, as well as learning.

At the organisational level, the sector in which an individual is working also affects the way in which they perceive and rank certain values and behaviours. The results of this thesis show that the interviewee who was working in the education field demonstrated that some values, like Being physically present were more important with respect to all the other participants (Ucok-Sayrak & Brazelton, 2022). The literature supports this hypothesis, by demonstrating that industry and societal culture highly influence organizational culture (Brodbeck et al., 2004). In this particular case, industry type affects agile way of working, hence agile values and behaviours.

As regards the organizational characteristics, it emerged from the interviews that larger companies face challenges when adopting agile methodologies, since they adopt a more complex structure, which requires some levels of hierarchy (Conboy & Carroll, 2019). The study by Dikert et al. (2016) explains that while it can be more challenging to implement

agile in larger organizations, it is still feasible and beneficial. Specifically, it outlines challenges such as hierarchical management, coordination challenges and resistance to change. The paper also identifies specific success factors for agile adoption in larger organizations: management support, customizing the agile approach, learning and training and alignment. The findings from the interviews corroborate the literature findings: participants working in multinational companies place great importance in the values of Alignment, Empowerment from the coach as well as Facilitating collective learning.

In addition to these factors, another organizational dimension is the agile way of working, which also affects agile values and behaviours (Hazzan & Dubinsky, 2014; Bastiaansen & Wilderom, 2021). Obviously, the specific characteristics and practices like working at increments, the Daily-stand ups and the self-managing teams do influence team members' agile values and behaviours (Malik et al., 2021). Furthermore, agile allows for enhanced flexibility as these methodologies can be highly tailored to the organization's needs (Alsanoosy et al., 2020). Interestingly the flexibility provided by the agile way of working, especially after Covid19 (Klaser et al., 2023), influenced the perceived importance of the behaviour Being physically present in team members. This seems to have had an impact particularly in the Italian agile employees (Biasi et al., 2022), who belong to a relationship-oriented culture, but have appreciated the benefit of agile way of working.

Finally, at the national level, the literature displayed the influence of national culture dimensions on agile, specifically referring to Hofstede's framework (Ayed et al., 2017; Matthews & Tanner 2022). The present thesis contributes to the literature, by providing a different analysis using Schwartz's framework (2011). The findings show that Cultural orientations influence agile values and behaviours: in this case, some aspects of the Italian and Dutch national cultures affected the perceived importance of the value of Altruism.

Proposition 2: Boundary conditions such as individuals' role, team maturity, sector, organizational characteristics, agile way of working and national culture influence a team member's perceived importance of certain agile values and behaviours.

5.2. Practical implications

The present thesis addressed the research gap investigating national culture and its influence on agile way of working. Although the literature proves that values (including national

values) influence behaviours, inside the dimension of agile way of working, Italian and Dutch national cultures have a lower impact. Team members working in agile teams, display similar values and behaviours, as they adopt the agile mind-set and identify with the agile way of working.

Organizations working with Italian and Dutch team members should focus on promoting the "agile identity" by fostering values such as Transparency and Teamwork. This will enable individuals to feel part of this agile community, creating a stronger connection to the agile values and behaviours, while overcoming potential cultural differences.

Companies working with Italian teams should also foster Altruism, which is a relevant value for Italian team members. At the same time, it is important that these companies also promote flexibility, which is highly valued by Italian agile employees.

Dutch organizations on the other hand, should encourage the autonomous decision making from the team, as it is an essential behaviour according to Dutch team members. Additionally, they should foster the visualisation of status and progress, as it was identified as an important behaviour in an agile team.

In order to promote the agile identity, organizations should be mindful of the different moderators impacting agile values and behaviours. Agile coaches working in Italy and in the Netherlands should always be mindful of the team maturity and the individuals' roles, as they affect team members' agile values and behaviours. Lastly, organizations should consider the particular circumstances of their own sector, which might lead to a different prioritization of the values and behaviours. Particularly, larger companies should focus on Empowering team members, promoting Alignment and Training.

