Values congruence and verbal behaviour of high- versus low-performing agile teams

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ABSTRACT,
The agile way of working is gaining popularity fast, and extends in different industries then solely software creation and engineering. It focuses on autonomous, adaptive and short-lasting teams, in order to provide optimal customer value. A person-workgroup fit regarding work values and consequent verbal behaviours seem to positively relate to team performance levels, in traditional management. Still, academic research regarding this matter in agile management remains limited. Thereof, this study researches the relationship between values congruence, verbal behaviour and team performance in an agile work setting. In this study, an explorative approach is used, including qualitative and quantitative data. First, a set of values and the congruence levels within agile teams are investigated through reviewing surveys filled out by each participant of each agile team (N=79). As for the second part of the study, thorough video-analyses per agile team is supposed to track and define verbal behaviours. All in all, a conclusion is drawn, whether values congruence and verbal behaviours relate to team performance, negatively or positively. Findings support, as well as contradict prior theoretical implications. The levels of value congruence are limited for high-performing teams, meaning that values congruence is not needed to positively relate to agile team performance. On the other hand, prior research has found positive relations between these variables. Less congruity has been found for personal values, such as "openness to change" and "self-enhancement", whereas last is remarkably lower in high-performing teams, meaning that having shared opinions on values such as power do not positively contribute to the performance of teams. Regarding verbal behaviours, it is found that relation-oriented behaviours, such as "humour" and "active listening" are more frequent in high-performing agile teams, and that low-performing agile teams engage more in change-related and counterproductive behaviours. Another example is "interruption", leading to constant counterproductive behaviours and decreasing performance. To conclude, practical implications have been propositioned, in order to enhance agile team design and increase performance levels.

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KEYWORDS: agile teams, work values, value congruence, verbal behaviour, team performance, team productivity

1. INTRODUCTION

In the past years, the term "agile" has gained its popularity. "Agile […] has become increasingly popular as a way of producing software in a lighter, quicker, more people-centered manner" (Sharp, 2018, p. 46). This way of working has expanded towards project management and therefore agile replaces traditional management approaches in a wide variety of service organisations, such as Spotify, who is trying to find the balance of innovation and flexibility through taking over agile ways of working (Bäcklander, 2019). Continuous improvement and the delivery of high customer value through more adaptable internal structures within the team is a requirement agility sets. Thereupon, it is demanded that behaviours and working values are being adjusted, in line with that idea.

Values are considered substantial motivational forces which lead towards certain behaviours (Uçanok, 2009). Especially in the agile environment, in which autonomy, flexibility and self-organization play major roles, it is necessary to look at the values of a team, connect these to the verbal behaviour within the team and investigate which squad constellations allow enhanced team effectiveness (Parker et al., 2015). Next to the values on the squad level, whereas squad functions as a substitute term for an agile team, the "leaders" values should be considered as a dependent variable, since his/her values also impact the behaviour of the squad members, which then consequently has an impact on the performance of the squad as a whole (van Dun & Wilderom., 2016). Already it should be mentioned here, that the "team leaders with self-transcendence value constellations serve as models for others and are associated with effective lean-team dynamics […], i.e., team members seem to read their leaders' values constellation." (Van Dun & Wilderom., 2016, p. 1541). As it gets clear there is a wide set of variables to take into account when wanting to connect values to verbal behaviour. However, the concept of value congruence has been a plentiful researched topic and can be defined as the agreement of (work) values between an individual and other governance entities such as managers, supervisors, colleagues or the complete working team (Bao et al., 2012). Within the context of this study, the P-O (person-organization) fit will focus on the congruence of work values within the agile team. It has been explored that value congruence is indeed a driver for behaviour affection, as well as increased communication and knowledge transfer (Ambrosini et al., 2010), which are main players within the "Big Five" model for team effectiveness and performance, one model within the multiplex system of frameworks regarding team effectiveness (Sims et al., 2004). The question then arises, whether this is still the case when factors change, such as the creation of multidisciplinary teams within an agile environment and whether this can have implications for agile management and team design.

1.2 Research objective and question

A lot of research has been done regarding value constellations, organisational-behavioural analysis and the way it affects behavioural characteristics of the members within teams (van Dun & Wilderom., 2016). Nonetheless, there is a research gap regarding the effect it has on the team performance in the agile context and what the practical implications are for agile team design based on value congruence and its purpose and effects. With congruence is meant "the degree to which an individual and an organisation's culture share the same values" (Kalliath et al., 1999, p. 1176), hence this concept will be elaborated further within the literature review of the article and will be applied to the idea of person-group fit. As past research has greatly contributed to the knowledge per variable, this paper aims at finding the interconnected relationships and reverberations between these variables and focuses on filtering helpful practical implications for team constellations in the agile environment. Therefore, the research question is as follows:

"How does value congruence relate to agile team's verbal behaviours and, in turn, to agile team performance?"

1.3 Academic and practical relevance

As for the practical and academic implications, the study aims to explore optimal team design and constellations within the agile context based on beneficial value patterns. Research has been done on this matter regarding constellations on the organisational level, but there is still a gap of knowledge on constellations on the group level (Sharp et al., 2011). The terms of group, multidisciplinary teams and squads in this case are interchangeable, but the term team is preferred, since it represents "an energetic group of people committed to achieving common objectives and producing high quality results" (Francis & Young, 1995, p. 8). Additionally, the concept of value congruence has been researched regarding the person-group fit, but next to relating it to levels of innovation, this study will contribute to the effect of such on the team performance. This is done through looking at performance on the team-level instead of the individual level. As for the practical implications, the study will put focus on team design connected to value congruence and the representation of verbal behaviour within the squad. The objective is to explore, among, optimal teams in terms of team performance, whether value congruence and the resulting behaviours favour or inhibit team performance. Therefore, it should give HR-managers implications on how to build agile squads to reach higher team performance and consequently higher effectiveness and value to the organisation.

1.4 Structure of the report

The report will touch upon a theoretical framework, which covers all subjects necessary in order to understand the content of the research and research question. Following, the methodology will be described, through which the data collection and measurement scales will become clear. Then, results will be analysed, which will be applied to practical implications and further discussed, including limitations and future research possibilities.

2. THEORETICAL FRAMEWORK

Due to steering away from traditional management methods, the creation of a flexible and adaptable working environment is the main focus of implementing agility within such large projects. In the following the definition of agility is described, as well as theories relating to team level values, verbal behaviour, and the theory of performance within teams.

2.1 Agile principles

To get a clear understanding on how agile teams work, it is needed to define the agile principles and what these

mean in the context of the conducted study. One can mainly define agility via the "Manifesto for Agile Software Development". Even though, this manifesto was initially created for and by software engineers, the principles and concept of agility can be related to any environment, such as for example the financial sector (Hazzan & Dubinsky, n.d.). By now, there is a wide variety of definitions regarding agility. Walter (2020, p. 344) defines (organisational) agility as "a company's set of capabilities for thriving and prospering in unpredictable and rapidly changing environment." For the service sector, which is a constantly changing industry, agile is being preferred instead of the traditional approach to project management due to its focal point on the ability to adapt, and is therefore is an end-to-end principle "designed for systems which exist in conditions of great uncertainty and frequent change in the environment and […] all project participants are required to be flexible." (Grebić, 2019, p. 57).