LIMITATIONS & FUTURE RESEARCH

The present study aims at contributing to the current literature by analysing the impact of national culture on agile. Despite the effort to provide a complete and robust study, the present thesis entails some limitations. The reduced number of participants enabled the interviewer to thoroughly analyse each transcript and perceive all the different points of view. However, a greater number of participants would have provided a larger amount of data enriching the validity of the present study.

It was observed that interviews conducted in the participants' native language were more spontaneous and participative compared to those conducted in English. To mitigate difficulties during the interviews, the interviewer focused on making participants feel comfortable, showing empathy, the interviewer also asked additional questions when necessary, and participants' responses to ensure accurate interpretation. This approach facilitated a better understanding of their thoughts and interpretation, especially when they communicated in a non-native language. Despite these efforts as well as interviewees' fluency in English, discussing personal topics was clearly easier in the mother tongue. Therefore, future research should, whenever possible, conduct interviews in the participants' native language.

Moreover, due to the nature of the this thesis, the data regarding team members' Basic Human Values (Schwartz, 2012) was gathered only through the qualitative method, which was based on Schwartz's guidelines (Schwartz, 2021). This approach enabled a rich data collection by grasping the interviewee's point of view and the different perception on each value and behaviour. However, a quantitative approach, as suggested by the guidelines (Schwartz, 2021), would have provided data, which would have allowed a comparison between the two national groups.

The broader sample of the study aims at providing more generalizability of the results; hence, employees from different sectors were included in the sample. After having assessed the relevance of this dimension, future research could focus on a particular industry to find specific agile values and behaviour that pertain to that sector. Furthermore, the broader sample also enabled the researcher to gather different opinions from individuals in various roles. This approach not only facilitated the collection of additional information (such as the relevance of team maturity), but also enhanced the understanding of how individuals' roles affect agile values and behaviours. In fact, interviewing only agile coaches, would have limited the insights of the impact of agile, as these experts probably have similar opinions, therefore reducing the potential impact of national cultural values. However, having assessed the relevance of this dimension on agile values and behaviours, future researcher should focus on participants in similar roles, or similar levels, in order to enhance the comparability of the results.

CONCLUSION

In conclusion, the present thesis sheds light on the effect of national culture on agile values and behaviours. It demonstrates that when working agile, team members identify with the agile way of working embracing agile values and behaviours, regardless of their national culture.

Additionally, agile values affect behaviours and they are moderated by boundary conditions, namely: individuals' role, team maturity, sector, organizational characteristics and agile way of working and lastly national culture.

APPENDIX 1

Interview guide

Introduction

- Brief presentation of the interviewer and the content of the study
- Data will be anonymized (personal information already collected through the consent form)
- Ask consent for recording

Start recording

- In which company are you working and what is your role?

Agile

1. When did your company start adopting agile?
2. Do you have any other experience in similar companies who are not implementing agile?
   o Do you recognise some specific behaviours that you embraced/started doing when you started working agile?
3. Imagine a daily situation in which you and your team are working together. How do you and your colleagues behave in the team?
   o Would you say that these behaviours between team-members are specific of agile organisations?

Individual values

4. What do you value the most about your current position?
   o What motivates you the most?
5. How important is it for you to help others in your life and work? Can you give an example?
6. Would you describe yourself as an adventurous person, comfortable with novelty and change?
7. Do you aspire to get as far as possible in your career and making sacrifices or would you rather have enough free time to enjoy yourself and your family?
8. How important are traditions for you?

Cultural values

9. Do you think that hierarchy is important in a society?

   o Do you think that people should be treated equally everywhere, independently from their ranking?

10. How important is it for you to have decision-making power, to be able to change the surrounding conditions?

   o Do you act and take decisions mostly according to your instincts or do you consider the other people and their consensus?

Q-sort methodology

11. Which values are in your opinion most important for the individuals in an agile team? Please put each option in the normal distribution (Table A1). Available options:

o Motivated individuals
o Supportive environment
o Working software as primary measure of progress
o Continuous customer collaboration
o Welcome changing requirements
o Customer satisfaction
o Shorter timescale for delivery of software
o Sustainable development: constant pace
o Technical excellence
o Simplicity
o Transparency
o Teamwork
o Justice
o Equality/Fairness
o Success
o Altruism
o Helpfulness
o Shared responsibility
o Self-discipline
o Taking initiative
o Curiosity

- o Experimentation
- o Obedience
- o Ambition

12. Which behaviours are in your opinion most important for individuals in an agile team? Please put each option in the normal distribution (Table A1). Available options:

- o Fail forward quickly
- o Communicate face-to-face
- o Frequently analyse risks
- o Project vision is developed and shared early
- o The product is produced at the pace the team can produce
- o Making decisions autonomously
- o Planning
- o Clarifying
- o Problem solving
- o Showing concern for others
- o Recognizing other's contribution (appreciation to others for their contributions)
- o Shielding from interruptions
- o Open communication
- o Visualising status and progress
- o Being physically present
- o Mutual help
- o Continuous feedback
- o Advocating and envisioning change (explaining the need for change, defining and communicating the vision)
- o Promoting innovative ideas
- o Facilitating collective learning
- o Networking (maintaining favourable relationships)
- o External monitoring (analysing the external environment, including both the environment outside the team and outside the organization like competitors)
- o Monitoring operations (to identify problems and opportunities)

- Would you like to explain something further in terms of your distribution?
- Is there anything that I didn't ask you and that you wanted to add?
- Closing remarks.

Table A1. Q-sort methodology presented to the participants.

4	3	2	1	0	-1	-2	-3	-4
Most important				Neutral				Less important

APPENDIX 2

Data structure

Aggregated Dimensions	2nd order themes	1st order themes	IP quotes	National group
Agile behaviours	Change related behaviours	● advocating and envisioning change	6	both
		○ agile requires adaptation	4	both
		○ defining a transformation plan rather than the change	1	ITA
		○ monitoring important to make changes	1	NL
		○ not promoting change but manage it	1	ITA
		○ resistance to change	8	both
	Decision Making Behaviours	● making decisions autonomously	16	both
		○ difficult decision making (unsupported)	1	NL
		○ low decision making makes you faster and gives people sense of fulfillment	5	NL
		○ team-based decision making	24	both
	Relational Behaviours	○ alignment	13	both
		● being physically present	21	both
		○ blame others	1	both
		○ burnout	3	both
		● clarifying	9	both
		● continuous feedback	13	both
		○ customer collaboration over contract negotiation	1	ITA
		○ definition of customer	2	ITA
		○ empowering others	5	both
		● face-to-face communication	11	both
		● facilitating collective learning	10	both
		○ interactions are good interruptions	1	ITA
		○ joke as a way of communicating	1	NL
		○ learn from each other	3	both
		○ listen	2	NL
		● mutual help	15	both
		● networking	12	both
		● open communication	17	both
		○ open communication and feedback together form team collaboration	1	NL
		● promoting innovative ideas	7	both
		● recognizing other's contribution	10	both
		○ regular meetings bring people together	1	NL
		● showing concern for others	11	both
		○ smart working	2	ITA
		○ social gatherings	5	both
		○ working with people	3	NL
	Task-based behaviours	● regularly reflecting on team's effectiveness and adjusting behaviour accordingly	8	both
		○ (cross-functional) meetings for new ideas	2	both
		○ create and break down features	1	NL
		○ daily technical meeting	8	both
		○ definition of costs	3	both
		○ deliver quality	3	both
		○ discuss improvements	1	NL
		● external monitoring	9	both