In order to be able to tackle uncertainty and change, there are a set of principles regarding agile teams, which focus on achieving this flexibility and adaptability. Agile sets a great contrast to traditional management styles, since such is focused on candid planning and exact management of change and plans (Dikert et al., 2016). Agile cannot be defined as either a tops-down approach nor a bottom-up approach. Agile is the description of an outside-in approach, in which the customer is priority and the reason for value creation (Denning, 2015).

Another term for the implementation of the agile philosophy is "Scrum" and it describes the unfolding of small self-steering teams (preferably up to nine people), which work in such a constellation for a shorter period of time, also referred to as sprints (Moe et al., 2010). In the context of the study, small teams, also previously indicated as "squads", work together for ten weeks, which then indicate one sprint. The important aspect of this way of working is shared responsibility for customer-related purposes and authority within the teams. One might also refer to these squads as self-managing teams (SMT), which includes a wide variety of knowledge and skill set, and thrives on collective responsibility and independence (Magpie et al., 2017). In order to cover such a wide range of knowledge, skills and expertise within the squad, the squad constellation exists of arbitrarily chosen experts from different backgrounds. Additionally, the idea of a team-manager or leader is being discarded and is being replaced by the "product owner" (Kerr et al., 2018), referred to as PO. The product owner's role equals the management of the squad including observing their performance during the sprint and guiding the squad towards high-performing results, as well as isolating the team from external impacts to keep efficiency and effectiveness high internally (Smith et al., 2009). The difference between the PO and a team manager that with the agile setting, all sorts of hierarchal structures are avoided. This then allows equal distribution of power and a supple working environment (Kerr et al., 2018). Another aspect which is of importance within such independent constellations is coordination, through which the agile way of working includes tribes. This can be described as "a collection of squads with an interconnected purpose" (Kerr et al., 2018, p.7), since interconnected relationship are one of the main pillars within team effectiveness. All in all, the agile way of working is aiming at creating a loosely-build and dynamic structure, with focus on responsiveness and versatility.

2.2 Values theory

Values can be described as "desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives" (Brown & Treviño., 2009, p. 478). They express relevant wants, which affect behaviour and personal choices, since values are daily companions (Uçanok, 2009). Schwartz (2012) has constructed a theory regarding values, including its nature, the structure of value relations and the connection towards attitudes, beliefs, traits and norms. This information allows to connect the idea of values to the verbal representation of behaviour within the agile teams and in how far this relationship contributes towards team performance. Schwartz (2012) defines ten falsifications of values. The importance of these features is that they define underlying motivations and later can be restructured into four value relations. Among the ten motivational types of value, one can extract four relational types including 1) conservation, 2) openness to change, 3) self-enhancement and 4) self-transcendence. From the perspective of this value theory, which is mainly concentrated on basic human values, this study will look into work values, which Ros et al. (1999, p.54) defines as "specific expressions of general values in the work setting". Hereby is meant that value within the work environment will be taken into account, rather than general values. In the context of agility, researchers have found out that certain values are beneficial when working in agile teams. Values such as commitment, focus, openness, respect and courage are needed in order to maximise the value within agile teams (Madi et al., 2011). But, there are more values which have been added to these five core terms, including visibility (transparency), humour, proactivity, honesty and empathy (Paterek, 2019). The two value dimensions, including self-enhancement versus self-transcendence are connected towards shared and respective interests. "Individual-oriented values emphasise power, achievement and success, whereas collective-oriented values stress altruism and universalism" (Brown & Treviño, 2009, p. 479). Next to these two dimensions, there are two supplementary aspects, namely openness to change versus conservation, which aim at different interests such as change, resilience and testing or, on the other hand, encourage tradition and obedience (Brown & Treviño., 2009). Demi et al. (2020) have found out in exploratory research regarding the Scrum method, which is a possible agile methodology, that benevolence (self-transcendence) is the most important human factor needed for scrum roles.

Furthermore, value congruence has several positive effects on variables such as on team dynamics and task performance (Mitchell et al., 2012). Values congruence means the resemblance of values within a group or between individuals (Edwards & Cable, 2009). Within this context, it means the similitude of working values within agile teams. Moreover, Brown and Treviño (2009) mention, that shared values are connected to positive outcomes. The reason for the importance of value congruence, is that careers are often chosen by individuals based on stable personal values, which then are strengthened by either training or socialisation (Brown & Treviño., 2009). Hereby, it is possible to not only measure the content of the values, but also the frequency of congruence.

Values play an important role within the expression of interests and characteristics of a person (Schwartz, 2012). Figure 1 (see appendix) shows the complex theory of values, which has been refined by

Cieciuch et al. (2014) and includes 19 values, instead of the original 10 values initially set up (Schwartz, 2017). These 19 umbrella values fall under the wings of the 4 aforementioned higher-order values, including self-transcendence, openness to change, self-enhancement and conservation. Hereby, the dimension of conservation versus openness to change reveals whether one is resistant to change and value self-control, or whether one is open to the autonomy of action and thought. On the other hand, the aspects of self-transcendence versus self-enhancement determines whether one is driven to put others' needs before of one's own, or whether one is stimulated by advancing one's own interests at the possible costs of others (Dobewall & Strack, 2013). Next to the personal focus, values can be categorised based on their level of social focus, as well as can be grouped into being growth-anxiety-free or self-protection-anxiety-avoidant (Schwartz, 2017). The higher the conservation and the self-transcendence of a person, the higher the social focus, meaning they are more likely to adapt to other people's needs. The higher the self-enhancement and openness to change, the higher the personal focus, which is related to self-expression.

2.4 Values affecting verbal behaviour

The complex concept of values includes more dynamic stimuli which trigger certain verbal behaviour. So are the core values of self-enhancement and conservation connected to anxiety-based values, prevention of loss goals and the protection of oneself against commination. On the other hand, opposite responses such as anxiety-free values, promotion of gain goals as well as self-expansion and growth are connected to the two remaining core values of openness to change and self-transcendence (Schwartz, 2012). As mentioned in the value theory, anchored values play an important role for work teams, since they are able to not only influence behaviour but also the team performance (van Dun et al., 2021). Therefore, some sort of congruence of values within the work team seems to have a positive effect. Glew (2009) mentions in his personal versus team level analysis of values that it is rather the content of the values, such as e.g., a sense of accomplishment, to have a bigger effect on the behaviour of the team than value congruence within the team. Engelbrecht (2002) on the other hand argues, that "value congruence is the tendency for individuals to express greater positive attitudes when they encounter others who exhibit values similar to their own" (p. 595). Value congruence, meaning the harmony and similarity of values within a certain context, is researched extensively previously. This has also been underpinned by Mustafa et al. (2017) who prioritised that a collectivist value orientation is an important driver for working preferences and team choice.

Additionally, value congruence is extremely important regarding managerial values in the agile context. It is not appropriate to talk about leadership values in the agile environment, since as mentioned above, the idea of a leader is being replaced by a non-authoritarian PO. Researchers have found out in general, that there exists a positive relationship between team performance and cohesiveness (Wang et al., 2005).

Conversely, there is also the misfit of values within the team (or workgroup), which can be defined as value incongruence. As aforementioned, the fit of values within the team mainly has positive effects on team effectiveness. Therefore, also a PG (Person-Workgroup) value incongruence can be of crucial relevance for job attitudes, behaviour and well-being, which then leads to increased or decreased work performance. In the case of value incongruence, it sets negative consequences for job attitudes, well-being and work-related behaviours, which consequently, as a chain reaction, has negative impacts on the effectiveness and performance of a team as a whole (Doblhofer et al., 2019).

Regarding the verbal behaviour, it is possible to classify verbal behaviour into three sections, which then can be applied to the codebook of verbal behaviour in the methodology. Gerpott et al. (2019) categorises into (a) task-oriented, (b) change-oriented and (c) relations-oriented behaviours (counterproductive behaviours have also been included). Hereby, all three types of behaviours have different distinct primary goals (Yukl, 2008). Task-oriented behaviours thereby concentrate on task efficiency (Anzengruber et al., 2017). Yukl (2008) hereby elaborates the task-oriented behaviour to have characteristics such as taking the lead in assigning tasks, scheduling, monitoring processes and is known to increase the performance of the individual as well as small teams. Relations-oriented behaviours therefore show more transformational characters, where the individual shows techniques such as supporting, cooperating, trust-building and counselling (Anzengruber et al., 2017). Lastly, change-related behaviours are focused on adaptability and innovation-creation. Therefore, it is characterised by behavioural traits such as risk-taking, encouragement and vision-building (Yukl, 2008). "The basic social function of values is to motivate and control the behaviour of group members" (Schwartz, 2012, p. 14). So would stimulation and self-direction values provoke open-mindedness and therefore might be positively related to change-oriented behavioural characteristics. On the other hand, values such as universalism and benevolence therefore communicate care and incentives to for others, which could be classified as relation-oriented behaviours (Sagiv & Roccas, 2021). As these values can be aligned with certain behavioural classifications, accordingly this also applies to the remaining values and will be further explored within this study.

2.5 Team performance

Team performance can be defined as a multifaceted process, which develops as team members capture the management of individual- and team-level processes and tasks (Salas et al., 2008). The terms of team performance and team effectiveness are interchanged often, due to the fact that performance effectiveness, including productivity, is one of the three main dimensions contributing to team effectiveness (Delgado Piña et al., 2008). Originally, team performance can be defined as being a static IPO (input - process - output) framework by McGrath in 1964. "The IPO theory postulates that input factors, such as team and individual characteristics, function through mediators or moderators to influence outputs, such as team satisfaction and performance." (Salas et al., 2009, p. 6). Yet, teams find themselves in emergent states and therefore develop and grow over time, because of which this traditional model cannot fully be applied anymore (Mathieu et al., 2017) and needs to be adjusted dependent on the team conditions.

To the main concept of team effectiveness belongs a wide set of contributors, which together define

a team as either effective or not. Cohen et al. (1996) has set up a framework which includes all components contributing to team effectiveness overall. Hereby, determinants are performance effectiveness (including costs, productivity and quality), employee attitudes (e.g., job satisfaction), and employee behaviour, which all stem from socio-technical theory, effectiveness theories and prior scientific research. Sims et al. (2004) argues that through researching team performance, as well as processes, many frameworks have been designed. Subsequently, one component of the effectiveness framework is also team performance. To dive deeper into team performance, this concept mainly focuses on group decision making and group productivity. Hereby, a chain reaction evolves, whereas "the more information group members exchange, the better the group decision making quality, and the more group members are informed about each other's expertise, the more the information is exchanged" (Kim & Burton, 2002, p. 368).

3. METHODOLOGY

3.1 Research design

The study conducted is an exploratory study, which focuses on finding new perspectives on the novel management principles of agile (Saunders et al., 2012). The aim is to look at the agile way of working from a new point of view and therefore take into account variables such as values and behaviour, which can have implications for the practice of agile and can therefore set new requirements for the agile implementation. In the end, the results will help organisations to further optimise their performance within squads and create success behaviours as a group.

The study depends on three different researches, mainly inductive methods (Saunders et al., 2012). Hereby, it is chosen to use multiple methods and different data collection techniques are combined.

There is a total of three mixed-methods, in order to collect the needed data to conduct an analysis. First, a literature review is supposed to give the needed knowledge about the topic and different concepts represented within the research question and the theoretical framework. Hereby, this method more defines as being deductive, since prior scientific investigations are being looked at critically. Additionally, data from surveys regarding the work values of each member will be analysed. Furthermore, the concept of team performance is provided through several surveys. Lastly, the data collection exploits the use of the video observations, in which all squads have been video tracked for all three meetings during their sprint (planning meeting, refinement meeting and retrospective meeting). This then accounts for the variable of the verbal behaviour.

3.2 Sampling and sample description

As mentioned prior, the samples stem from within the Dutch service sector. For research purposes within the subject of agility, there has been a collaboration with a service organization who has implemented the agile way of working in all departments in the year of 2015 and were able to document and observe a set of agile teams and track their behaviours through different methods such as video tracking. The sample size includes 11 agile teams (N=79), each with different sizes. There are deviations of the average size of approximately 7 members, but the range lies within a maximum of 10 members and a minimum of 5 members. Within these squads, there is one PO, who guides the squad, but is not the responsibility owner. The remaining members are knowledged experts from different departments building the diversification portfolio within the squads. The 11 sample squads diversify from being mono- or multicultural and also diversify from either being offline or virtual due to the Covid-19 pandemic. All in all, the sample size is relatively small, but this will have no direct impact on my research data.

Thereby, the squads are 76.54% male and 22.22% are female participants. The remaining 1,23% were not identified. The mean age of the squad members lies around 38 years old (*M = 38.404*). Additionally, the majority of the participants reached the educational level of a Universitarian or HBO Master's degree, whilst a smaller majority has a Universitarian or HBO Bachelor's degree. Only a very small proportion owns different types of educational achievement.

There were some criteria set for eligible team designs whereby the selection criteria stemmed from Kirkman and Rosen (1999) which set out (1) that the minimum team life span should be at least one year, (2) team distinctiveness should be present, (3) different levels of team effectiveness, which is mainly contingent on various amounts of productivity within the customer service and lastly (4) which critiques that across all sites, the job and the organisational characteristics are applied constantly.

3.3 Research instruments and measurements

For the measurements of each instrument, it is important to look into two concepts: reliability and validity. Reliability can be defined as the steadiness of scores, whereas validity refers to the precision of score elucidations (Hagan, 2014). Thereof, Cronbach's alpha is a common consideration of internal consistency reliability (McNeish, 2018). With a justifiable value of .7 (Taber, 2017), the research instruments can be seen as reliable. As Cronbach's alpha coefficient will account for the reliability of values congruence and team performance, so does the intra-class correlation coefficient account for reliability through identifying agreement of the same variable across coders (Compton et al., 2012).

3.3.1 Value congruence

The main research instrument is the individual working value. As mentioned before, through surveys it is possible to gain an overview of the values presented within the squads. The survey is an 8-point scale, which aligns with the content of Schwartz' (2012) value theory. In total, the survey reckons about 18 values, and each of the participants is asked to rate their importance on a 7-scale Likert scale, reaching from 1 (not important) to 7 (extremely important). There is also the option of choosing -1, which indicates that the value equals the opposite of one's personal value. Hereby, the survey includes items related to the four sub dimensions, such as self-transcendence, openness to change, conservation and self-enhancement. Additionally, it contains extra information about additional values such as directive, admirable, competitive and materialistic values. Cronbach's alpha equals *.918*, whereas this accounts for the values itself, instead of value congruence. Hereby, the categorisation of these values rely on Elizur's (1984)

definition of the value theory and the Cronbach's alpha equals *.806* or self-transcendence, *.775* for openness to change, *.762* for conservation and, lastly, *.825* for self-enhancement. These all indicate acceptable reliability. Since it is of importance to also analyse the level of value congruence within squads, the frequency of values need to be analysed in order to measure the level of congruity. In order to explore whether this has a positive or negative effect on behavioural representations and team performance the research will determine the extent of congruence within the team between the individual members' values scores through the intraclass correlation coefficient (referred to as ICC) (Chen & Barnhart, 2008). The ICC is an inter-rater reliability coefficient, which is important "when scores on a variable consists of means taken over items that are indicators of the same construct" (James et al., 1984, p. 85). Therefore, this is applicable for the construct of measuring value congruence and can be measured through the reliability of r_{WG}, which equals the within-group inter-reliability, based on a single item, which in this case would be value congruence (James et al., 1984). Ostroff (2005) has applied this type of analysis when trying to explore the multiple perspectives of congruence, specifically this method was used for organisational value congruence in the group, as well as group personal values. Ostroff (2005) then applied the one-way ANOVA test for significancy.

All used items from within the survey are categorised into the four underlying main dimensions made by Schwartz (Brown & Treviño, 2009), as can be seen in Table 1 in the Appendix. First, an ANOVA test is done, in which all means per sub dimension are being compared per team. As the work values of each participant has only been measured after the first meeting out of three (within a time span of 3 weeks), it must be assumed that these work values stay consistent throughout the meetings and therefore can be accounted for in meeting 2 and 3. Hereby one can deviate between ICC (1) and ICC (2), and the formulas used are derived from Newman & Sin (2007). As ICC (1) can be described as a one-way analysis of variance, it "provides an estimate of the extent to which raters are interchangeable – that is, the extent to which one rater from a group may represent all the raters within a group" (Klein & Kozlowski, 2000, p. 224). On the other hand, the ICC (2) measures the reliability of group means within the teams (Klein & Kozlowski, 2000), and therefore touches upon within-group reliability instead of between-group reliability. Additionally, to the input of the one-way ANOVA, the test requires *k*, which is the average size of teams, and equals *7.545* for this sample (Newman & Sin, 2007).

Even though ICC (1) and ICC (2) are being calculated, ICC (1) gives more importance, since it explains the intra-correlation within the teams, whilst ICC (2) focuses on inter-relations between the groups. Shieh (2015) argues, that a score reaching between .00 and .50, sets an acceptable range for the ICC (1).

3.3.2 Verbal behaviour

As for the research instrument of verbal behaviour, the codebook will be used as well as the video-coded videos. Two coders were used to determine inter-rater reliability and thus more reliable observations have been made, with a clear reduction of risk regarding an observer's bias. Within the theoretical framework behaviours have already been taxonomised as being change-, relation- or task-oriented, which is consistent to the classifications made in the codebook (Yukl, 2012). First, it is needed to match the codebook behaviours to those mentioned within the theoretical framework. After, it is possible to compare how these behaviours are related to the values and value congruence, and whether squads with value congruence exhibit certain behaviours, such as being, for example, more relation-oriented or not. As aforementioned, all three meetings have different purposes and it exists data of all three within one sprint (planning, refinement and retrospective). In order to most optimally align the data for verbal behaviour with such of the dependent variable, meeting 3 (retrospective) will be the analysed meeting regarding verbal behaviours. Additional reason for choosing this meeting, is the purpose of the conference, since its aim is at reflecting and building upon common solutions together and therefore sets the opportunity for all members to be relatively active. All in all, the objective is to filter out frequencies of team-level behaviours, to then fathom a link to values congruence and team performance levels.

3.3.3 Team performance

As for the measurement of team performance, a survey on team performance has been filled out by each of the participants of the squads after meeting 3. Here, the survey touches upon the perceptions and feelings of the team members, on how they view the performance of their team during the meeting. The survey is based on a 7-item Likert scale, ranging from 1 (very inaccurate) to 7 (very accurate). The Cronbach's alpha is *.755*.

A second source to measure the team performance as a whole, is the data collected on "team productivity". As for the data on team productivity, there is no indication on how reliable it is, but it includes a 6-item measure which represents a synthesis of the KPI's. This data has not been collected by team members individually, but is data from the analysed company itself. As for the reliability of this data, one must consider the purpose of this data and there has been no influence on how the organization uses or portrays this data. Additionally, it can be inspected through looking into the objective performance data provided by the service organization itself, which examines the team productivity.

As for the categorisation of the teams in either being high- or low-performing, both sources will be taken into account and compared. Hereby, it is possible to confirm the results from the perception of the team participants with the actual data gathered by the company and, on the other hand, also examine "grey areas", in which the data does not align.

3.3.4. Control variable

The "meeting effectiveness" survey includes a 7-scale Likert scale reaching from 1 (extremely ineffective) to 7 (extremely effective), and touches upon opinions about effectiveness, productivity, time-worthiness and efficiency. Hence, only the scale of "meeting effectiveness" has been measured after all three meetings, whether the remaining two scales have been measured after meeting 3 only. The "meeting effectiveness" scale therefore can be seen as a control variable, since it has been held consistent throughout the study and therefore acts as a sort of check-up, to whether it is plausible to use meeting 3 as a threshold in this research. With $M = 5.93$ and $SD = 1.15$ (table 2 appendix), meeting 3 can be seen

as rather more effective than ineffective and can be used as a measure for this study.

3.4 Data analysis

Obviously, the study will mainly focus on a comparative analysis method, through which the squads will be put as a focal point in particular. Since the research aims at finding out the impact of values and verbal behaviour on team performance, high-performing versus low-performing squads will be compared, associations analysed and conclusions drawn on which squad constellations positively contribute to team performance. Hereby, all sample objects will be taken into account. Hence, a cut-off-point between squads being high- or low-performing needs to be set and each squad has to be labelled into one to the two boxes. This method is reliable, since one criteria for the sample is the representation of low- and high-performing teams. As aforementioned, team effectiveness and high team performance mainly go hand in hand, through which it can be secured that both possibilities of teams are spoken for.

The analysis of the verbal behaviours will be done through inferential statistics in form of a t-test in which comparative testing can be done for the frequency of behaviours and value congruence, after having categorised the teams in either being high- or low-performing and using these two groups to compare means and differences. Depending on assumptions such as normality, sample size, and common variance (Rasch et al., 2009), the type of t-test can vary. Hereby, a t-test for independent samples will be used, if normal distribution is assumed, and otherwise the nonparametric Mann Whitney-U test will be used.

Moreover, in order to check correlations between all three variables, a Spearman's rho correlation matrix will indicate effect sizes and direction (table 4 in appendix), whereas mainly effect size will be analysed, instead of significance, due to the small sample size (Stanton-Geddes et al., 2014; Murtaugh, 2014). A value equal or above .4 is seen as a moderate effect strength.

4. RESULTS

Within this section, the data analysis regarding all three variables will be portrayed.

4.1 Team performance

When looking at the scores of all other teams regarding the 4-item performance survey, which was based on a Likert scale, it becomes clear that the cut-off point *(M=5.046)* indicates whether a team is high- or low performing. In total, with this average score, the tendency of teams is to be more high performing then not. Teams *01001 (M=5.344), 02001 (M=6.25), 03001 (M=5.531), 04001 (M=5.571), 12001 (M=5.917), 01001 New (M=5.375), 02001 New (M=5.75), 03001 New (M=5.95) and 04001 New (M=5.7)* exceed the threshold and thereof can be defined as high performing teams. On the other hand, there are three teams which can be clarified as being low-performing, with average scores of *M=4.357, M=4.958* and *M=4.9*.

Additionally, the objective performance data implicates the internal performance monitoring made by the service organization itself, instead of perceived opinions given by the individuals. This data relies on points, which is a synonym for the word "tasks". The percentage of productivity therefore is based on the completion of planned task within a sprint, and the overall completion of tasks, which were not initially planned. Hereby, as can be seen in table 3 in the appendix, teams 06001 *(M=.54, .59),* 07001 *(M=.17, .24)* show clear signs of lower compared average percentages of the completion of (planned) tasks. As the perceived performance of team 08001 also has been calculated to be low, this is not necessarily the case for the objective performance data, since the values (*M=.49, .64*) are not remarkably low. When comparing this to the remaining teams, these do stand out with values mainly over *M=.75*, except for team 12001, which circles around similar values as team 08001 (*M=.53, .63*). Thereof, one might consider team 12001 as also lower performing, since this grey area can be an indicator for the self-perception bias, in which skills are being overestimated by the individual itself (Gervais & Goldstein, 2007). To conclude, there are a total of 7 high-performing and 4 low-performing.

4.2 Value congruence

As the output shows, a one-way ANOVA test is the input for calculating the ICC. Self-enhancement ($p > .05$) does not show significance due to not being normally distributed, and thereof cannot be taken into account for the ICC. Table 1 shows that the F-test only shows significance for self-transcendence ($.001 < p < .05$) and conservation ($.001 < p < .05$), and marginal significance for openness to change ($p < .01$). For self-transcendence (ICC (1) = .22, ICC (2) = .68) and conservation (ICC (1) = .28, ICC (2) = .75), this assumption is being fulfilled for both coefficients, meaning that this indicates satisfactory intra-correlation and reliability. With an ICC (1) of *.22* and *.28*, this means that 22% and 28% of the observed variance in members' value scores is due to systematic between-squads differences compared to the total variance and therefore, accounts for the group membership (Shieh, 2015). As for the ICC (2), the cut-off point for an acceptable value can be estimated to be around .7, but this heavily depends on the sample size and the ICC (1) score, whereas value exceeding .5 can be defined as being satisfactory. As the sample size is rather small, the ICC (2) of *.68* and *.75* can still be classified as acceptable (Shieh, 2015), which indicates reliable group means which were modified from one another (Castro, 2002). Especially conservation shows high intra-correlation with an ICC (2) exceeding .7. In context, it means that the reliability of group means within teams equals 68% and 75%. As for the value sub dimension of openness to change (*ICC (1) = .10, ICC (2) = .47*), neither of the values indicate strong reliability, hence value congruence, and thereof do not account for strong group-level variability but rather value incongruence within the teams (Castro, 2002).

As for the r_{WG}, it relates to being an index of within-unit agreement and, in context, gives the possibility to classify the teams into having parallelism regarding the values or, on the other hand, value incongruence (James et al., 1993). The calculation model is based on combined values per one of the four main values, since the survey items have been grouped into such, as explained before.

Table 1
ANOVA and derived ICC (1) and ICC (2), average r_{WG} scores

Measure	M	SD	F	p	ICC 1	ICC 2	r_{WG}	r_{WG} (high)	r_{WG} (low)
Self-transcendence	5.922	.9873	3.117	.003*	.22	.68	.94	.94	.96
Openness to change	5.5291	1.03083	1.876	.064**	.10	.47	.93	.93	.94
Conservation	5.556	1.0908	4.004	.001*	.28	.75	.94	.94	.94
Self-enhancement	5.677	1.1159	.973	.475	-	-	.91	.89	.94

*Note: * p-value < 0.05, ** p-value < 0.01 (marginal)*

Thereof, it will be possible to calculate the within-unit agreement per value, per team, and define which teams agree on what type of value and hold shared perceptions. As higher values of r_{WG} equal increased levels of inter-group agreements, the threshold for adequate agreement equals a r_{WG} value of .7 or higher (Woehr et al., 2015). However, after inspecting this value, it indicates that due to the lack of sensitivity of this measure, many values have exceeded this cut-off point, through which the limit has been raised to either exceed this threshold or not. What becomes clear, is that within all value subdimensions teams *02001 & 03001* (new) score lowest on the r_{WG}, with values of an average r_{WG} = *.875 (*02001*)* and r_{WG} = *.8975 (*03001*)*. In comparison to all teams, these values score the lowest. On the other hand, most teams exceed the .9 threshold, and therefore good inter-rater reliability can be explained for. It is remarkable, that teams 02001 *(r_{WG} = .956)* and 07001 *(r_{WG} = .97)* also score exceedingly high, but only for the value dimensions of self-transcendence, openness to change and conservation, whilst the values for self-enhancement (*r_{WG} = .83; .89*) are surprisingly low. This indicates, that especially for the value dimension of self-enhancement, the inter-rater reliability is beneath the reliability of the other three dimensions. This can be also evidenced by looking at the mean r_{WG} per value aspect, which is remarkably low for self-enhancement (*M = .91*), in contrast to self-transcendence (*M = .94*), openness to change (*M = .93*) and conservation (*M = .94*).
Because of this it gets clear, that there is high value congruence in total, but the team members are less agreeable on values concerning self-enhancement. These results extend the results filtered from the ICC scores, since also there the intra-class correlation is not sufficient for self-enhancement. As for openness to change, one can see that the outcomes do not match. Thereof, it is important to remember that the ICC's are omnibus measures that apply across all groups, whereas the r_{WG} […] coefficient applies only to single groups " (Castro, 2002, p.72) . To fall back on this, it is important to mention, that even though the average r_{WG} is sufficient as an average for the whole sample, extreme values per group average out the lower values (as for teams *06001, 02001 new* and *03001 new*), through which the final score indicates high agreement. Table 1 also includes the mean r_{WG} per subdimension, as for low- and high-performing teams in contrast.

4.3 Verbal behaviour

The most represented behaviours (Table 2) during meeting 3 for all low-performing teams included 1) active listening (32.2%); 2) giving direction/own opinion (12.7%); 3) informing with facts (10.8%); 4) agreeing (8.1%) and; 5) governing/interrupting (7.8%). The major representation of behaviours were relation-oriented behaviours, with a total of 45.6%. After that, task-oriented behaviours are accounted for by 21.7% for the sample of the low-performing teams. The other behaviours (which also includes the subdimension of counterproductive behaviours) are also demonstrated, but are less frequent, with totals of 15.9% (change-oriented) and 14.8% (counterproductive). The first column represents the high-performing teams, whereas the most represented behaviours are 1) active listening (41.0%); 2) giving direction/own opinion (9.0%); 3) informing with facts (8.4%); 4) humour (6.6%) and; 5) agreeing (6.4%). Also here, relation-oriented behaviours are more prominent, but compared to the low-performing teams, this percentage is increasingly higher (58.1%) and thereof represents over half of the behaviours to be relation-oriented. On the other hand, the high performing teams attracted remarkably less counterproductive behaviours (9.0% versus 14.8%), even though this dimension includes as many behaviours as the dimension of relation-oriented behaviours. Task-oriented behaviours (20.1%) and change-oriented behaviours (10.8%) come as second and third most-frequent behaviours. All in all, in comparison, the high-performing teams engaged more in active listening and humour, whilst the low-performing teams engaged more in giving direction/own opinions and governing/interrupting.
As can also be seen in table 2, only humour (*p-value > .1*) and interrupting (*p-value > .1*) show marginal significance between low- and high performing teams, meaning that the means are somewhat different. Hereby, humour has a higher mean within the high-performing teams (M = .02816875 [2.82%] versus M = .06560814 [6.56%]), whilst governing/interrupting has a higher mean within low performing teams (M = .07874425 [7.87%] versus M = .03340914 [3.34%]). Also, as for the behavioural taxonomies, relations-oriented behaviours show a marginal significance *(p-value > .1*), through which can be shown that there is a significant difference in such behaviours between low- (M = .4549 [45.49%]) and high performing teams (M = .5807 [58.07%]). Task-focused behaviours and Rest behaviour show the least significance, meaning that these means are equal between both groups.

Table 2
Frequency of the video-coded behaviours from meeting 3, categorised for low- and high-performing

Behaviours	Examples	Standardized frequency (%)		
		HP (N=7)	LP (N=4)	p
Task-oriented behaviour		**20.1%**	**21.7%**	**.671**
1. Shaping the discussion	"Let me summarize our decision"	3.9%	3.2%	.613
2. Informing with facts	"The final score of team 8 is…"	8.4%	10.8%	.392
3. Verifying	"Can you update me on?"	6.0%	6.6%	.539
4. Governing/Delegating	"I want you to…"	0.4%	0.2%	.927
5. Focussed task behaviour	Busy with individual responsibilities	1.4%	0.9%	.788
Relations-oriented behaviour		**58.1%**	**45.6%**	**.089††**
6. Active listening	Nodding, making eye contact	41.0%	32.2%	.315
7. Agreeing	"Correct"	6.4%	8.1%	.164
8. Providing positive feedback	"Good idea, thank you"	2.7%	1.3%	.230
9. Giving positive attention/being friendly	"Hi, how are you?"	0.5%	0.4%	.594
10. Giving positive attention/showing personal interest	"Can I help you with anything?"	0.3%	0.4%	.927
11. Humour	"Hahahah, that is hilarious"	6.6%	2.8%	.072*
12. Sharing personal information	"I had a great holiday"	0.6%	0.4%	.477
Change-oriented behaviour		**10.8%**	**15.9%**	**.240**
13. Giving direction/own opinion	"I believe that…"	9.0%	12.7%	.315
14. Giving direction/long term	"Our goal/vision is…"	0.6%	1.4%	.648
15. Professional challenging/asking for ideas	"I'm interested to hear your thoughts on…"	0.4%	1.0%	.412
16. Professional challenging/stimulating teamwork	"We can solve this problem together"	0.8%	0.8%	.934
Counterproductive behaviour		**9.0%**	**14.8%**	**.177**
17. Showing disinterest	No active listening	2.2%	1.0%	.295
18. Disagreeing	"I disagree with you"	1.1%	1.7%	.376
19. Defending one's own position	"We are doing it my way"	1.0%	2.0%	.412
20. Giving negative feedback	"I'm not happy, but we can fix it"	1.0%	1.6%	.236
22. Governing/Interrupting	Interrupting	3.3%	7.8%	.056*
23. Governing/Correcting	"I want…"	0.4%	0.7%	.315
Rest behaviour				**.705**
24. Null behaviour		2.0%	2.0%	.788
Sum		100.0%	100.0%	

*Note: *p-value < 0.05 (significance), based on independent t-test, † means p-value > 0.10 (marginal)*
*Note: **p-value < 0.05 (significance), based on Mann Whitney-U test, †† means p-value > 0.10 (marginal)*

4.4 Correlations between value congruence, verbal behaviour and performance

To check whether there are correlations in between the three variables, table 4 (appendix) only shows significant results from within the sub-dimensional values, as well as within the behavioural classifications. But due to the p-value being heavily dependent on the sample size, the insignificant values can still be analysed regarding effect size. All in all, correlations between verbal behaviours and value congruence per subdimension are rather low, hinting that there are no correlations between the variables. Remarkable are the moderate correlations between counterproductive behaviours ($r = .667$) and self-enhancement, as well as change-related behaviours with self-transcendence ($r = -.949$). Furthermore, perceived squad performance shows a strong correlation towards task-focused behaviours ($r = .667$) and a negative strong correlation towards change-related behaviours ($r = -.949$), which aligns with previous findings and indicates, that as performance decreases, change-related behaviours increase. Newly found is the increase of task-focused behaviours, as well as the strong, significant correlation between counterproductive behaviours and relation-focused behaviours ($r = .900$), meaning mutual increasement.

5. DISCUSSION

5.1 Theoretical implications

This study looked into the relationships between value congruence, verbal behaviours and team performance in the agile environment. We found that Brown and Treviño (2009), as well as Mitchell et al. (2012) have researched, that value congruence has positive effects on team performance. This leads to the following theoretical implications, whereas the findings of the study contradict the positive effects of values congruence on team performance. Mainly, the teams which exhibit lower value congruence scores, belong to the high-performing classification. Hereby, one can say that value congruence does not necessarily positively affect the level of performance in the team and these findings contradict the aforementioned findings. But solely from these findings one cannot draw conclusions, since the verbal behaviour plays an important role within the team performance. To answer the first part of the research question, in how far value congruence relates to team performance, it can de indicated that there is no relation present. Unexpectedly, the high-performing teams have lower value congruence in all aspects, than the low-performing teams. Even more unforeseen has been the fact that the r_{WG} is higher in all aspects for the low-performing teams, and not the high-performing teams. Even though it has been evidenced, that higher value congruence most likely has positive effects regarding team performance, this might not be the case for agile teams. This can be due to lack of the actual predictions that work values have on verbal behaviour in an agile working environment. The value of openness to

change and self-enhancement shows value incongruence, which means that the teams do not have common work values relating to their sub values. Both sub-dimensions belong to the grouping of work values concentrating on personal focus, instead of social focus (Cieciuch et al., 2014). Flexibility, change and openness are values which are expected in the agile methodology and teams, but are strenuous to apply when working agile for the first time (Srinivasan & Mukherjee, 2015). Especially self-enhancement scores low on the ICC, as well as on the r_{WG}. Self-enhancement is an intrinsic work value, which focuses on self-fulfilment (Jaw et al., 2007) and includes values such as power, achievement, taking initiative, ambition and success. Whitworth and Biddle (2007) argue, that there is a strong social presence within agile teams. Thereof, it can be explained on why self-enhancement and openness to change underly less congruity, as the personal focus is not priority of each team member. The research can extend the exploratory study of Demi et al. (2020), which covers up the importance of benevolence for scrum roles within the agile context. Also, McHugh et al. (2012) mention the mutual accountability within agile teams, whereas the findings speak for the same. Thereof, the high value congruence for self-transcendence speaks for the social nature of agile teams, and explains the higher value congruity on shared values (self-transcendence and conservation) in also high-performing teams, instead of respective values (Brown & Treviño, 2009). Additionally, this research endorses previous findings, which say that it is not only the level of congruence to (in this case) the leader, but that it is also depends on the content of values to decide which need congruity and which values do not (Qu et al., 2017; Glew, 2009). Even though this research focuses on value congruence between the team and a leader, this is representable within this study. To dive deeper into the category of the values regarding self-enhancement, it is noticeable that the value congruence is elevated within low-performing teams. Not only are the team members relatively congruent on this value-domain, the mean scores (see table 1) are relatively high, meaning that most team members put importance on such values. One main value belonging to the class of self-enhancement is power, presented through dominance and resources (Cieciuch, 2014). As aforementioned, agile teams do not have clear power distributions, since the role of a manager vanishes (Kerr et al., 2018). With no clear power distributions within a team, independence and autonomy is prioritized, but also members draw attention to competition. Because of this competitive nature, performance is lowered due to rising conflict (Janss, 2012), which would match the findings. Additionally, these values would fit behaviours such as interrupting and opinion-giving, which are more dominant in the low-performing teams. All in all, one must consider that this is mainly researched for traditional teams (Janss, 2012), but perhaps can also be accounted for in agile teams and require additional research.

As for the verbal behaviours, Sagiv & Roccas (2021) have found out, that especially relation-oriented behaviours, which are represented by values such as benevolence and universalism, contribute positively to team performance.

We found that the heavy prominence of relation-oriented behaviours (such as humour and active listening) can be reasons for the high performance of the teams. This extends the theoretical framework, that the need for socially-focused values within the agile context are mainly represented through relation-oriented behaviours and show, that such aspects positively impact the performance of agile teams. Also, autonomous, agile teams are supposed to take an adaptive and relaxed approach, but naturally, team members take upon different roles, in order to support the self-organization within the team (Hoda et al., 2010). Thereof, there surely should be overall cohesion within the team to be effective, but the importance of value congruence might not be applicable equally to everyone, since these roles have different priorities.

Clearly, humour is more prominent in the high performing agile teams. When there is a sense of humour within the group, team performance is increased (Smith et al., 2002). On the other hand, behavioural frequencies show that agreeing and delegating/interrupting is projected more during low performance, where value congruence on the other hand is higher. When value congruence is high, the members within the squads have more parallels, leading to higher familiarity within the team. Members feel a sense of comfort when around people, who have similar views and ideas then themselves (Ostroff et al., 2005). Thereof, it can be argued that behaviours such as interrupting and direction-giving are more common. These findings agree with the finding of Yang (2020), who demonstrates that value congruence within teams leads to expanded judgement through expressing own opinions. Also, agreement is more likely, due to having similar opinions regarding values. Conversely, a high agreement-rate does not necessarily contribute positively to team performance. The correlation matrix does show, that certain values bring up behaviours, but that there are barely any correlations between these two variables, which was differently expected by Sagiv & Roccas (2021) . So does it align, that if there is a strong shared opinion on self-enhancing values, so are counterproductive behaviours more frequent, since power and the longing for dominance are portrayed through behaviours such as governing and interrupting. On the other hand, self-transcending values are negatively correlated to change-related behaviours, inasmuch caring and tolerance do not find alignment with change-related behaviours (Cieciuch, 2014).

5.2 Practical implications

The findings can inform (agile) HR managers on how to design teams in order to increase performance. As the results show, value congruence does not positively affect team performance, through which it is not necessarily important to recruit for people to have the same sort of values for all subdimensions. As high value congruence is remarkable in low-performing teams, optimal team design should not be dependent on shared values, but more on different values, relating to the team role one takes on. On the other hand, results do show that the congruence of the socially-focused values such as self-transcendence and conservation are highest in high-performing teams. Mutual trust, cohesion and the willingness to help (Srivastava & Jain, 2017) are necessary within teams in order to align with its social focus and make self-organization work. Thereof, it is important to choose teams, where these values are present and, preferably, are guided by relation-oriented behaviours to increase the level of performance.

Additionally, the representation of relation-oriented behaviours shows the importance in teams, whereas it is important to build teams, in which such are represented to secure active listening and a sense of humour. This does

not mean, that change-oriented behaviours such as opinion giving are not represented, but they are represented in combination with less counterproductive behaviours such as interrupting and governing.

5.3 Strengths, limitations and future research

In this case, the use of survey data has made it possible to research the variables of value congruence, as well as team performance. The video observation data facilitates the investigation of verbal behaviour and put this variable into connection to value congruence and its impacts on team performance. Next to this, the *validity* and *reliability* of the gathered data is another strong point within this study. Responses have been gathered independently of each other. Additionally, the data chosen for the study is mainly video-recorded behavioural data. Hereby, reliability is increased by the opportunity to freeze and replay the data, which gives the coder the opportunity to analyse the data more detailed than real-time data (Haidet et al., 2009). Also, through capturing data through video evidence, it is not needed for participants to rely on past events and memory, but the data is a representation of the actual event. Additionally, the video recordings have been coded by student duos independently, after which parallelism of each file has been checked, and a correlated 'golden file' has been created, which takes two interpretations of the same data into account. Furthermore, all video observations, regarding behavioural coding, have been coded via the same codebook based on theoretical frameworks and research models. Thereof, conditions have been equal to all coders and observations and internal consistency has been secured.

As for strengths, the data has been previously gathered by students and supervisors from the faculty of Behavioural, Management and Social sciences of the University of Twente. Therefore, there has been no direct influence on the choice of data collection, nor the design of collection methods, through which variables have been limited. Due to deviating definitions of team effectiveness and missing data on main pillars contributing to this concept, the study was forced to substitute one variable to team performance instead of effectiveness. Even though the independent data gathering can be seen as a strength, and one requirement of the service organisation is the difference within effectiveness levels, the unequal sample sizes representing low- (N=4) and high-performance (N=7) teams can hint towards selection bias. Additionally, the sample size of overall participants (N=79) and useful squads (N=11) is relatively small, especially since all data sets have not been completed or available. Additionally, the classification of low- and high-performing teams is unequally distributed, with only a sample size of four teams for low-performing, against seven teams for high-performing. Sample size is in that way important because of its effect on statistical power and sensitivity, whereby small sample sizes have the risk of generating a false-negative result (Singh & Masuku, 2014). Adding to this, the extensive differences of team size (5 versus 10) can be a crucial factor, since it makes it more difficult to draw conclusions regarding (for example) value (in)congruence. One could consider the smaller sample sizes a strength regarding the ICC, since smaller sample sizes are not necessarily required. However, this condition can only be met, if the number of observations per subject is high enough, meaning approximately 20 ratings or more (Bujang & Baharum, 2017). This is not the case within this study. Moreover, there are especially limitations regarding the use of surveys as reliable data. The common method bias can be a reason of limitation. This occurs primarily, when response tendencies are invariable across measures due to social desirability or personal mood states. Common method bias is in that sense problematic, since it heavily reduces reliability and validity (Jordan & Troth, 2019). As for the objective performance data, one must consider that there is a minor chance that the KPI's have been modified in order to increase the organizational productivity, but this is solely an assumption, since the data has been used for own performance monitoring, which should be accurate for internal improvements.

Of course, behaviours are not solely influenced by just values, but there are is a wide variety of factors which are unique and different to each person. They also play part in the effects on behaviour. Because of this, it is challenging to predict behavioural patterns from such trans-situational variables such as values, but if the conditions are controlled, a prediction of behaviour can be drawn (Schwartz, 2013).

As for future research, it can be looked into additional meetings, in order to sharpen the findings and increase the data of the sample. Additionally, due to different purposes of the meetings, different objectives might cause different need for verbal behaviours and value congruence. Furthermore, this research focuses on values congruence within the team, but one could deepen the knowledge about the effects of value congruence with the PO of the team, instead of everyone.

6. CONCLUSION

To conclude, this paper investigated the question, how value congruence relates to agile team's verbal behaviours and, in turn, to agile team performance. To answer the research question, it can be said that value congruence does not relate positively to team performance in the agile context, at least not in combination of all four value dimensions. Especially with high congruence-levels for personal-focused values such as "openness to change" and "self-enhancement", performance and productivity data show that such teams are low-performing. Thereof, it can be concluded that the representation and shared opinions regarding socially-focused values such as "self-transcendence" and "conservation" more positively relate to agile team performance, due to the social character of agile teams.

As for verbal behaviours, relation-oriented behaviours are more frequent within high-performing teams, which shows that these do positively relate to performance levels. Through more frequent "active listening" and a sense of "humour" within the team, performance and productivity increases. On the other hand, low-performing teams are represented by also relation-oriented, change-oriented and counterproductive behaviours, as well as value congruence, which leads to a feeling of familiarity and therefore induce the permission for interrupting, opinion-giving, but also agreeing.

7. ACKNOWLEDGEMENTS

Hereby, I thank my two supervisors Desirée van Dun and Lara Carminati for guiding me throughout this journey and giving optimal support. Also, I thank my bachelor circle for the additional help when needed

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9. APPENDIX

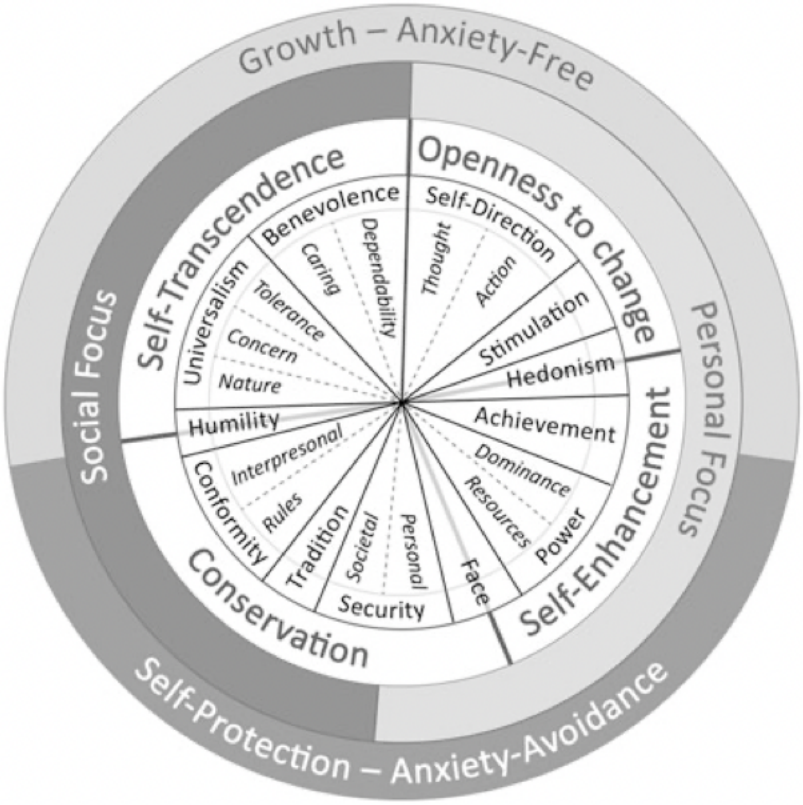

Fig. 1: Circular motivational continuum of 19 values in the refined value theory (from Cieciuch et al, 2014)

Table 1
The categorisation of values

Item	Self-transcendence	Openness to change	Conservation	Self-enhancement
Altruism (caring, assisting others)	x			
Justice (treating others fairly)	x			
Helpfulness (working for the welfare of others)	x			
Teamwork (working together, cooperation)	x			
Equality (ensuring equal opportunity for all)	x			
Experimentation (trying new things)		x		
Variety (welcoming novelty and change)		x		

Creativity (innovating, thinking outside the box)	x			
Curiosity (pursuing interest, inquisitiveness)	x			
Daringness (seeking adventure, taking risks)	x			
Obedience (meeting obligations, dutiful)		x		
Conformity (following the rules, fitting in)		x		
Self-discipline (exercising self-restraint)		x		
Tradition (preserving customers)		x		
Honor (showing deference to senior employees)		x		
Taking initiative (enterprising, inventiveness)				x
Ambition (having high aspirations)				x
Success (achieving, accomplishing)				x

The categorisation of values, from Treviño & Brown, 2009, p. 482

Table 2

Means and Standard deviations of "Meeting effectiveness" (control variable)

Team (M3)	**M**	**SD**
01001	5.5	2.6
02001	5.8	1.2
03001	5.7	1.3
04001	5.8	0.8
06001	4.4	1.2
07001	4.8	1.2
08001	5.6	0.8
12001	5.9	0.6
01001 (new)	4.9	1
02001 (new)	6.1	0.9
03001 (new)	5.8	1.1

Table 3

Objective performance data

Team	Avg. PlannedPointsCompletionRatio	Avg. PointsCompletionRation
01001 (H)	85%	91%
03001 (H)	76%	84%
04001 (H)	47%	76%
06001 (L)	54%	59%
07001 (L)	17%	24%
08001 (L)	49%	64%
12001 (L)	53%	63%

Note: H = high-performing, L = low-performing

Table 4

Correlations of all variables via Spearman's Rho

Variables	1	2	3	4	5	6	7	8	9	10
1. Self-transcendence										
2. Openness to change	.650**									
3. Conservation	.671**	.732**								
4. Self-enhancement	.415**	.273*	.406**							
5. Task-focused behaviour	.462	.200	-.600	-.154						
6. Relation-focused behaviour	-.018	-.162	-.036	-.270	-.400					
7. Change-related behaviour	-.949	-.200	-.200	.105	-.200	.200				
8. Counterproductive behaviour	.103	.500	.600	.667	-.700	.900*	.200			
9. Rest behaviour	-	-	-	-	-	-	-	-		
10. Perceived squad performance	-.123	-.032	-.198	-.022	.667	.018	-.949	-.205	-	

*Note: **. Correlation is significant at the .01 level, *. Correlation is significant at the .05 level,*