		● fail forward quickly	13	both
		● frequently analyzing risk	9	both
		○ importance to consider time constraints	1	ITA
		○ long-term planning	3	ITA
		● monitoring operations	8	both
		● planning	13	both
		○ present the work to the stakeholder	1	NL
		● Problem solving	9	both
		○ project management and team collaboration enable each other	1	NL
		● project vision is shared and developed early	15	both
		○ recurrent meetings	4	both
		● shielding from interruptions	11	both
		○ task definition	1	ITA
		○ testing	3	both
		● the product is produced at the pace the team can produce	10	both
		○ Up to date with innovations	3	both
		● visualising status and progress	10	both
		○ working at increments	7	both
Agile way of working	International Teams	○ international team attitude towards work	2	ITA
		○ international team communication difficulties	4	both
		○ international team enriching diversity	4	both
		○ international team language barrier	2	NL
		○ international team role perception	2	both
		○ international team time perception	1	ITA
		○ presence of international teams	4	both
	Leadership	○ collaborative leadership	4	ITA
		○ coach as enabler	8	both
		○ coach essential for giving guidance	8	both
		○ coach/leader decision making power	7	both
		○ coach's/leader's responsibility	4	both
	Self-managing teams	○ crossfunctional teams	3	both
		○ flexibility	2	NL
		○ self-organizing team	1	NL
		● shared responsibility	3	both
		○ team ownership	2	both
Agile values	Personal values	● ambition	9	both
		○ progress as driver for motivation	1	NL
		○ success motivates people	1	NL
		○ time flexibility	2	both
	Relational Values	● altruism	5	both
		● continuous customer collaboration	12	both
		○ emotional intelligence	1	NL
		● equality	12	both
		○ focus on people	3	both
		○ good communication enables online working	1	NL
		● helpfulness	7	both
		○ individuals and interactions	3	both
		● justice	7	both
		○ mentorship	2	both
		● motivated individuals	9	both
		● obedience	13	both

		○ obedience is not a value commitment is	1	NL
		● responsibility (individual)	11	both
		○ rules inside team to collaborate	1	NL
		● self-discipline	9	both
		● supportive environment	11	both
		● taking initiative	9	both
		○ team building activities	4	both
		● teamwork	11	both
		○ teamwork is essential for success	1	NL
		● transparency	14	both
		○ transparency enables consensus	1	NL
		○ transparency enables ownership and consensus	1	ITA
		○ trust	6	both
		● utility	10	both
	Task-based Values	○ challenge	5	both
		● curiosity	3	NL
		● customer satisfaction	12	both
		● experimentation	8	both
		○ innovation as a tool	1	ITA
		○ inspecting and adapting	1	NL
		○ learn from un-success	3	both
		○ relationships between values	1	NL
		● shorter time for delivering the (entire) software	7	both
		● shorter time for delivering the increment	7	both
		● simplicity	10	both
		● success	11	both
		○ success equals client satisfaction	2	NL
		● sustainable development constant rythm	10	both
		○ sustainable development NOT constant	1	NL
		● technical excellence	8	both
		● technical excellence (individual)	3	ITA
		○ technical excellence as an enabler	1	NL
		○ variability in the tasks	1	ITA
		○ visualisation, external monitoring, planning as tools for project management	1	NL
		● welcome changing requirements	13	both
		● working software as primary measure of progress	9	both
		○ working software not as a value	1	ITA
Boundary conditions of agile values and behaviours	Sector	○ consultancy	11	both
		○ higher education	1	NL
		○ software development	2	ITA
		○ IT sector	8	both
	Team Maturity	○ maturity of the individuals	4	both
		○ maturity of the organization	1	ITA
		○ maturity of the team	5	both
	Sector & Organizational Characteristics	○ agile favours innovation through less bureaucracy	2	NL
		○ agile mindset	4	both
		○ agile transformation	2	both
		○ difficult implementation of agile at higher levels in organization	1	ITA
		○ fixed approach before agile	1	NL

		○ flat organizational structure	5	both
		○ policies hinder the implementation of agile	1	ITA
		○ size of the company	3	both
		○ standard PM methods very bureaucratic	1	NL
		○ tailor the agile approach	3	ITA
	○ Team members' roles	○ agile coach	7	both
		○ agile creates new roles	1	NL
		○ COO	1	NL
		○ designer	1	ITA
		○ freelancer	1	NL
		○ product owner	3	both
		○ project manager	2	both
		○ scrum master	4	both
		○ Software Developer	1	ITA
Schwartz Values	Schwartz Cultural Values	○ egalitarianism	5	both
		○ Hierarchy	13	both
		○ cons of hierarchy bureocracy	2	both
		○ cons of hierarchy centralise power	1	both
		○ cons of hierarchy distance between roles	2	both
		○ pros of hierarchy structure and clarity	6	both
		○ respect hierarchy	1	ITA
		○ mastery	12	both
	Schwartz Individual values	○ consensus in individual's decisions	6	both
		○ Conservation		
		○ balance between change and traditions	2	NL
		○ conformity	1	ITA
		○ security	6	both
		○ tradition as not essential	5	both
		○ tradition as valuable sense of belonging	5	both
		○ tradition can block the team	2	both
		○ tradition is good if it has a purpose	3	both
		○ hedonism work-life balance	10	both
		○ openness to change	15	both
		○ self-enhancement achievement	3	ITA
		○ self-transcendence benevolence	11	both

Note: green (behaviours) and blue (values) dots represent the behaviours and values that were given to the participants in the Q-methodology.

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MODULES

Dear participants,

My name is Francesca Marini, and I am a Master student in Business Administration at the University of Twente. I would like to invite you to take part in my study. Before deciding, you need to understand why the research is being done and what it would involve for you. Please take some time to read the following information and feel free to ask questions if anything is not clear or if you would like more information.

What is this study about? Can I participate?

I am conducting this research to understand what agile values and behaviours are; moreover, I am interested in understanding whether these values and behaviours differ across cultures. Any employee who has been working in an agile organisation for at least one year can participate in the study.

What does my participation involve?

Participation in this research project is completely voluntary. If you agree to take part, you will be signing a consent form and be interviewed for about an hour about your personal experience when working agile.

The information you provide will be used only for the purpose of the master thesis and any personal information will be concealed during the transcribing process. On completion of the master thesis, the audio recordings will be destroyed, whilst the completely anonymized interview transcripts and surveys will be stored on the safe cloud of the UT for future research. If at any point you wish to withdraw, you can do so with no repercussion by contacting the researcher. In this case, data collected will be deleted and not used in the research.

Benefits and risk of participating

The research project has been reviewed and approved by the BMS Ethic Committee/ domain Humanities & Social Sciences. No risks or benefits have been anticipated for this study.

Contact details:

The researcher

Francesca Marini

f.marini@student.utwente.nl

BMS Ethics Committee

To ask questions or discuss any concerns about this study with someone other than the researcher, please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl.

Consent Form for Master Thesis on Agile Values and Behaviours
YOU WILL BE GIVEN A COPY OF THIS INFORMED CONSENT FORM

Please tick the appropriate boxes	**Yes**	**No**
Taking part in the study		
I have read and understood the study information dated (20.02.2024), or it has been read to me. I have been able to ask questions about the study and they have been answered to my satisfaction.	☐	☐
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐
I understand that taking part in the study involves participating in an audio-recorded interview. The interviews will be transcribed as text, concealing any personal data and the audio file will be destroyed once the master thesis is completed.	☐	☐
Use of the information in the study		
I understand that information I provide will be used for the student's master thesis.	☐	☐
I understand that personal information collected about me that can identify me, such as [e.g. my name or where I work], will not be shared beyond the study team.	☐	☐
I agree that what I shared in the interview (excluding any personal information) can be quoted in research outputs.	☐	☐
Future use and reuse of the information by others		
I give permission for the anonymized transcripts that I provide to be archived by the University of Twente in their protected cloud so it can be used for future research and learning.	☐	☐

Personal information (only used for research purposes)

Nationality: _____

Age: _____

Gender: _____

Role inside the company: _____

Signatures

_____   _____   _____
Name of participant (printed)   Signature   Date

I have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

Francesca Marini   _____   _____
Researcher name   Signature   Date

Study contact details for further information: Francesca Marini (f.marini@student.utwente.nl

Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher, please contact the Secretary of the Ethics Committee of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl