

The communication within heterogeneous teams: what influences and shapes it?
The influence of team diversity on conflict and group performance, and the moderating effect
of personality traits on these relationships.

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Master Thesis
June 25, 2018

ABSTRACT	1
1. INTRODUCTION.....	1
2. THEORETICAL FRAMEWORK.....	4
2.1 WORKGROUP DIVERSITY	4
2.2 TASK CONFLICT.....	6
2.3 RELATIONSHIP CONFLICT.....	8
2.4 PERSONALITY TRAITS.....	9
2.5 CONCEPTUAL MODEL	12
3. METHODOLOGY	13
3.1 RESEARCH DESIGN	13
3.1.2 <i>Procedure</i>	15
3.2 SAMPLING	16
3.3 MEASURES	18
3.3.1 <i>Workgroup diversity</i>	18
3.3.2 <i>Task conflict</i>	19
3.3.3 <i>Relationship conflict</i>	20
3.3.4 <i>Personality traits</i>	20
3.3.5 <i>Team performance</i>	21
3.3.6 <i>Controlled variables</i>	21
3.4 DESCRIPTIVES.....	22
3.5 ANALYSIS.....	23
4. RESULTS.....	25
4.1 LINK BETWEEN GROUP DIVERSITY AND TEAM PERFORMANCE	25
4.2 THE EFFECT OF TASK CONFLICT.....	25
4.3 THE EFFECT OF RELATIONSHIP CONFLICT.....	26
4.4 THE MODERATING EFFECT OF PERSONALITY TRAITS ON THE RELATION BETWEEN DIVERSITY AND TASK CONFLICT.....	26
4.5 THE MODERATING EFFECT OF PERSONALITY TRAITS ON THE RELATION BETWEEN DIVERSITY AND RELATIONSHIP CONFLICT.....	28
4.5 ADDITIONAL SIGNIFICANT RELATIONS FOUND	29
4.5.1 <i>The effect of social initiative on the relation of task conflict and team performance</i>	29
4.5.2 <i>Relation between relationship conflict and team performance</i>	31
4.6 SUMMARY	31
5. CONCLUSION.....	33
5.1 DISCUSSION.....	33
5.2 THEORETICAL IMPLICATIONS	34
5.2.1 <i>Group diversity</i>	34
5.2.2 <i>Task conflict</i>	34
5.2.3 <i>Relationship conflict</i>	35
5.2.4 <i>Personality traits</i>	35
5.2.5 <i>A different effect found</i>	35
5.2.6 <i>Other findings</i>	37
5.3 LIMITATIONS.....	37
5.4 PRACTICAL IMPLICATIONS.....	39
5.5 CONCLUSION AND STRENGTHS	40
REFERENCES	42
APPENDIX A	48
APPENDIX B: INFORMED CONSENT	49
APPENDIX C: EXPERIMENTAL PROCEDURE.....	51

APPENDIX D: DESERT SURVIVAL SITUATION TASK	53
APPENDIX E: MODERATION TABLES OF PERSONALITY TRAITS ON RELATION BETWEEN DIVERSITY AND RELATIONSHIP CONFLICT	58
APPENDIX 1: REVERSED ITEMS*	60
APPENDIX 2: MULTI-PERSONALITY QUESTIONNAIRE SURVEY	62
APPENDIX 3: QUESTIONNAIRE	67

The communication with heterogeneous teams: what influences and shapes it?

ABSTRACT

The communication between individuals has always been important as it allowed them to understand each other and work together. The proper communication in workgroups is vital, especially for companies. Effective communication allows groups to make good decisions that would be beneficial for their employers, for instance. However, this is often affected by a myriad of factors like diversity, task or relationship conflicts, or personality. These can influence the group's communication, making the group perform better or worse. Task conflict can positively influence the diverse group's performance as individuals may bring in ideas that others would not have thought of before. On the contrary, the relationship conflict may pose a negative effect, distracting the group from the purpose of a given task. Therefore, it is important to study these influences and learn how to cope with them. This thesis aimed to test the effects that diversity and task/relationship conflict have on team's performance. This research also evaluated another influencing factor, which is not widely researched yet. It tested the moderating effects of five personality traits, which could also influence the relation between diversity and task conflict, and the relation between relationship conflict and diversity. In order to test these influences, this research used the desert survival situation task to measure team performance and aforementioned factors. This thesis contributed to the scientific research by measuring and testing the effects of personality traits through the Multi-Personality Questionnaire. This research argued that high scores on the MPQ would make the relation between diversity and task conflict stronger. However, high scores on the MPQ could also weaken the relation between diversity and relationship conflict.

Key words: group diversity, team performance, task conflict, relationship conflict, personality traits.

1. Introduction

“To effectively communicate, we must realize that we are all different in the way we perceive the world and use this understanding as a guide to our communication with others” (McLaren, 2017). These inspirational words by Anthony Robbins showcase the importance of communication and mutual understanding amongst diverse cultures. In such a vastly interrelated world, the ability to properly communicate with other cultures or nationalities seems vital, especially in the business world. Nevertheless, the effective intercultural communication is also important for the students who strive to find an employment (van der Zee & Van Oudenhoven, 2013; Williams, 2005) and who want to understand and be accepted by other cultures.

The communication with different cultures and the ability to work efficiently in diverse teams is widely visible in the work as well as in the university environment. In their work or student career, people will face social encounters with different nationalities and cultures that they will need to thrive in, in order to succeed (Beamer, 1992; Stier, 2006). Therefore, researching and studying how diverse groups communicate and work together is vital.

This thesis will research and investigate the implications that diversity in workgroup poses on group performance, with particular attention to influencing factors such as task and relationship conflict. Moreover, this thesis will test the influences of five personality traits, which are based on the multi-personality questionnaire. The moderating effect of five personality traits will be tested on the relation between diversity and task conflict, and on the relation between diversity and relationship conflict (van der Zee, van Oudenhoven, Ponterotto & Fietzer, 2013).

Diversity has been shown to have both positive and negative effects on the group performance and observing such communication between team members could explain these effects (O'Reilly, Caldwell, & Barnett, 1989; van Knippenberg, de Dreu & Homan, 2004). However, there are other factors that could pose an effect on the overall performance of a group. Diversity shows the distinctions between individuals, which could be appointed to various elements, such as gender, race, nationality, et cetera. As aforementioned, diversity in groups can set individuals apart, which will then negatively influence the working of a group (O'Reilly, Caldwell, & Barnett, 1989; Mannix & Neale, 2005). On the contrary, diversity can also positively affect group performance. The research shows that diversity in teams will bring varying beliefs and opinions to the discussion, which might have not been thought of by other group members (Mannix & Neale, 2005; Stahl et al., 2013).

Conflict is regarded as an important type of communication as it can have an influence on the communication between diverse groups. Therefore, this thesis focuses on two types of conflicts: relationship and task conflict. These two conflicts are regarded in the literature to have opposing effects on the team performance and effectiveness.

Task conflict shows the levels to which participants argue and discuss a specific task within a group (Pelled et al., 1999; & Zelno, 2003). Relationship conflict signifies the tension between individuals in a group. It is mostly regarded as a negative influencer as much of the conflict within individuals may also be caused by the factors not related to the given task (Simons & Peterson, 2000).

The last measured variable is personality traits. Each person has unique levels of different personality traits. Some people score higher on cultural empathy, whereas others may obtain a lower score on this trait. All of these factors influence the way individuals communicate, how open they are, or how empathetic they are (van der Zee et al., 2004). This thesis focuses on the five main personality traits, which are measured through the Multi-Personality Questionnaire. These are: cultural empathy, flexibility, social initiative, open-mindedness and emotional stability (van der Zee & van Oudenhoven, 2000, 2001; van der Zee et al., 2013).

The review of existing literature shows that there are multiple studies, which examine the effects of diversity on group performance (Pelled, Eisenhardt & Xin, 1999; van Knippenberg et al., 2004). Moreover, the literature presents studies that focus primarily on relationship conflict (Mohammed & Angell, 2004) or primarily on task conflict (de Dreu & Weingart, 2003). The general findings show that task conflict is mostly recognized as a factor that adds differing opinions and beliefs to the group. Therefore, this type of conflict positively influences the overall group performance. Relationship conflict however poses opposite effect. The review of the literature presents relationship conflict as a negative influencer of group's communication, and thus performance. Moreover, the literature presents the Multi-Personality Questionnaire as a measurement of the five personality traits to be predictors of intercultural success (van der Zee et al., 2013). However, the research on personality and its implications on group diversity is still in its early stages (van der Zee & van der Gang, 2007).

Despite the numerous studies on the measured variables, there is a place for further research and more concrete data. The effects of diversity, as well as different types of conflict have been researched before in one study (Jehn et al., 1995). However, the literature review provided limited information on the role that personality has on the relation between task and relationship conflict and diversity, and thus on the overall communication within diverse teams (van der Zee & van der Gang, 2007). Personality traits and their effects were not incorporated in one study with all other aforementioned variables. Therefore, this thesis will further contribute to the theory of diversity in teams by adding an extra variable, which is

personality traits. Consequently, this research aims to provide new relevant insights that would enrich the current data regarding the role of personality traits on group performance.

This thesis posed no restrictions on the studied population, with one condition. Any participant had to be at least 18 years old. Due to the nature of this research, any person was a prospective participant. As previously mentioned, successful, effective and adequate communication within groups is vital in every part of human life and the implications of this study could be transcribed into both a student and a work environment. Thus, the researcher included any person that was willing to participate.

Research question: *To what extent does team diversity affect group performance; what is the role of task and relationship conflict, and what is the moderating role of personality?*

This thesis will research and analyze the role of diversity and the moderating role of personality on conflict and group performance. Moreover, it will test the role of task and relationship conflict on group performance. It will answer the aforementioned research question using a laboratory study with adults, which was tested at the Erasmus University in Rotterdam and off campus over the course of two months. All of the data will be exported into the SPSS program. Furthermore, the results will be analyzed through simple and multiple regression analyses. Other tests will also be conducted in order to obtain correlations, frequencies and descriptive statistics of the main variables.

Firstly, this thesis will present a theoretical framework, in which the main concepts will be described. This chapter will present an overview of the previous research on group diversity, relationship and task conflict as well as personality traits, measured through the Multi-Personality Questionnaire. Afterwards, this thesis will introduce the methodology of this research, in which the research design and sampling will be explained. The researcher will also provide detailed description of the chosen decision-making task as well as the procedure of the laboratory study. Furthermore, the measures of each variable will be discussed, with the reliability of scales. The researcher will present the descriptive statistics and provide full analysis of the research.

Next chapter will present the results of the laboratory studies and the overall summary of all the findings. The last section of this thesis will include discussion and provide an answer to the research question. Finally, the researcher will discuss limitations and will provide recommendations for future research, followed by practical implications. The thesis will end by providing an overall conclusion with strengths of this research.

2. Theoretical framework

Within an overview of existing literature, the key concepts will be discussed and explained. Diversity, and more specifically workgroup diversity, will be defined as first. Then, the concepts of task conflict and relationship conflict will be examined. The last part of this chapter will focus on defining and explaining personality traits. More specifically, the Multi-Personality Questionnaire model will be addressed. The hypotheses will be placed underneath each variable accordingly. Lastly, the conceptual model, which is based on previous findings and hypotheses, will be presented.

2.1 Workgroup diversity

As a result of the current trend of globalization, the diversity in workplace groups has been increasing steadily. Diversity underlines the dissimilarities between individuals, and signifies that they differ on a spectrum of multiple factors, such as culture, gender, age or race, but also in the level of education (Williams & O'Reilly, 1998; Jehn & Bezrukova, 2004). According to van Knippenberg et al. (2004), the diversity in demographic composition is expected to continue expanding. The literature shows that the diversity in workgroups may have both positive and negative outcomes (Williams & O'Reilly, 1998). Mumford and Gustafson (1988) present diversity as a factor that can increase creativity during work. On the contrary, the literature also shows that workgroup diversity may be damaging to the overall performance and have negative influences on the functioning of a particular group (Triandis, Kurowski & Gelfand, 1994). However, what is still unknown are the stages at which positive or negative outcomes occur (van Knippenberg et al., 2004).

The literature shows that there are two recognized principles while researching workgroup diversity and its effects on performance (Williams & O'Reilly, 1998; van Knippenberg et al., 2004). The first concept is the social categorization perspective, which states that individuals create distinctions between in-groups and out-groups, based on the shared similarities and unique differences (van Knippenberg et al., 2004). As a result, trust will be attributed to the individuals' own groups rather than outside groups (Brewer, 1979). The process of finding a group that an individual belongs to can lead to two outcomes. The feeling of trust and belonging may conduct positive emotions towards the in-group and thus its functioning. However, the process of categorization, which revolves around the principle of placing people in groups, where everyone is similar to one another, may lead to various difficulties, namely the "inter-subgroup relations" (van Knippenberg et al., 2004, p.1009). Consequently, the workgroups with more uniform and similar individuals show higher group unity (O'Reilly, Caldwell, & Barnett, 1989), higher commitment, as well as fewer

disagreements between co-workers (Pelled et al., 1999). Therefore, taking these factors into account, the researchers argue that the workgroup performance within homogenous groups will be higher, compared to heterogeneous workgroups. On the contrary, the second principle in researching workgroup diversity, which is the information/decision-making perspective, suggests that diverse groups should indicate better performance than homogenous groups (van Knippenberg et al., 2004). The reason for that originates from the basics of diversity's structure and concept. The groups that are more diverse will have a higher possibility of having individuals with different skills, abilities or knowledge about a specific task. Van Knippenberg et al. (2004) also mention that diversity in workgroups may also contribute to higher levels of creativity.

Stahl, Maznevski, Voigt and Jones (2010) state that different factors influence the performance of diverse teams in dissimilar ways. In their study, the researchers focus on the effects of cultural diversity on team performance. Stahl et al. (2010) explain that the cultural differences may be difficult to identify as they had been mostly rooted within individuals from early stages of their life. Simultaneously, the researchers suggested that cultural diversity may affect the working of a group even more as it is "a source of strong categorization and stereotyping" (p.691). The researchers recognize three outcomes, two of which were previously discussed, "the social categorization theory and information-processing theory" (p.691). The third process is based on the "similarity-attraction theory," which suggests that people will be attracted, and thus more willing to cooperate and work, with individuals who they have shared values or attitudes (Stahl et al., 2010, p.691). This process is correlated with the negative effects of diversity in teams. In addition, cultural diversity in groups leads to the voicing of multiple courses of actions and differing opinions that individuals can discuss, consider or reject. Stahl et al. (2010) recognize it as divergent processes. As a result, this process may positively influence the group performance, as it requires the individuals to hear all of the opinions and discuss it (Stahl et al., 2010). However, the "divergent processes" can also negatively impact the group working if the differences between individuals are perceived as distraction from the task, for instance (Stahl et al., 2010, p.691). Thus, this can create conflict, which can negatively impact the group performance. Mannix and Neale (2005) support these findings and state that social categorization as well as similarity theory will pose negative influences on the performance in diverse groups.

The above review of the literature shows that there are several outcomes that diversity has on communication within groups, and thus on performance.

2.2 Task conflict

The aforementioned relationships of diversity with performance, both positive and negative, can be explained through different types of conflict, namely task and relationship conflict. The literature indicates that task and relationship conflict may influence group performance in different ways. However, the literature also shows that these two variables are closely connected and influenced by each other. Simons and Peterson (2000) state that while reporting on task conflict, the participants also mention the existence of relationship conflict within a group. Nevertheless, the provided below review of available literature distinguishes these two variables as separate factors due to the opposite effects they have on the workgroup performance. Therefore, the two variables will be examined separately.

The concept of task conflict simply arises from the fact that when the opinions of the members are divided, it may result in arguments and conflicts (Pelled et al., 1999; Rentsch & Zelno, 2003). Consequently, this can be regarded as one of the challenges within a workgroup (de Dreu & Weingart, 2003). Moreover, de Dreu and Weingart (2003) mention that some studies have focused their research on workgroup conflict related to relationship and task issues. The social aspects of workgroup conflict are discussed in the next sub-section. Other researchers have also discussed those two outcomes, dividing them into intragroup task conflict and intragroup relationship conflict (van Knippenberg et al., 2004).

The diversity within workgroups is one of the factors that correspond to the increase of task conflict (Pelled et al., 1999). High diversity in teams may spark more conflict about the task as people may not fully understand each other or know how to effectively work with different cultures (Lovelace, Shapiro & Weingart, 2001). The elements that constitute task conflict can be regarded through multiple actions and variables. These can relate to the judgments or opinions posed by other members of the team. Moreover, they can also involve the “distribution of resources, procedures and policies (...) and interpretation of facts” (de Dreu & Weingart, 2003, p.741).

In the study on team innovativeness and the effects of diversity and task conflict within group, Lovelace, Shapiro and Weingart (2001) show that there are multiple factors that can explain the influences of task conflict on team effectiveness. The researchers state that the positive effects of task conflict on team performance depend on the way participants feel during the task. More specifically, if an individual does not feel safe or encouraged in expressing their own differing opinions, they may remain silent. Consequently, the diversity may not seem significant as individuals only correspond to the shared beliefs and opinions (Lovelace, Shapiro & Weingart, 2001). Edmonson (2003) presents a similar argument by saying that if individuals feel safe in the work or group environment, they will be more likely to express their own ideas.

The review of the literature shows that opinions about the effects of task conflict on group performance are divided. Older research studies have shown that task conflict negatively influences workgroup performance (Brown, 1983). Therefore, a conflict within a workgroup had been regarded as a negative influence on team performance. The researchers argued that increased levels of task conflict would demotivate workers and would push away their focus from the task (Hackman & Morris, 1975; Wall & Callister, 1995). Other studies have indicated, “low levels of conflict could be beneficial” (de Dreu & Weingart, 2003, p.741).

The study conducted by Carnevale and Probst (1998), indicated different results once they placed participants in two different controlled conditions. Within the first condition there was no conflict, which resulted in a relaxed atmosphere, in which participants were more flexible and creative. Opposite circumstances were imposed on the second group of respondents. With a condition involving a high conflict, participants reported to be more competitive. However, as the researchers point out, this resulted in a decrease of creative thinking (Carnevale and Probst, 1998).

Some theorists state that task conflict can positively influence the overall performance of a workgroup (de Dreu & Weingart, 2003). Coming back to the information/decision-making perspective, the researchers recognize that contradictory viewpoints from group members may actually positively influence the performance. Knowing that there are multiple differing opinions may force the group to evaluate all points related to a specific task, and thus may result in a more thorough final decision (van Knippenberg et al., 2004). Weingart and Jehn (2000) support this claim and state that collaboration between team members is essential for successful and productive group work. To further discuss, the researchers reason that collaboration would be effective in dealing with task conflict, as it would encourage the team to present their arguments and decide on the solution unitedly.

Consequently, the absence of conflict within a workgroup may negatively influence the effectiveness of a team (de Dreu & Weingart, 2003). Schulz-Hardt, Mayer, and Frey (2002) support this claim, saying that workgroups made better decisions when they first had to engage in extensive argumentation for and against it.

H1: Diversity has a positive relationship to task conflict.

H2: This positive relation will increase team performance.

2.3 Relationship conflict

While the task conflict is signified as a positive influence on workgroup performance, the relationship conflict is considered to have negative effects on such an outcome (de Dreu & Weingart, 2003; Simons & Peterson, 2000). Relationship conflict is shown through tension as a result of differences between individuals and “interpersonal incompatibility” (Simons & Peterson, 2000, p.2). The relationship conflict within a workgroup is seen as a factor distracting team members from their assignment (de Dreu & Weingart, 2003). The relationship conflict brings in elements to a team, which may not be related to the task, such as personal values or “political preferences, values, and interpersonal style” (de Dreu & Weingart, 2003, p.741). Consequently, the distraction caused by, for example, negative emotions of an individual towards group members, may negatively influence the overall performance and thus a specific group task (de Dreu & Van Vianen, 2001). Other research suggests that relationship conflict is associated with tension or animosity amongst team members (Simons & Peterson, 2000).

Moreover, earlier research showed that relationship conflict negatively influences group performance as well as commitment to the team and task (Jehn, 1995). De Dreu and van Vianen (2001) indicated negative effects of relationship conflict on team performance. However, they argued that one reason for such an outcome could be the disregard for the research to the steps that should follow as a result of such conflict, namely the solutions. They concluded that the dodging of responses to relationship conflict positively influenced team functioning, while diverse group responses to relationship conflict negatively impacted it. Moreover, the findings from their study on relationship conflict showed that engaging in conflict is connected with worse group work, thus performance (de Dreu & van Vianen, 2001).

A different study, which tested the effects of surface-level and deep-level diversity over time among students, determined that the level of impact the diversity can pose on group performance cannot be limited to the simple main effects (Mohammed & Angell, 2004). The two moderators, team process and team orientation, helped in decreasing the impact that diversity had on relationship conflict, both on the surface-level and deep-level diversity. However, there are multiple reasons for such an occurrence, for example students could find ways to work with people they may dislike in more efficient matter (Mohammed & Angell, 2004). Nevertheless, the researchers state that the overall performance of a group was indeed negatively influenced by the relationship conflict. Van Woerkom & van Engen (2009) also claim that relationship conflict poses negative outcomes on the team performance.

Jehn (1995) associates dissatisfaction with the relationship conflict within a group but claims that relationship conflict may not have strong influences on the overall performance as some members may choose not to work with the individuals they dislike.

However, for the purpose of this research individuals will have to work together as a group. Therefore, concluding that the majority of research associated negative effects of relationship conflict on group performance (Simons & Peterson, 2000; de Dreu & Weingart, 2003; de Dreu & van Vianen, 2001), the following hypothesis was formed.

H3: Diversity has negative effects on the relationship conflict.

H4: This relation will decrease the team performance.

2.4 Personality traits

As previously mentioned, diversity can influence task and relationship conflict in opposing ways. Such relation can also pose an effect on the overall team performance in either positive or negative direction. However, the relation between diversity and task conflict as well as the relation of diversity and relationship conflict may be changed under the influence of personality traits.

Personality is the major factor in determining individual's ability to effectively communicate with other nations and cultures, and thus in predicting individual's performance within a group (Huang, Chi, & Lawler, 2005). Personality can also indicate whether a specific intercultural encounter would be threatening. Moreover, it can influence the way individuals would react and behave in intercultural communication (van der Zee et al., 2013). The unique personality traits of each individual set them apart and make them into who they are. Thus, they pose a tremendous impact in an individual's life and work success as well (Flam, 2017). In his research, Akmal (2015) state that personality has an effect on the overall team performance.

The literature presents multiple theories and ways to measure and assess personality traits (Cattell, 1956; Goldberg, 1990; Eysenck, 1991). However, this thesis will focus on the Multi-Personality Questionnaire (MPQ) developed by van der Zee and van Oudenhoven (2000, 2001). The aim of this questionnaire was to measure five personality traits, which were associated with intercultural success. These are: cultural empathy, open-mindedness, social initiative, emotional stability, and flexibility (van der Zee et al., 2013).

Cultural empathy is regarded as a process of identification and sympathizing with feelings or actions towards individuals from different cultures. Consequently, an individual with high scores on this trait may be very successful in intercultural communication as he can sympathize and accept other people's beliefs and opinions (van der Zee, Atsma & Brodbeck, 2004). Open-mindedness is characterized in individuals who have an open and objective view toward different cultures. Similarly to the first trait, a person with an open mind may be more willing to listen and accept different opinions and beliefs. Emotional stability reflects an individual's capability to remain resolute in stressful situations. However, individuals with low scores on this trait will show strong emotions with stressful encounters (van der Zee et al., 2013).

The fourth trait – social initiative – explains the willingness to face social situations and to show initiative in social encounters. Therefore, an individual with low scores on social initiative may not interact or engage with culturally diverse teams. Lastly, flexibility signifies a positive attitude towards new situations and experiences as well as successful adaptations to such situations (van der Zee et al., 2013; van der Zee & van Oudenhoven, 2000, 2001). This trait is recognized as one of the most important personality traits, especially while working in the multi-cultural environment, as this trait predicts individual's readiness and willingness to change and adapt. Consequently, working in the diverse groups may be challenging and people need to be ready to quickly adapt.

Van der Zee et al. (2013) present the MPQ as valid and reliable, based on the multiple studies that used this instrument and supported it. Moreover, the reliability of the MPQ has also been supported “across samples, settings and contexts” (van der Zee et al., 2013, p.118). The researches also present the multiple studies, in which the MPQ can “predict indicators of intercultural success among immigrants, expatriates and their families intercultural teams and international students and employees” (p.118). Consequently, these fully support the validity of the test. Van der Zee et al. (2013) signify that the validity of the MPQ exceeds the validity of other personality tests such as the Big Five Theory.

The findings from van der Zee et al. (2004) present only two traits that influence the well-being and performance of employees in diverse groups. The researchers state that emotional stability and flexibility are the two traits they find to be significant. They argue that an individual with more stability will embrace stressful and intercultural encounters as opposed to a person with less stability. However, other research suggests that some traits, such as cultural empathy, may become an important factor in later stages of the intercultural encounters and workgroups (van Oudenhoven & van der Zee, 2002). Another study, which examined the influence of personality on performance and transformational leadership, shows that traits such as cultural empathy, open-mindedness and social initiative signifies positive elements to transformational leadership, and thus predicts better performance (van Woerkom

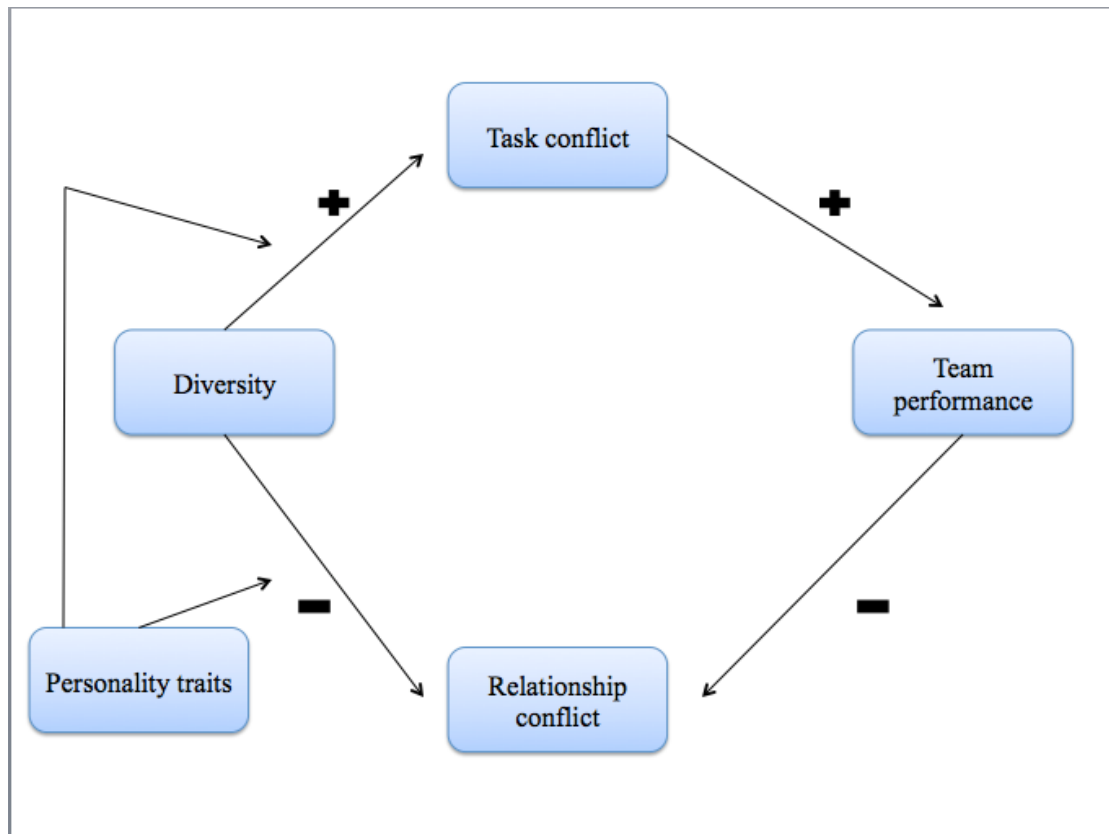
& de Reuver, 2009). Another study, which had students as participants, showed significant effects of emotional stability and social initiative on adjustment to a new environment (Yakunina, Weigold, Weigold, Hercegovac & Elsayed, 2012).

The presented studies show that personality plays a significant role in the predictions of an individual's success, especially within diverse teams. Individuals with high levels of emotional stability and flexibility may perform and communicate more effectively within diverse workgroups. Therefore, this shows that people who have high scores from the Multi-Personality Questionnaire will cause more task conflict within diverse groups. Thus, the relation between diversity and task conflict would be strengthened by high scores on the MPQ (Fui & Hassan, 2015). Consequently, participants with high scores on the MPQ may work more efficiently with others and be more open to suggestions. However, people who score higher on the MPQ may also experience more relationship conflict, which in turn will weaken the relation between diversity and relationship conflict. Similarly, the relationship between diversity and task conflict as well as relationship conflict may be influenced by personality traits (Ganguly, Bardhan, Saha & Rameshwar, 2017). Based on the previous research, the next hypotheses were formed.

H5: The relationship between diversity and task conflict is moderated by personality in positive direction. The high scores on the MPQ will make this relationship stronger.

H6: The relationship between diversity and relationship conflict is moderated by personality in negative direction. The high scores on the MPQ will make this relationship weaker.

2.5 Conceptual model



3. Methodology

This section of the thesis introduces the methodology. More specifically, it presents a detailed description of research design and sampling. Then, a full explanation of decision-making task as well as procedure of the laboratory study is presented. This section also describes the measures of each variable and provides tables with descriptives and correlations of the main variables. The last sub-section provides with the analysis of the conducted tests to check each hypothesis.

3.1 Research design

This thesis focused on the role that diversity in groups plays on the task conflict as well as on the relationship conflict, and thus on the overall performance, moderated by the personality traits. The literature review on diversity and workgroup performance indicated a wide usage of quantitative research, namely, experimental methods, in testing these occurrences (van Oudenhoven & van der Zee, 2002; Jehn, 1995). Therefore, in order to properly test and analyze these relationships, a quantitative method was applied. More specifically, this thesis included both a survey and a lab study.

The usage of a lab study provides an opportunity to create workgroups, in which participants will have to communicate and work together (Bordens & Abbott, 2002; Phillips, Northcraft & Neale, 2006). This allowed the researcher to test how well individuals perform in a multi-culturally diverse environment. Furthermore, the usage of the ‘hands-on lab’ method enabled the researcher to observe and obtain data while having the participants present in a specific room at the same time. This also provided with the advantage of checking for any variances between the proposed theory and the communication within group, thus their group performance (Nickerson & Ma, 2006). Moreover, this lab study tested the influences of group diversity on relationship and task conflict as well as the role of personality traits on these factors, and thus on the overall performance. The usage of such a method provided deeper insights on how personality traits, as well as relationship and task conflict, might have affected intercultural communication, and thus the overall performance. Moreover, a lab study provided with more accurate data, at the same time allowing the researcher to be present as people interacted with each other in a given moment (Ludwick & Zeller, 2001). A survey alone would not have been as sufficient in providing information and data to test the hypotheses (Brandts & Charness, 2011).

In order to properly test the research question, the task for the lab study had to motivate interaction and communication. The task needed to spark discussion among the participants in order to test the relationship and task conflict as well as the overall

performance. Moreover, participants had to be able to finish such a task within an hour. Therefore, the researcher chose the desert survival situation as the task given to each group (Lafferty, Eady & Elmers, 1974; Human Synergistics International, 2017). This task was used by multiple research studies on workgroup performance (Staples & Zhao, 2006). It is a relevant task for this research as it involved the process of collective decision-making, which would naturally involve relationship and task conflict due to the diversity in groups (van Knippenberg et al., 2004).

Moreover, the researcher chose a desert survival situation task, as it required the participants to talk about possible outcomes and solutions. Moreover, this task had an answer key, which allowed the researcher to easily calculate individual and team scores. The team scores reflected the team performance in the analysis of the thesis (Lafferty, Eady & Elmers, 1974; Human Synergistics International, 2017).

Right before the start of the study, the researcher indicated that the participants should imagine that they were in an airplane crash and landed in the desert. There was no other way to survive except cooperation. Furthermore, the participants were presented with fifteen items (see appendix A). The task consisted of two parts: individual scoring and team discussion, in which participants had to discuss all of their ideas and make unanimous decisions on each item.

The usage of the desert survival situation also allowed the researcher to observe the group dynamic as well as to see whether conclusive group decisions would be the better choice rather than the individual scores. As participants did not know what the correct answers were, the task required them to discuss each other's ideas and make group decisions. To elaborate further, the researcher presumed that the participants, who were mostly students, would not have had a real life experience of being in a plane crash or of being stranded in the desert. Thus, it was assumed that the respondents would not be influenced with outside factors while making their individual and group decisions (Deacon, 2016). The task also involved many negotiations and disagreements, which the participants had to overcome (Balthazard & Potter, 2004). This also allowed the researcher to see how a group would come to conclusive decisions. Thus, the desert survival situation task made it possible for the researcher to observe group's resolutions of the problems as well as their communications skills.

The full explanation of the desert survival situation task, which was handed out to the participants, is provided in the appendix (see appendix B). Moreover, the answer key, experimental procedure as well as informed consent form are placed in the appendixes C and D.

The laboratory study tested one group at a time. The groups consisted of three to four participants, with one exception where the group had five participants. This was due to a

cancelation in participation, which will be later explained in the limitations section. The laboratory study started with the survey about personality traits, which participants had to fill in individually. This survey was handed out before the start of the experiment to make sure that the participants answered the questions in a neutral state. The exposure to the diversity task might have changed or somewhat influenced the attitude of the participants and could possibly make them answer the questions about their personality differently than if they answered before the task. Therefore, the researcher needed to make sure that the respondents answered the questions about personality as neutral as possible. This survey included multiple questions about their personality and who they are, such as “Are you a good listener?, Do you sense when others get irritated?, Do you notice when someone is in trouble? (van der Zee & van der Gang, 2007; van der Zee et al., 2013, p.122). This helped in identifying the specific personality traits as well as in measuring the scores of the MPQ.

After, each group was given a description of the desert survival situation task as well as the score sheet, which they filled out individually. Next, each group had 20 minutes to discuss the task together. At the end, the participants had to complete an additional survey, which measured the key concepts of the research, such as task and relationship conflict. The survey also had questions about demographics as well as controlled variables, such as gender, age, education level or living abroad. The laboratory study finished with the discussion of the correct answers as well as debriefing.

In order to cover the real purpose of this study, the participants were told that this is a laboratory study on decision-making processes in teams. The researcher explained that this research examines how well people can make decisions altogether and under time pressure.

This laboratory study consisted of eight independent variables, which were five personality traits (cultural empathy, social initiative, flexibility, emotional stability and open-mindedness), task and relationship conflict as well as controlled variable, gender. The dependent variable was the group performance, which was used in the simple and multiple regression analyses to test the hypotheses.

3.1.2 Procedure

This research was a laboratory study. The chosen task – desert survival situation – required a quiet and inviting room, in which participants could sit and have a place to write down their scores. Thus, most of the laboratory studies were conducted in the Research Lab at the Erasmus University.

The researcher gave the printed consent form to each individual. Each group was firstly asked to read through the consent form and sign it. Simultaneously, the researcher informed participants that the discussion of the task would be recorded. Moreover, the

researcher specified that their information as well as the recording would only be used for the purposes of this research. Only then, the researcher could continue with the study. The participants were firstly asked to fill in the survey about their personality traits. This survey was prioritized as the results from it were formed into a variable. Moreover, the researcher wanted to obtain the most accurate results, without any influence of other factors. As all of the participants completed the survey, the researcher handed out the description of the desert survival situation task as well as the score sheet. The researcher also explained the idea of this task and asked the participants to first fill in the sheet individually. For that, the participants were given five to ten minutes to finish.

Once everyone completed the scoring, the researcher read the consensus part to the participants, which explained what a consensus decision is. This also gave participants the idea that they would need to voice their opinions and talk about all possible outcomes. It also stressed out the importance of discussion and differing ideas. The researcher timed each experiment and indicated when there was five and one minute until the end. This task was presumed to stimulate group discussion.

Afterwards, the participants were given a second survey, in which they indicated how they perceived this study and how they felt during workgroup. This questionnaire also incorporated questions about task and relationship conflict. As everyone filled out the second survey, the researcher gave the correct answers and participants had to calculate their individual and team scores. The laboratory study ended with the debriefing. The study usually lasted between 50 minutes to an hour.

3.2 Sampling

This thesis studied adults, without much limitation to the specific demographics. However, the participants had to be older than 18 due to the ethical requirements of academic research (Sieber, 2012). The implications from this type of lab study could be attributed to any individual as it aimed primarily to research the effects of diversity on group performance, including the mediating role of relationship and task conflict as well as the moderating role of personality traits.

The researcher spent two months searching for participants. More specifically, the researcher started to look for participants in the middle of March and was able to conduct the first experiment in the second week of April. The testing finished in the second week of May, when the last three experiments were conducted. The sample was mainly collected at the Erasmus University. Almost every day, the researcher went to university's cafeterias, study places as well as the outdoors and asked people to participate in the laboratory study. Once someone agreed, the researcher presented a sign up sheet with specific dates times, which he

or she could choose the time that suited her/him the most. Moreover, the researcher also tried to obtain participants by posting on various social media sites, such as Erasmus's Facebook pages, Commodity Market or Media & Business group; and advertise the research. However, there were not many people who were willing to spend an hour to participate in the laboratory study. Therefore, the researcher thought of another way, which could attract more people. Once again, the information was posted on various social networking sites, with the addition of a raffle and a prize of 15 euros each for three participants. Simultaneously, the researcher kept trying to obtain participants face to face as well and mentioned the possibility of winning a monetary prize. This helped in obtaining a vast majority of participants. However, the participants were also obtained through the social network of the researcher. Five experiments were conducted outside of the campus. This was mostly carried out at private homes and cafes in Rotterdam as well as in Amsterdam.

The researcher created an online Excel sign up sheet, in which participants wrote down their name and email address on the chosen time slot. The researcher designed it so that only four people could sign up for each spot. This laboratory study involved a group task. Therefore, the minimum amount was three people in order to maintain a group dynamic and the maximum was four due to the time constraint. If a group would exceed this number, there would be too many people and it would likely result in not everyone getting an equal chance or opportunity to speak out. Despite the careful planning, there was one group that had five participants. This was caused by a lack of communication between the researcher and the two participants who signed up for the specific time slot. The two participants did not reply to any email sent by the researcher. Based on previous experiences, the researcher deducted that these participants would not come. At the last minute, the researcher was able to find one person willing to participate. However, at the time of the laboratory study everyone showed up and the researcher had to carry out the research with five people.

Once the given time slot was filled with three or four people, the researcher could conduct the laboratory study. Moreover, each participant received two emails with a reminder of a specific time as well as the place of the study. The first email was sent two days before the study and the second was sent couple hours before. This was meant to ensure the researcher that each participant would show up on time. However, despite multiple reminders, there were still cases of people not showing up or arriving late. The researcher had to then quickly obtain other participants, which was done through convenience sampling (Marshall, 1996). Furthermore, the snowball sampling was used. After each group was tested, the participants were also asked to think of their own social network and possibly recruit other people who would be willing to participate in the study as well (Goodman, 1961).

Due to the high concentration of international students at the Erasmus University as well as the researcher's own international network, the obtained participants were from

various different countries. This was vital for the research (van der Zee et al., 2004). Moreover, this allowed for the random formation of heterogeneous groups. The researcher did not manipulate the groups' diversity. These were formed randomly, based on the availability of each individual. Some groups were more diverse than others (different nationalities), and two groups were non-diverse. The diversity was calculated through Blau's heterogeneity index (Blau, 1977), where diversity is measured from .00 (non-diverse) to 1.00 (diverse). This index was found in multiple studies and thus it was used in this research as well (Blau, Blum & Schwartz, 1982; Harrison & Klein, 2007).

In total, 78 respondents participated in this laboratory study. All participants were able to finish two surveys as well as the desert survival situation task. There were more females ($n = 54$) than males ($n = 24$). The participants who took part in the study originated from 22 countries. The majority of participants were Dutch ($n = 30$), and the second biggest nationality was German ($n = 7$). The third biggest nationality was Turkish ($n = 6$), and Greece ($n = 5$). However, most of the studied nationalities had one to four representatives, such as Czech Republic, Bulgaria, Poland, China, Syria or Brazil. The majority of participants were highly educated. Out of the whole sample, 56 participants had obtained a Bachelor's degree (72 %), and 12 had Master's degree (15 %). Moreover, most participants were students ($n = 54$), and 15 of them were working (19 %). The rest of the participants was not working (5 %). The majority of participants indicated that they have lived outside of their home country for longer than three months (83 %). Only 13 people did not live outside of their home country for so long (17%). Furthermore, the results indicated that the studied participants had an experience with other cultures, by not only living abroad for a longer period of time, but also by travelling to multiple continents. 21 participants travelled to three different continents (27%), 16 people stated that they travelled to four different continents (20 %) and seven participants travelled to five continents (9%).

3.3 Measures

3.3.1 Workgroup diversity

Diversity in groups can be attributed to multiple factors, which separate individuals from one another. For this research, the diversity was presented in differing nationalities and thus cultures between participants. As previously explained, diversity can pose both positive and negative outcomes to the group dynamic and functioning (Mannix and Neale, 2005). By sharing their point of views and resolutions, the participants can bring new skills or ideas to the group's discussion, which might not have been considered in a non-diverse team where everyone shares common background and experiences. However, the diversity in workgroups

could also pose many challenges, which could potentially influence the group dynamic in a negative way (van Knippenberg et al., 2004; Stahl et al., 2010).

For this research, the Blau's index of heterogeneity (Blau, 1977; Blau, Blum & Schwartz, 1982) was used. This index was used in other studies on group diversity (Pelled et al., 1999; Biemann & Kearney, 2010; Mohammed & Angell, 2004) and thus, it was also incorporated in this study. The diversity was measured on scale from .00 (non-diverse groups) to 1.00 (highly diverse group). Moreover, the diversity was calculated manually by adding the squared proportion of individuals in each category, summing them up and then subtracting from 1. The researcher calculated the diversity per team. The overall composition of the sample was moderately diverse and varied from .00 to .67 ($M = .49$; $SD = .18$). The diversity was not normally distributed.

3.3.2 Task conflict

Task conflict appears when there are differences in opinions between individuals about a specific task or exercise. This results in discussion and arguments, which most of the previously mentioned studies attribute it to the positive influence of the task resolution. The aforementioned studies show that once the team members have colliding opinions, they need to discuss them before making a final group decision. Therefore, this may result in even better decision as individuals have a chance to consider ideas that they might not have thought of before.

This variable was measured by the intragroup conflict scale, which was developed by Jehn (1995). The scale consisted of four items, which included items, such as "how often do people in your work unit disagree" (Jehn, Northcraft & Neale, 1999, p.750). This scale, as well as the relationship conflict scale, was previously used in other studies on relationship conflict and group performance (Jehn et al., 1999; Mohammed & Angell, 2004). Moreover, the items were measured on a 5-point Likert scale from 'not at all' (1 point), to 'a lot' (5 points). All of the items were normally distributed. The scale of the task conflict was reliable ($\alpha = 0.85$). The scale could have been improved by removing one item "how much conflict about the work you did was there in your group" ($\alpha = 0.86$). However, the normality test indicated that all items were normally distributed and removing one item would not improve the scale significantly. Thus, the researcher included all four items in the research. The results showed that participants encountered moderate levels of task conflict ($M = 2.52$; $SD = .81$).

3.3.3 Relationship conflict

The relationship conflict is another variable, which also arises from differences between individuals in a group. However, the relationship conflict is mostly associated with differences on a more personal level (Simons & Peterson, 2000). Moreover, this type of conflict is also recognized as a factor that distracts participants from the main purpose of the task or discussion.

Relationship conflict was also measured by the intragroup conflict scale, which was developed by Jehn (1995). The scale had four items, for example “how much tension is there among members of your work unit” (Jehn, Northcraft & Neale, 1999, p.750). Once again, a 5-point Likert scale was used for indicating the amount of relationship conflict, ranging from ‘not at all’ (1), to ‘a lot (5).

After running the normality test, one item had to be deleted, as it was not normally distributed. This was “how much jealousy/rivalry was there among the members of your group” (Jehn, Northcraft & Neale, 1999, p.750). Most of the answers were 1, which meant that most participants did not experience much jealousy or rivalry. This could be caused by the laboratory environment as well as by the fact that most participants were students who knew each other. Thus, the group discussions did not evolve into harsh competition.

Once this item was deleted, the reliability analysis was run for the three remaining items. The scale of relationship conflict was reliable ($\alpha = 0.84$) and it would not be improved by deleting another item. Overall, participants experienced moderate levels of relationship conflict ($M = 2.02$; $SD = .89$).

3.3.4 Personality traits

Personality traits, as previously mentioned, are predictors for social and/or intercultural encounters. Each individual possesses a unique mixture of personality traits, which make them who they are. These traits also influence the way we encounter various situations or problems. Thus, it is an important factor to include in the research on communication and conflict (van der Zee et al., 2013; Akmal, 2015).

The personality traits were measured through the developed shorter version of the Multi-Personality Questionnaire, with consisted of 40 items (van der Zee et al., 2013). Some of the items included in the survey were: “pays attention to the emotions of others; is a good listener; works according to strict schemes or takes initiatives” (p. 122). This scale was tested and compared to the original scale, which concluded that scale was reliable and valid van der Zee et al., 2013).

Firstly, the researcher recoded the items from the survey that were reversed. These were taken from emotional stability trait, social initiative and flexibility (see appendix 1). The

normality test indicated that all 40 items were normally distributed in this research. Moreover, the scale was also found to be reliable ($\alpha = .80$). It could have been slightly improved by removing one item “*pays emotions to others*” ($\alpha = .81$). However, the scale with 40 items was also reliable and thus it was not changed (Pallant, 2010).

3.3.5 Team performance

The overall team performance was a reflection of the communication within each group. The performance was measured and based on the differences in the group’s rankings and the correct answer provided by the author (Lafferty et al., 1974) for all 15 listed items. Therefore, if the ranking for a correct answer was 12 and the group ranking was 4, then the final score resulted in 8 (Lafferty et al., 1974).

The participants were told that there are no negative scores. For that reason, the participants had to always subtract from the higher number. For example, if the correct answer was 1 and group ranking was 4, then the correct answer was 3. Overall, the participants in all of the groups varied a lot in their team performance ($M = 59.85$; $SD = 10.94$).

3.3.6 Controlled variables

The researcher included several controlled variables in the second survey, which participants had to fill in after the desert survival situation task. These were: age, gender, educational level, employment status, living abroad (living outside of their home country for longer than 3 months) and the international news coverage. The aforementioned controlled variables were added to the survey to see whether they would pose a significant effect on the relationship between independent and dependent variables.

However, after running the correlations test to see which variables were significantly correlated to the dependent variable – group performance, the researcher did not find any controlled variable that posed a significant effect. Therefore, no controlled variable was added to the statistical tests. Table 1 shows the correlations of all of the controlled variables to team performance.

Table 1.

Correlations of controlled variables ($N = 78$)

<i>Team performance</i>		
	Pearson's	Sig. (2-tailed)
Gender	2.52	.105
Educational level	-.009	.938
Employment status	-.109	.342
Living abroad	.032	.783
International news	.059	.612
Age (year of birth)	-.168	.141

3.4 Descriptives

The tables included in this section present the descriptive statistics of all of the main variables as well as the correlations of the main variables. The Table 2 presents the mean, standard deviation as well as the minimum and maximum value and Cronbach's alpha from the reliability analyses.

Table 2.

Descriptives of main variables ($N = 78$)

	<i>M</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Cronbach's α</i>
Workgroup diversity	.49	.18	.00	.67	
Task conflict	2.52	.81	1.25	5.00	.85
Relationship conflict	2.02	.89	1.00	5.00	.84
Team performance	59.85	10.94	38	76	
Cultural empathy	5.16	.74	2.44	6.78	.82
Social initiative	4.86	.77	2.88	6.63	.80
Flexibility	3.84	.86	2.00	6.14	.82

Emotional stability	4.21	1.01	1.50	6.25	.85
Open mindedness	4.98	.64	3.75	6.63	.70

The Table 3 presents the correlations between all of the main variables.

Table 3.

Correlations between main variables ($N=78$)

	1	2	3	4	5	6	7	8	9
Group diversity (1)	1.00	-.02	.08	-.09	.12	.19	-.02	-.07	.17
Task conflict (2)	-.02	1.00	.70**	-.36**	-.18	-.06	.10	.03	-.19
Relationship conflict (3)	-.08	.70**	1.00	-.43**	-.10	.02	.07	-.05	-.14
Team performance (4)	-.09	-.36**	-.43**	1.00	.15	.19	-.02	-.16	.15
Cultural empathy (5)	.12	-.18	-.10	.15	1.00	.17	-.24*	-.44**	.58**
Social initiative (6)	-.02	-.06	.02	.19	.17	1.00	.30**	.24*	.29**
Flexibility (7)	-.02	.10	.07	-.02	-.24*	.30**	1.00	.40**	-.10
Emotional stability (8)	-.07	.03	-.05	-.16	-.44**	.24*	.40**	1.00	-.15
Open mindedness (9)	.17	-.19	-.14	.15	.58**	.29**	-.10	-.15	1.00

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

3.5 Analysis

The data obtained from two surveys was exported in two separate files into a SPSS program. The results from the group performance – team scores – were calculated by the researcher and put manually into the SPSS. The diversity was also calculated manually and placed in the SPSS into a separate column. Firstly, the researcher had to clean the data from the two data sets: questionnaire and MPQ survey. This mostly involved deleting tests' trials, missing values as well as correcting the participants' numbers and checking if they are align with the signed informed consents.

As previously explained, all of the items were checked for normality. Next, reliability analyses of all the items were run separately for each variable. These showed that each scale

was reliable. Only then, the researcher could continue with the tests. Afterwards, the researcher computed items from personality traits into five separate variables: cultural empathy, flexibility, social initiative, emotional stability and open-mindedness. The researcher also computed items from task and relationship conflict and named them accordingly. However, as previously mentioned the relationship conflict consisted of only three items, as one was not normally distributed, and thus deleted. The calculated scores for each team were manually placed into SPSS and were given a name: team performance. The same was done for the group diversity. The diversity was calculated separately for each team as well. The researcher also ran a correlation analysis of the main variables to see how much the variables varied from each other and to see in which directions they moved (Pallant, 2010). The Pearson correlation was reported (Table 3). The analysis showed both positive and negative correlations of different variables.

Afterwards, the tests to check each hypothesis were run. Firstly, the relation between the independent variable, group diversity, and dependent variable, team performance, was tested through simple regression analysis. This analysis was run in order to see if there is a significant relation between the main independent and dependent variable. Next, the regression analyses were conducted in order to test hypothesis 1, 2, 3 and hypothesis 4. Furthermore, the moderation analyses of personality traits and their influence on relation between diversity and task/relationship conflict were tested.

In order to be able to test the moderation effect, the researcher had to make a standardized version of continuous variables of group diversity (ZDiversity) as well as five personality traits (e.g. ZSI – social initiative, or ZOM – open-mindedness). Next, the computed variables of diversity and corresponding personality trait were created (e.g. ZDiversity x ZCE). This test was conducted five times for each moderation effect in order to test the influence of each personality trait. Thus, hypothesis 5 and 6 were examined.

4. Results

The multiple regression analysis was used repeatedly to test each hypothesis. There were two mediation analyses conducted and five moderation analyses. This section of the thesis provides with the detailed examination of the results. All of the tests were run with the controlled variable, gender.

4.1 Link between group diversity and team performance

The theoretical framework of this thesis stated that the effects of diversity in teams, and thus on the team performance, were found to be both positive and negative (van Knippenberg et al., 2004; Mannix & Neale, 2005; Stahl et al., 2010). The researcher conducted adequate tests in order to test the mentioned theory and hypotheses.

Both variables were continuous, and thus a simple regression analysis was run in order to test the relation between group diversity ($M = .49, SD = .18$) and team performance ($M = 59.85, SD = 10.94$). The regression analysis, with the controlled variables of living abroad and educational level, showed that the relationship between these variables was not significant, $F(1,76) = .63, p = .429$ with R^2 of .008. Diversity was found to be a non-significant predictor ($b = -5.43, p = .429$).

4.2 The effect of task conflict

The simple regression analysis was run in order to test if task conflict has an effect on the relation between diversity and team performance. To further elaborate, the analysis was examined in order to see if the relationship between diversity and team performance is caused by the task conflict within group. Thus, the simple regression analysis was run to test the hypothesis 1 and hypothesis 2. However, no mediation was found as for it to be significant, the relation between the independent (group diversity) and dependent variable (team performance) needed to be significant.

The simple regression analysis showed no significance between the group diversity ($b = -5.43, p = .429$) and performance, $F(1,76) = .63, p = .429$ with R^2 of .008. However, looking at the relation between group diversity and team performance, the researcher detected the negative correlation of these variables. To further elaborate, it can be stated that as group diversity increased, the performance decreased.

Moreover, the relation between group diversity ($b = -.08, p = .881$) and task conflict also had no significance $F(1,76) = .02, p = .881$ with R^2 of .000. This meant that diversity did not have any influence on the increase or decrease of task conflict. Therefore, hypothesis 1 was rejected, as the relation was not significant.

The relation between task conflict ($b = -4.87, p = .001$) and team performance showed a significance, $F(1,76) = 11.29, p = .001$ with R^2 of .129. This meant that task conflict had an effect on the team performance. To further elaborate, the regression analysis showed a negative correlation of task conflict and team performance, which meant that as task conflict increased, the performance decreased. However, the test showed that task conflict did not have an influence on the relation between diversity and team performance. Therefore, hypothesis 2 was rejected.

4.3 The effect of relationship conflict

Similarly to the previous test, the simple regression analyses were run in order to see if relationship conflict has an effect on the relation of group diversity and team performance. The same was found for the relation of diversity ($b = -5.43, p = .429$) and team performance, $F(1,76) = .63, p = .429$ with R^2 of .008, which presented no significant relation. Next, the relation of diversity to relationship conflict was tested. The simple regression analysis showed that diversity ($b = -.40, p = .468$) did not have any significant effect on the relationship conflict, $F(1,76) = .53, p = .468$ with R^2 of .007. Therefore, hypothesis 3 was rejected.

Another regression analysis tested the relation of relationship conflict ($b = -5.36, p = .000$) and team performance. The results showed that the relationship between relationship conflict and team performance was found to be significant, $F(1,76) = 17.68, p = .000$ with R^2 of .189. Therefore, this signified that relationship conflict has a direct negative effect on the team performance. To further elaborate, this result showed that as relationship conflict increased, the team performance decreased. However, relationship conflict did not have an effect on the relation between diversity and team performance. Thus, hypothesis 4 was rejected.

Moreover, there was a negative correlation between the two variables, which meant that as relationship conflict increased, the team performance decreased. However, the relation between the group diversity and relationship conflict had no significance ($p = .468$). Therefore, hypothesis 3 and 4 were rejected.

4.4 The moderating effect of personality traits on the relation between diversity and task conflict

The moderating effect of personality traits was tested on the relation between the independent variable (diversity) and dependent variable (task conflict). The researcher checked for moderation of five personality traits separately. However, multiple regression

analyses showed no significance. Therefore, hypothesis 5 was rejected. The tables below show Beta value, standard error (*S.E.*) as well as *t* and *p* values.

Table 4.

Moderation of cultural empathy (*N* = 78)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.03	.09	-.28	.780
ZCE	-.15	.09	-1.26	.211
ZDxZCE	-.15	.10	-1.30	.198

$R^2 = .055$; $F(3,74) = 1.42$, $p = .243$

Table 5.

Moderation of open-mindedness (*N* = 78)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.00	.09	-.01	.994
ZOM	-.18	.09	-1.55	.125
ZDxZOM	-.19	.10	-1.70	.093

$R^2 = .071$; $F(3,74) = 1.90$, $p = .139$

Table 6.

Moderation of emotional stability (*N* = 78)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.02	.09	-.14	.890
ZES	.02	.09	.21	.832
ZDxZES	.03	.10	.28	.780

$R^2 = .002$; $F(3,74) = .05$, $p = .984$

Table 7.

Moderation of social initiative ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.02	.10	-.18	.855
ZSI	-.06	.09	-.53	.597
ZDxZSI	-.02	.09	-.14	.890

 $R^2 = .005$; $F(3,74) = .11$, $p = .953$

Table 8.

Moderation of flexibility ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.02	.10	-.18	.858
ZFX	.10	.09	.87	.385
ZDxZFX	-.16	.13	-.16	.875

 $R^2 = .011$; $F(3,74) = .26$, $p = .851$

4.5 The moderating effect of personality traits on the relation between diversity and relationship conflict

Similar results were found once the researcher tried to test the hypothesis 5 for any significant changes between the relation of diversity and relationship conflict under the influence of personality traits. All of the five multiple regression analyses did not show any moderation, nor significant relation between the variables. Therefore, the rest of moderation statistics were put in the appendix (see appendix E).

No significant influence of any of the personality traits on the relation between diversity and relationship conflict was found. Therefore, H6 was rejected.

4.5 Additional significant relations found

The results from the tests for moderation showed that personality traits do not moderate the relation between diversity and the two types of conflicts: relationship and task conflict. It can be then concluded that the researcher did not find what was theorized and hypothesized. However, testing for other outcomes may be worthwhile as additional effects may be found. Therefore, the researcher conducted additional analyses of the moderating effects of personality traits on the relation of task conflict and team performance. The moderating effect of personality traits was also tested for the relation of relationship conflict and team performance.

In order to be able to perform additional tests for moderation of personality traits, the researcher made a standardized version of task conflict variable (e.g. Ztask) as well as of relationship conflict variable (e.g. Zrel). After, the computed variables of task/relationship conflict and personality traits were created (e.g. Ztask_ZCE or Zrel_ZSI).

After testing for the effect of each personality trait, the researcher found a significant moderation of the relation between task conflict and team performance.

4.5.1 The effect of social initiative on the relation of task conflict and team performance

Despite the fact that there was no moderation found between the independent and dependent variables, a different significant relationship has been discovered. The researcher conducted another multiple regression analysis with group performance as a criterium. The predictors were task conflict and social initiative trait. This relation was found to be significant (Table 9). As aforementioned, no controlled variables were added as none showed significance in this research.

Table 9.

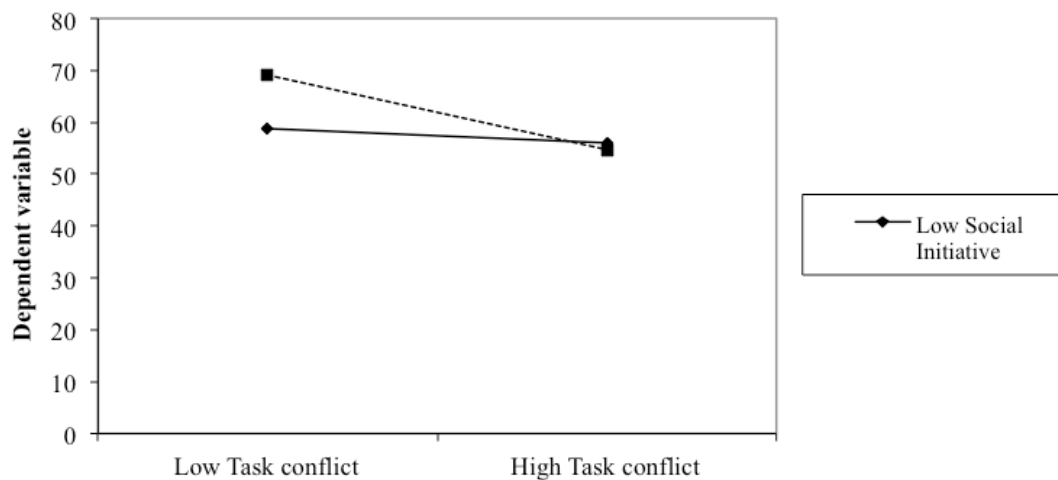
Moderation of social initiative on the relation between task conflict and group performance ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Ztaskconflict	-.39	1.14	-3.76	.000
ZSI	.20	1.13	1.96	.054
ZtaskxZSI	-.25	1.21	-2.38	.020

$F(3,74) = 6.91, p = .000, R^2 = .219$

The interaction effect of task conflict and social initiative on group performance was found to be significant. Therefore, the moderation of social initiative was found. As shown in the Table 9, the effects of task conflict and social initiative were significant. The moderating effect ($Z_{\text{task} \times \text{ZSI}}$) was also found to be significant ($p = .020$).

Graph 1. Moderating effect of social initiative trait



The graph shows the moderation effect of the social initiative trait between dependent variable (team performance) and independent variable (task conflict). The independent and dependent variables were both continuous and standardized variables. Therefore, by inserting unstandardized coefficients of the main variables and the moderator from the multiple-regression analysis results in the Excel formula, the graph was made (Dawson, 2018). The dependent variable on the graph shows the team scores that were previously calculated by the researcher. The high scores on the graph (e.g. score 68) mean worse performance. The lower the score that a team received, the better they performed.

Graph 1 shows that individuals who had high scores on social initiative trait, experienced lower task conflict in their group discussions, and thus their team scores were higher. This means that their team performance was negatively affected by high scores of social initiative and lower task conflict. However, the individuals who scored lower on social initiative, experienced higher task conflict in their groups. This, as shown in the graph, resulted in better team performance, as the scores from team error were lower.

4.5.2 Relation between relationship conflict and team performance

Another interesting relation has been found between the relationship conflict and team performance. Similarly to the previous sub-section, the researcher conducted five separate moderation analyses with relationship conflict (independent variable), team performance (dependent variable) and personality traits as moderator.

The multiple-regression analysis showed significant effects of relationship conflict ($p = .000$) and social initiative ($p = .039$). Moreover, looking at the unstandardized b coefficients, the researcher detected that as relationship conflict increased, the team performance decreased ($b = -4.80$). The opposite was observed for the effect of social initiative. The results showed that as social initiative increased, the team performance increased as well ($b = 2.45$). However, the interaction effect was not significant ($p = .477$). Therefore, there was no moderation.

Table 10.

The effect of social initiative on the relation of relationship conflict and group performance ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zrelconflict	-.44	1.11	-4.32	.000
ZSI	.22	1.11	2.10	.039
ZrelxZSI	-.07	1.04	-.71	.477

$F(3,74) = 7.58, p = .000, R^2 = .235$

4.6 Summary

Overall, the results from the analyses did not show much significant relations between the variables. The relation between the group diversity and team performance was found to be not significant. This countered the thesis claims that were based on the theoretical framework. Moreover, the researcher did not find any significant effect of task and relationship conflict on the relation between group diversity and performance. Thus, hypothesis 1, 2, 3 and 4 were rejected.

The multiple regression analyses tests measuring the moderating effect of five personality traits on the relation between task conflict and diversity showed no significance. The findings

showed that personality traits did not pose any change on the relation between these variables. Therefore, the hypothesis 5 was rejected. Similar results were found on the effect of personality traits on the relation between diversity and relationship conflict. Thus, the hypothesis 6 was also rejected.

However, a different result was identified. The social initiative trait was found to have a moderating effect on the relation between task conflict and performance. Moreover, the researcher found significant relation between relationship conflict and team performance, but no moderation.

5. Conclusion

This section of the thesis presents the answers to the research question as well as limitations, future recommendations and practical implications to the current research. The conclusion and strengths are also stated.

5.1 Discussion

This thesis aimed to test how people work in diverse teams and to see how this is affected by other factors, such as task and relationship conflict and personality traits. Proper and effective communication in groups, and especially diverse groups, is seen as one of the most important factors in the communication within a work environment. Similarly, intercultural communication is also vital in a school or university environment as well. However, various outside factors could affect communication in diverse teams (van Knippenberg et al., 2004; Stahl et al., 2010). The researcher stated that conflicts about task as well as interpersonal conflicts in groups are seen as types of communication, and thus can pose an effect between the main relation of diversity and team performance. To further elaborate, the rising relationship conflicts within group could negatively influence the overall communication, as people would focus more of their attention on interpersonal issues that would not be related to the given task. The opposite effect was theorized for the task conflict. This was seen as a factor that would improve group's performance, as participants would share their opinions about the task, which may not have been thought of by other members. Moreover, personality traits were theorized to have a moderating effect on the team's communication (van Oudenhoven & van der Zee, 2002). To further explain, participants who would score higher on the MPQ would make the relationship between diversity and task conflict stronger. On the contrary, people who would score higher on the MPQ would make the relationship between diversity and relationship conflict weaker.

This research tested the relation between group diversity and team performance, with the influencing factors of task/relationship conflict and personality traits. In total, the researcher conducted 23 laboratory studies ($N = 78$) with the usage of the desert survival situation task. The researcher also incorporated two surveys in the research, which measured the scores for personality traits, task and relationship conflict as well as controlled variables. Team performance was obtained from the team scores that the group received, after calculating the difference between correct answers and their team scores. The researcher calculated the amount of diversity in each group manually.

The researcher tested for any significant effects of task and relationship conflict and for any moderation of personality traits on the relation between group diversity and task

conflict and on the relation between diversity and relationship conflict. The research question was the following: *To what extent does team diversity affect group performance, what is the role of task and relationship conflict, and what is the moderating role of personality?*

Based on the findings, the research question was answered. The team diversity did not pose a significant effect on the group performance. Moreover, task and relationship conflict did not influence the relation between diversity and team performance. Lastly, personality only played a minor moderating role and it did not significantly change the relation between diversity and task/relationship conflict.

The theoretical implications as well as practical implications, limitations, strengths and overall conclusion are provided in the sections below.

5.2 Theoretical implications

5.2.1 Group diversity

There was no significant relation found between the diversity and team performance. Therefore, the group diversity did not have any effect or influence on the team performance. However, a theoretical assumption could provide some explanation to this finding. The theoretical framework indicated that diversity might pose both positive and negative influence on team performance (van Knippenberg et al., 2004; Mannix & Neale, 2005; Stahl et al., 2010). Therefore, no effect could mean that positive and negative effects of diversity within group could have neutralized the overall influence of the whole studied sample. The majority of studied participants were students who had either received a Bachelor or Master's degree. Due to the fact that the researcher obtained most of the sample at the Erasmus University, it can be stated that most of these students had an experience with communication in diverse groups. The Erasmus University has students from many different nationalities and cultures, and thus students experience intercultural communication on a daily basis. This could explain why group diversity did not have significant effects on the overall team performance.

5.2.2 Task conflict

The theorized effect of task conflict on the relation between diversity and team performance was found to be not significant. However, the relation between task conflict and team performance showed significance. Therefore, this meant that the task conflict had a direct effect on the team performance.

5.2.3 Relationship conflict

Similarly, the relationship conflict did not influence the relation between diversity and team performance. However, the findings showed that the relationship conflict did have an effect on the team performance. Diversity did not have any effect but the direct effect of relationship conflict on the team's communication was found.

5.2.4 Personality traits

The influences of personality traits on the relation between group diversity and relationship conflict as well as on the relation between diversity and task conflict were also tested. Personality traits were tested for their moderating effect on the relation between these variables. However, the results did not show any significant effects.

The diversity within groups did not show any significant influence, which could be explained from the demographics of the studied sample. Most participants were students but some were also working, which could also signify that they might have already had experience with task conflicts in groups, while working on an assignment, for instance. Moreover, looking at the previously explained demographics, the majority of participants indicated that they lived outside of their home country for longer than three months. This factor alone could signal that participants had an experience of communicating with other cultures or nationalities. Therefore, they could have learned various skills that could help them with overcoming task conflict or diversity in teams. As majority of participants were international students, they scored high on the MPQ, which could also explain why diversity did not pose an effect on their team performance. Therefore, the levels of task conflict in groups did not affect their communication in a significant way.

5.2.5 A different effect found

The model of this thesis did not work as intended. However, the effects of personality traits were discovered somewhere else. Social initiative was the only personality trait that was found to have an influence. The results showed significant main effects of task conflict and social initiative trait on the team performance. Moreover, the interaction effect was also found to be significant. The findings showed that individuals who scored high on social initiative experienced lower task conflict. Consequently, their communication, and thus team performance was worse. Their team error was higher and this meant lower performance (Lafferty, Eady & Elmers, 1974). The opposite effects were found with the low scores on

social initiative. The lower scores on this personality trait indicated more task conflict in their groups, which resulted in better performance as the group had lower team error.

As previously mentioned, the direct effects of personality traits on relation between diversity and task conflict were not seen; possibly because the studied groups were already familiar of the diverse setting and such group work. The aforementioned effect of social initiative on the relation between task conflict and team performance was not theorized in this thesis but it was shown to be significant in other research that was not previously mentioned in the theory for this reason (D'Silva, Ortega & Sulaiman, 2016). Similar findings were found in Bradley, Klotz, Postlethwaite and Brown's study (2013), where the researchers presented two of the personality traits that have a moderating effect on the relation between task conflict and group performance. These were emotional stability and openness. The researchers stated that high scores on these two personality traits indicated a positive influence on team performance. However, the low scores on these two traits indicated a chance of rise of a conflict within a group. The findings from this research did not find moderation of emotional stability and openness but it did find a significance of the influence of task conflict on group performance as well as moderation of social initiative.

The findings are somewhat contradicting to the theory of multi-personality questionnaire, as high scores on social initiative should have indicated a better team performance. Individuals with high scores should have engaged more and this would lead to higher levels of task conflict. However, the findings showed the opposite. As presented in the theoretical framework, social initiative represents the willingness to engage in social situations (van der Zee et al., 2013). Thus, individuals who scored low on this trait may have been the ones that did not engage in team interactions as much.

However, one reason to explain such happening could be that the levels of task conflict as well as the overall performance were also influenced by other factors, which were not found significant in the results. Nevertheless, this does not mean that other factors had no influence. For instance, the positive and negative effects of diversity could have still posed some effect on each individual. However, as previously mentioned the opposing effects could have canceled each other out and were not identified as significant in the tests. To further elaborate, individuals with lower social initiative could have scored higher on other personality traits, which could then still positively influence the group's communication, and thus performance.

5.2.6 Other findings

Another significant relation was found between the relationship conflict and team performance. The researcher only theorized that relationship conflict would have an effect on the relation between diversity and team performance. After conducting additional analyses, the researcher indicated a significant relation between team performance and relationship conflict. The researcher hypothesized that relationship conflict will negatively influence the team performance acting as mediator. However, no effect was found. Instead, the relationship conflict posed an effect during moderating analysis with social initiative. The results showed that as relationship conflict increased, the team performance decreased. This finding was supported by other research, which found similar effects of this type of conflict (Jehn, 1995; de Dreu & van Vianen, 2001; de Dreu & Weingart, 2003). Therefore, the participants might have not been affected by diversity in group, however during the discussions, the interpersonal conflict that individuals had between each other did influence their group work in a negative way.

Moreover, the results showed that as social initiative increased, the team performance increased as well. Therefore, this meant that high scores on social initiative had a positive effect on the team performance. While analyzing the relationship conflict, the social initiative trait signified an opposite influence. In this finding, the high scores of social initiative did have a positive effect on the team communication and performance. This lined up with the theory, which stated that individuals with high scores on this trait would engage more in the conversation and this could potentially bring in more ideas, and thus enrich the group communication (van der Zee & van Oudenhoven, 2000, 2001; van der Zee et al., 2013).

5.3 Limitations

The researcher conducted normality tests as well as reliability analyses of scales in order to make sure that the research was valid and reliable. Moreover, the study did not have many restrictions for obtaining the studied sample in order for the findings to be generalizable. However, some limitations were still detected and are discussed in this section. The recommendations for future research are provided after limitations.

One of the first identified limitations was the sample. In total, the researcher obtained 78 participants, which was too small for it to be generalized to the larger public (Lim & Ting, 2012). Moreover, majority of studied participants were students. This also signified that the findings could not be transcribed and identified with the elderly or workers, for instance. To further elaborate, the students who participated were mostly studying at the Erasmus University, and thus most of them already had an experience with working in diverse groups.

Therefore, the results from this study might not have reflected the real influence of diversity on groups.

Another limitation was recognized within the sampling – groups' composition. The groups were mostly diverse. However, there were only two groups that were non-diverse. Moreover, the majority of participants were obtained through random sampling where individuals were presented with list of dates and times and chose the one that suited them the most. The researcher did not intervene with the sign up sheet as well as the placement of each individual. However, some participants were obtained through the personal network of the researcher. Due to this fact, some groups had people that mostly knew each other very well. They were mostly families or close friends. Consequently, the dynamic of such groups was a lot different as compared to the random formation of groups at the university. In these situations, the relationship conflict, for instance, could not have been the strong influencer as the individuals within such groups knew each other very well and were able to communicate with one another very effectively. Therefore, one of the recommendations for the future research would be to obtain a larger sample, with more variety of participants. The future research should include a similar ratio of students and working people. The students should be obtained from universities such as Erasmus. However, the researchers should also include students from different types of university in order to properly measure and observe if diversity does pose an influence on the group work and performance. Moreover, there should be more non-diverse groups in order to compare and test whether diversity poses a significant influence on the overall group performance. Another recommendation for the future would be to conduct this research for longer period of time. This would allow the researchers to test more individuals and to see if factors such as diversity, task/relationship conflict and personality traits have significant effects on the group performance.

Looking at the research design of this study, another limitation was identified. This study was conducted in a laboratory setting, which in general is not represented as an ideal setting for experiments (Berkowitz & Donnerstein, 1982). Being at the research lab at the university, the participants knew that they will be tested in some way and thus they were awaiting the experiment. This type of environment might have not been the most effective for observing the communication between the participants as a real-life setting.

Moreover, another major limitation was convincing people to come to a specific room and spend an hour of their time doing the laboratory study. This alone brought many limitations to the study. The majority of groups did spend 20 minutes of given time to discuss all of their answers and make unanimous decisions. However, some groups finished the task a lot quicker. The shortest time of a group work was about six minutes. This could have negatively influenced the overall results. The group did not focus enough on the task, as they

wanted to finish the study as soon as possible. Therefore, even though the researcher gathered enough participants, their participation alone sometimes brought limitations to the research.

Furthermore, as previously mentioned, due to the absence in communication from two participants, one group resulted in having five participants, which was not a desired composition of a group. This also was identified as a limitation. During the study, the researcher observed that the group dynamic was poor. Some participants were mostly excluded from the discussion and did not say much during the whole study. They did not engage in the conversation as much as others were voicing their opinions without noticing that one person did not speak. Therefore, the effects of diversity or relationship and task conflict were shadowed by the amount of people in a group.

In order to be able to validate the research as well as to transcribe the results onto the population, the experiences and behaviors of studied sample in a laboratory study should be comparable to the experiences of a study that would be conducted outside of the lab (Falk & Heckman, 2009). This was somewhat achieved and tested when the researcher conducted lab studies at cafes or private homes. However, the model of this research did not work, and thus the findings could not be generalized to the larger public. Therefore, apart from the larger and more varied studied sample, another recommendation for future research would be to conduct these studies in an environment that would resemble the real life workgroup experiences on a greater scale. For instance, the study could be conducted at the co-working spaces, which are designed for professionals who are mostly self-employed and use these places as means of enlarging their network. This type of place would resemble the real work experience more than a designed research lab at the university. This would probably make it easier for participants to imagine that this is their work or school group and that they need to focus on the task.

Moreover, the future study should incorporate an award system in order to motivate people to participate in the research but also for them to pay full attention and time. Next to snacks and drinks, the researchers could also offer a small monetary reward for each participant. This would resolve the problem of finishing the task too early or the problem of participants not communicating properly or not showing up.

5.4 Practical implications

This thesis tested the effects of diversity on a group performance, with other influencing factors such as task and relationship conflict and personality traits. Despite the fact that the theorized model did not work, the findings of this study can still be transcribed into practical implications for companies as well as universities. Moreover, this research showed that diversity does not always have to make a difference and that anyone, regardless of the MPQ scores, should be able to work together in a diverse team.

The proper and effective communication within group is vital for employees, the companies, students and universities. Therefore, it is important to study it and to pass these findings further on. Many multi-national companies already have a diverse working environment and know how to work with different cultures and nationalities. However, some are still struggling to cope with rising personal and task conflicts. This study reveals the findings on these influencing factors and the theory attached to it.

The research did find a significant moderation of one of the variables, which was not theorized in the original model but could still be used and presented as an important practical implication. Looking at the results and discussion, the companies could benefit from this research and learn more about one of the personality traits that posed a significant effect – social initiative. This finding shows that social initiative is a trait that can act as both positive and negative influencer of group work. The results from this research showed that high levels of social initiative indicated lower task conflict, and thus worse performance. This contradicts the theory and thus this shows that this trait needs to be properly evaluated.

Moreover, the findings showed that task conflict does have a positive effect on team performance while moderated by the social initiative. This could show the companies that task conflict can be beneficial for the overall performance of a workgroup. With this knowledge, the companies could see that group's communication is more effective than simple voting. Therefore, they could stress out this importance to their employees and make sure that the groups evaluate all of the options before making a final decision.

The moderating analysis of social initiative and relationship conflict on team performance also showed significant results, which could enrich companies' understanding of effective group work. The findings showed that as relationship conflict rises, the team performance decreases. Similarly, the companies could benefit from it by making sure to monitor for any signs of interpersonal conflicts and resolving it very quickly. This would positively influence their decision-making processes and would allow them to communicate without any negative factors influencing their performance.

5.5 Conclusion and strengths

To summarize, this research aimed to observe and test the influences of workgroup diversity on the overall team performance, with other influencing factors: task and relationship conflict and five personality traits. This thesis tested for direct relation between diversity and team performance, as well as for the effect of task/relationship conflict and for moderating role of each personality trait. The model did not work as intended. However, other significant effects of moderation were found. Consequently, this research showed that social initiative posed an effect on the overall team performance. The moderating analysis

also showed that task conflict increases team performance, whereas relationship conflict has an opposite effect.

Despite the many mentioned limitations, this research also had its strengths. This study did not have many restrictions to obtaining participants. The majority that participated were students. However, there were also people who were already part of a working environment. Therefore, the implications of this study could be transcribed onto more general public, even if the results did not line up with the model.

The usage of laboratory study as a type of quantitative method was another strength. Despite many limitations attached to this kind of research, the laboratory study still gave more concrete and reliable data than survey. The researcher was physically present during the study and this gave an opportunity to also observe participants and not only evaluate the scores and results afterwards. Moreover, the participants had to be present for an hour during the study, which made sure that they are focused on the task. Conducting this type of research online would not be feasible and would lack validity as other factors could distract participants. The results would not reflect the real-life group work, and thus performance.

Moreover, this results from this thesis added to the scientific research as it tested effects of variables that were not incorporated in much of the existing literature. To further elaborate, new findings on the effects of personality traits were found.

References

- Akmal, K. (2015). Personality traits influence on team cohesiveness and performance: The moderating effect of leadership. *Information and Knowledge Management*, 5(4), 104-109.
- Balthazard, P. A. & Potter, R. E. (2004, January). *An example of CSCLIP delivery and research technologies with some preliminary findings from the field*. Paper presented at the proceedings of the 37th Annual Hawaii International Conference on System Sciences, Hawaii, U.S.A. Retrieved from https://www.researchgate.net/publication/221181095_An_Example_of_CSCLIP_Delivery_and_Research_Technologies_with_Some_Preliminary_Findings_from_the_Field
- Beamer, L. (1992). Learning intercultural communication competence. *International Journal of Business Communication*, 29(3), 285-303. <https://doi.org/10.1177/002194369202900306>
- Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American Psychologist*, 37(3), 245-257. <http://dx.doi.org/10.1037/0003-066X.37.3.245>
- Biemann, T., & Kearney, E. (2010). Size does matter: How varying group sizes in a sample affect the most common measures of group diversity. *Organizational Research Methods*, 13(3), 582-599. <https://doi.org/10.1177/1094428109338875>
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: Free Press. (pp. 1-318). Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/000271627944200146>
- Blau, P. M., Blum, T. C., & Schwartz, J. E. (1982). Heterogeneity and intermarriage. *American Sociological Review*, 47(1), 45-62. <https://doi.org/10.2307/2095041>
- Bordens, K. S., & Abbott, B. B. (2002). *Research design and methods: A process approach*. New York, US: McGraw-Hill. (pp. 1-608) Retrieved from <http://psycnet.apa.org/record/2001-18329-000>
- Bradley, B. H., Klotz, A. C., Postlethwaite, B. E. & Brown, K. G. (2013). Ready to rumble: How team personality composition and task conflict interact to improve performance. *Journal of Applied Psychology*, 98(2), 385-392. <https://doi.org/10.1037/a0029845>
- Brandts, J. & Charness, G. (2011). The strategy versus the direct-response method: a first survey of experimental comparisons. *Experimental Economics*, 14(3), 375-398. <https://doi.org/10.1007/s10683-011-9272-x>
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86(2), 307-324. <https://doi.org/10.1037/0033-2909.86.2.307>
- Brown, L. D. (1983). *Managing conflict at organizational interfaces*. Reading, MA: Addison-Wesley. (pp. 1-349)
- Carnevale, P. J., & Probst, T. M. (1998). Social values and social conflict in creative problem solving and categorization. *Journal of Personality and Social Psychology*, 74(5), 1300-1309. <https://doi.org/10.1037/0022-3514.74.5.1300>

- Cattell, R. B. (1956). Validation and intensification of the sixteen personality factor questionnaire. *Journal of Clinical Psychology*, 12(3), 205-214.
[https://doi.org/10.1002/1097-4679\(195607\)12:3<205::AID-JCLP2270120302>3.0.CO;2-0](https://doi.org/10.1002/1097-4679(195607)12:3<205::AID-JCLP2270120302>3.0.CO;2-0)
- Deacon, B. (2016). *EFL students in the desert: Using survival simulations to improve teamwork*. PDF
- De Dreu, C. K., & van Vianen, A. E. (2001). Managing relationship conflict and the effectiveness of organizational teams. *Journal of Organizational Behavior*, 22(3), 309-328.
<https://doi.org/10.1002/job.71>
- De Dreu, C. K. W. & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88(4), 741–749. <https://doi.org/10.1037/0021-9010.88.4.741>
- D’Silva, J. L., Ortega, A. & Sulaiman, A. H. (2016). Personality and task interdependence as moderators for task conflict and team effectiveness. *Asian Journal of Applied Science*, 9(2), 62-69. <https://doi.org/10.3923/ajaps.2016.62.69>
- Edmonson, A.C. (2003). Managing the risk of learning: Psychological safety in work teams. In M. West, D. Tjosvold, & K.G. Smith (Eds.), *International handbook of organizational teamwork and cooperative working* (pp. 255–275). London: Wiley. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/02-062_0b5726a8-443d-4629-9e75-736679b870fc.pdf
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5 or 3? - Criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12(8), 773-790.
[https://doi.org/10.1016/0191-8869\(91\)90144-Z](https://doi.org/10.1016/0191-8869(91)90144-Z)
- Falk, A., Heckman, J. J. (2009). *Lab experiments are a major source of knowledge in the social sciences*. (Discussion paper No. 4540). Retrieved from <http://ftp.iza.org/dp4540.pdf>
- Flam, F. (2017, August, 7). Personality has greater impact on success than IQ, new research suggests. *Independent*. Retrieved from <https://www.independent.co.uk/news/science/personality-iq-success-wealth-factors-determining-prospects-intelligence-careers-james-heckman-a7880376.html>
- Fui, L. D. & Hassan, Z. (2015). The relationship between personality and team conflict. *International Journal of Accounting & Business Management*, 3(1), 39-49.
<https://doi.org/10.24924/ijabm/2015.04/v3.iss1/39.49>
- Ganguly, M., Bardhan, M. R., Saha, R. & Rameshwar, R. (2017, December). *Influence of personality traits on leadership roles on conflict management style within the organization*. Paper presented at IIT Roorkee ICRBS Conference, Roorkee, India. Retrieved from https://www.researchgate.net/publication/320980168_Influence_of_Personality_Traits_on_Leadership_Roles_on_Conflict_Management_Style_within_the_Organization_Influence_of_Personality_Traits_on_Leadership_Roles_on_Conflict_Management_Style_within_the_Org
- Goldberg, L. R. (1990). An alternative" description of personality": The big-five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216-1229. Retrieved from https://projects.ori.org/lrg/PDFs_papers/Goldberg.Big-Five-FactorsStructure.JPSP.1990.pdf

- Goodman, L. A. (1961). Snowball sampling. *The Annals of Mathematical Statistics*, 32(1), 148-170.
- Guetzkow, H., & Gyr, J. (1954). An analysis of conflict in decision-making groups. *Human Relations*, 7(3), 367-382. <https://doi.org/10.1177/001872675400700307>
- Hackman, J. R., & Morris, C. G. (1975). Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. In L. Berkowitz (Ed.), *Advances in experimental social psychology*. New York: Academic Press. (pp. 45-99). Retrieved from <https://www.sciencedirect.com/science/article/pii/S0065260108602488>
- Harrison, D. A. & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), 1199-1228. <https://doi.org/10.5465/amr.2007.26586096>
- Huang, T., Chi, S., & Lawler, J. J. (2005). The relationship between expatriates' personality traits and their adjustment to international assignments. *The International Journal of Human Resource Management*, 16(9), 1656-1670. <https://doi.org/10.1080/09585190500239325>
- Human Synergistics International. (2017). Desert survival situation. Warm up the problem-solving and decision-making skills of your teams. Retrieved from https://www.humansynergistics.com/docs/default-source/default-document-library/desert_prod_info_sheet_v2-0_np.pdf?sfvrsn=82f52645_0
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(2), 256-282. <https://doi.org/10.2307/2393638>
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741-763. <https://doi.org/10.2307/2667054>
- Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25(6), 703-729. <https://doi.org/10.1002/job.257>
- Johnson, D. W., & Johnson, F. P. (1991). *Joining together: Group theory and group skills*. Englewood Cliffs, NJ: Prentice-Hall. Retrieved from <http://psycnet.apa.org/record/1991-97576-000>
- Lafferty, J. C., Eady, P. M., & Elmers, J. (1974). The desert survival problem. *Experimental Learning Methods*. Plymouth, Michigan.
- Lim, W. M., & Ting, D. H. (2012). *Research methodology: A toolkit of sampling and data analysis techniques for quantitative research*. GRIN Publishing: Munich, Germany. (pp. 1-84).
- Ludwick, R. & Zeller, R. A. (2001). The factorial survey: An experimental method to replicate real world problems. *Nursing Research*, 50(2), 129-133.
- Mitchell, G. (2012). Revisiting truth or triviality: The external validity of research in the psychological laboratory. *Perspectives on Psychological Science*, 7(2), 109-117. <https://doi.org/10.1177/1745691611432343>
- Mannix, E. & Neale, M. A. (2005). What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science Public Interest*, 6(2), 31-55. <https://doi.org/10.1111/j.1529-1006.2005.00022.x>

Marshall, M. N. (1996). Sampling for quantitative research. *Family Practice*, 13(6), 522-526. <https://doi.org/10.1093/fampra/13.6.522>

McLaren, C. (2017, March 3). Communication and the importance of understanding [Blog post]. Retrieved from <http://www.mclarencoaching.com/communication-and-the-importance-of-understanding/>

Mohammed, S., & Angell, L. C. (2004). Surface- and deep- level diversity in workgroups: Examining the moderating effects of team orientation and team process on relationship conflict. *Journal of Organizational Behavior*, 25(8), 1015-1039. <https://doi.org/10.1002/job.293>

Mumford, M. F., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application and innovation. *Psychological Bulletin*, 103, 27-43.

Nickerson, J. V. & Ma, J. (2006). Hands-on, simulated, and remote laboratories: A comparative literature review. *ACM Computing Surveys*, 38(3), 1-24. <https://doi.org/10.1145/1132960.1132961>

O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, 34(1), 21-37.

Pallant, J. (2010). Checking the reliability of a scale. In Pallant, J. (Eds.), *SPSS survival manual: A step by step guide to data analysis using SPSS*. Maidenhead: Open University Press/McGrawHill. (pp.1-352).

Pelled, L. H., Eisenhardt, K. M. & Xin, K. R. (1999). Exploring the Black Box: An analysis of work group diversity, conflict and performance. *Administrative Science Quarterly*, 44(1), 1-28. <https://doi.org/10.2307/2667029>

Phillips, K. W., Northcraft, G. B., & Neale, M. A. (2006). Surface-level diversity and decision-making in groups: When does deep-level similarity help? *Group processes & intergroup relations*, 9(4), 467-482. <https://doi.org/10.1177/1368430206067557>

Rentsch, J. R. & Zelno, J. A. (2003). The role of cognition in managing conflict to maximize team effectiveness. A team member schema similarity approach. In M. West, D. Tjosvold, & K.G. Smith (Eds.), *International handbook of organizational teamwork and cooperative working* (pp. 131-150). London: Wiley. Retrieved from http://library.uniteddiversity.coop/Cooperatives/%20International_Handbook_of_Organizational_Teamwork_and_Cooperative_Working.pdf

Schulz-Hardt, S., Mayer, J., & Frey, D. (2002). Productive conflict in group decision making: Genuine and contrived dissent as strategies to counteract biased information seeking. *Organizational Behavior and Human Decision Processes*, 88(2), 563-586. [https://doi.org/10.1016/S0749-5978\(02\)00001-8](https://doi.org/10.1016/S0749-5978(02)00001-8)

Sieber, J. E. (2012). *The ethics of social research: Surveys and experiments*. Springer Science & Business Media. Retrieved from https://books.google.nl/books?id=gE_PBgAAQBAJ&dq=The+Ethics+of+Social+Research:+Surveys+and+Experiments+edited+by+Joan+E.+Sieber&lr=&source=gbs_navlinks_s

Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, 85(1), 102-111.

- Stahl, G., Maznevski, M. L., Voigt, A. & Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis of research on multicultural work groups. *Journal of International Business Studies*, 41, 690-709. <https://doi.org/10.1057/jibs.2009.85>
- Staples, D. S., & Zhao, L. (2006). The effects of cultural diversity in virtual teams versus face-to-face teams. *Group Decision and Negotiation*, 15(4), 389-406. <https://doi.org/10.1007/s10726-006-9042-x>
- Stier, J. (2006). Internationalisation, intercultural communication and intercultural competence. *Journal of Intercultural Communication*, 1(11), 1-12. Retrieved from <https://immi.se/intercultural/nr11/stier.pdf>
- Triandis, H. C., Kurowski, L. L., & Gelfand, M. J. (1994). Workplace diversity. In H. C. Triandis, M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*. Palo Alto, CA: Consulting Psychologists Press. (pp. 769-827).
- Van der Zee, K. I., Atsma, N., & Brodbeck, F. (2004). The influence of social identity and personality on outcomes of cultural diversity in teams. *Journal of Cross-Cultural Psychology*, 35, 283–303. <https://doi.org/10.1177/0022022104264123>
- Van der Zee, K. I., & van der Gang, I. (2007). Personality, threat and affective responses to cultural diversity. *European Journal of Personality*, 21(4), 453-470. <https://doi.org/10.1002/per.619>
- Van der Zee, K. I., & van Oudenhoven, J. P. (2000). The Multicultural Personality Questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality*, 14, 291–309. [https://doi.org/10.1002/1099-0984\(200007/08\)14:4<291::AID-PER377>3.0.CO;2-6](https://doi.org/10.1002/1099-0984(200007/08)14:4<291::AID-PER377>3.0.CO;2-6)
- Van der Zee, K. I., & van Oudenhoven, J. P. (2001). The Multicultural Personality Questionnaire: Reliability and validity of self- and other ratings of multicultural effectiveness. *Journal of Research in Personality*, 35, 278–288.
- Van der Zee, K. & van Oudenhoven, J. P (2013). Culture shock or challenge? The role of personality as a determinant of intercultural competence. *Journal of Cross-Cultural Psychology* 44(6), 928-940. <https://doi.org/10.1177/0022022113493138.jccp.sagepub.com>
- Van der Zee, K. I., van Oudenhoven, J. P., Ponterotto, J. G. & Fietzer, A. W. (2013). Multicultural personality questionnaire: Development of a short form. *Journal of Personality Assessment*, 95(1), 118-124. <https://doi.org/10.1080/00223891.2012.718302>
- Van Knippenberg, D., de Dreu, C. K. & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89(6), 1008–1022. <https://doi.org/10.1037/0021-9010.89.6.1008>
- Van Oudenhoven, J. P., & van der Zee, K. I. (2002). Predicting multicultural effectiveness of international students: The Multicultural Personality Questionnaire. *International Journal of Intercultural Relations*, 26(6), 679-694. [https://doi.org/10.1016/s0147-1767\(02\)00041-x](https://doi.org/10.1016/s0147-1767(02)00041-x)
- Van Woerkom, M., & de Reuver, R. S. (2009). Predicting excellent management performance in an intercultural context: A study of the influence of multicultural personality on transformational leadership and performance. *The International Journal of Human Resource Management*, 20(10), 2013-2029.

- Van Woerkom, M. & van Engen, M. L. (2009). Learning from conflicts? The relations between task and relationship conflicts, team learning and team performance. *European Journal of Work and Organizational Psychology, 18*(4), 381-404. <https://doi.org/10.1080/13594320802569514>
- Wall, J., & Callister, R. (1995). Conflict and its management. *Journal of Management, 21*(3), 515–558. <https://doi.org/10.1177/014920639502100306>
- Weingart, L. R. & Jehn, K. A. (2000). Manage intra-team conflict through collaboration. In E. A. Locke (ed.), *The Blackwell Handbook of Principles of Organizational Behavior* (pp. 226–238). Oxford, UK: Blackwell Publishers. <https://doi.org/10.1002/9781119206422.ch18>
- Williams, K. Y. & O'Reilly, C. A. (1998). Diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior, 20*, 77-140.
- Williams, T. R. (2005). Exploring the impact of study abroad on students' intercultural communication skills: Adaptability and sensitivity. *Journal of Studies in International Education, 9*(4), 356-371. <https://doi.org/10.1177/1028315305277681>
- Yakunina, E. S., Weigold, I. K., Weigold, A., Hercegovac, S. & Elsayed, N. (2012). The multicultural personality: Does it predict international students' openness to diversity and adjustment? *International Journal of Intercultural Relations, 36*(4), 533-540. <https://doi.org/10.1016/j.ijntrel.2011.12.008>

Appendix A

DESERT SURVIVAL SITUATION

Before the plane caught fire, your group was able to salvage the 15 items listed on the sheet. Your task is to rank these items according to their importance to your survival, starting with “1” being the most important to “15” the least important. You may assume you are the actual people in the situation, the group has agreed to stick together, and all the items are in good working condition.

Item	My Ranking	Team Ranking	Correct Answer	My Error	Team Error
Flashlight (4 battery size)					
Jackknife					
Sectional air map of the area					
Plastic raincoat (large size)					
Magnetic Compass					
Compress kit with gauze					
.45 caliber pistol (loaded)					
Parachute (red & white)					
Bottle of 1,000 salt tablets					
A cosmetic mirror					
Book (“Edible Animals of the Desert”)					
A pair of sunglasses per person					
2 quarts of 80 proof Vodka					
1 overcoat per person					
1 quart of water per person					
Score					

Appendix B: Informed consent

CONSENT REQUEST FOR PARTICIPATING IN RESEARCH

FOR QUESTIONS ABOUT THE STUDY, CONTACT:

Paulina Wydrzynska, 423349pw@eur.nl, +31641413483

DESCRIPTION

You are invited to participate in a research about working. The purpose of the study is to understand how groups perform on a task under time pressure.

Your acceptance to participate in this study means that you accept to participate in an experiment. In general terms:

- your participation in the experiment will be related to performing a task that requires team work.

Unless you prefer that no recordings are made, I will use an audiotape during the experiment. You are always free not to answer any particular question, and/or stop participating at any point.

RISKS AND BENEFITS

As far as I can tell, there are no risks associated with participating in this research. Yet, I will not keep any information that may lead to the identification of those involved in the study. I will only use pseudonyms to identify participants.

I will use the material from the experiment exclusively for academic work, such as further research, academic meetings and publications.

TIME INVOLVEMENT

Your participation in this study will take one hour. You may interrupt your participation at any time.

PAYMENTS

There will be no monetary compensation for your participation.

PARTICIPANTS' RIGHTS

If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. If you prefer, your identity will be made known in all written data resulting from the study. Otherwise, your individual privacy will be maintained in all published and written data resulting from the study.

CONTACTS AND QUESTIONS

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact –anonymously, if you wish, Joep Hofhuis – hofhuis@eshcc.eur.nl.

SIGNING THE CONSENT FORM

If you sign this consent form, your signature will be the only documentation of your identity. Thus, you DO NOT NEED to sign this form. In order to minimize risks and protect your identity, you may prefer to consent orally. Your oral consent is sufficient.

I give consent to be audiotaped during this study:

Name	Signature	Date
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This copy of the consent form is for you to keep.

FOR QUESTIONS ABOUT THE STUDY, CONTACT:

Paulina Wydrzynska, 423349pw@eur.nl, +31641413483.

I give consent to be audiotaped during this study:

Name	Signature	Date
------	-----------	------

This copy of the consent form is for the researcher to keep.

Appendix C: Experimental procedure

Experiment design:

- Walk in
- Informed consent
- MPQ survey
- Start of the experiment
- Explanation of the desert survival situation (5 min)
- 5-10 minutes for themselves to rank the items (5-10 min)
- 20 minutes to complete the task (20 min)
- Second survey (7 min)
- Debriefing (10 min)

Good morning/afternoon, thank you for coming in today and making the time to participate in this laboratory study. Before we start I would like you to read through this informed consent form and sign it twice. One copy is for me and the other one is for you to keep. If you have any questions or doubts, do not hesitate to ask me. Today's session will be audiotaped, unless you don't want it to. The audiotape will only be used for academic purposes and will not be spread.

Time to read and sign the consent form

–

Before we start the study I would like to ask you to fill in this survey about personality traits. Once everyone is finished, we will proceed with the lab study.

Hand in the MPQ

–

Now it is time to start the laboratory study. It will go down as follows: First I will explain the desert survival situation task. Then everyone will need to complete the task individually and after you will discuss it together and formulate a collective answer. After this, I'll ask you to complete a questionnaire and then we will discuss your answers. Everything together will take approximately 1 hour. Is everything clear?

Hand out the papers, read through the situation and explain how the ranking works. Give 5-10 minutes to complete the task individually. After that explain that they now have to make a team ranking and read through the 'achieving consensus' part. Give them 20 minutes to complete the task and give a sign 5 minutes before the time is up.

Send the link with the survey to the participant's e-mail addresses during the task

–

After the task walk in, ask if they were able to complete the task. Explain they will now fill out the questionnaire (online) and after that we will discuss their outcomes of the desert survival situation. Ask if they all have a phone or laptop they can access the survey on. Use paper back-ups if it doesn't work. Hand out the participants number (group ... p ..).

Give participants the time to complete the questionnaire and continue when everyone finished

–

Debriefing

Walk through the desert survival situation answers with everyone.

Explain that the experiment was about working/communicating in diverse teams and how this is affected by different personality traits.

Ask them not to share the nature of the experiment with people who are still participating.

Thank participants.

Appendix D: Desert survival situation task

THE TASK

- Issue the scenario and read through this with participants.
- Issue the Score Sheet and ask participants to first work individually to put the items in order of importance (assume all are in good condition) and record this in the “My Ranking” column of the score sheet. They should not discuss this with anyone else at this stage. Give them 5-10 minutes to do this.
- There is just one group. Explain that they are the real people who have crashed on the plane. Use the opportunity to discuss some of the characteristics of a good team. Give the groups 20-30 minutes to come to a consensus on each item on the list and to write their agreed responses in the “Team’s Ranking” column. Before letting them start, read the “Consensus Decisions” section of the packet. Instruct them not to change their individual responses. Remind participants when there are 5 minutes left. When the time is up bring the group back together and go through the correct answers.
- Ask them what thought process they followed for addressing the problems? What issues or questions did they consider? What order did they approach these issues? Ask how difficult it was to work out a team consensus and whether everyone finally agreed.
- Score the score sheet – participants must work out the numerical difference between their ranking and the actual ranking, for instance if the answer is rank 7 and they said rank 1, then the difference is 6. If the ranking was 1 and they answered 3, the difference is 2. Do not use minus figures. They need to do this for their own ranking and their team ranking. The participant and team with the lowest score wins!

CONSENSUS DECISIONS

When your group reaches the point where each person can say, “Well, even though it may not be exactly what I want, at least I can live with the decision and support it,” then the group has reached consensus. This doesn’t mean all of the group must completely agree, but all of the group must minimally agree.

Consequently, any one of you can block a decision. This is precisely why consensus decisions are both more difficult and more effective than other group decision methods, such as voting. It forces the group to consider all aspects of the problem and objections to possible courses of action. Treat differences of opinion as a way of 1. gathering additional information, 2. clarifying the issues, and 3. forcing the group to seek better alternatives.

- Try to get underlying assumptions regarding the situation out into the open where they can be discussed. The team needs all the info it can get so encourage everyone offer ideas.
- Listen and pay attention to what others have to say. This is the most distinguishing characteristic of successful teams.
- Be cautious of early, quick, easy, agreements and compromises. They are often based on erroneous assumptions that need to be challenged.
- Avoid competing and arguing. In this situation either the group wins or no one wins.
- **DO NOT VOTE.** It will split the group into “winners” and “losers,” it encourages either/or thinking (when there may be other ways), and fosters argument rather than discussion.

DESERT SURVIVAL SITUATION

It is approximately 10:00 A.M. in mid August and you have just crash-landed in the Sonoran Desert in southwestern United States. The light twin-engine plane, containing the bodies of the pilot and co-pilot, has completely burned. Only the airplane frame remains. None of the rest of you has been injured.

The pilot was unable to notify anyone of your position before the crash. However he had indicated before impact that you were 70 miles south-southwest from a mining camp which is the nearest known habitation, and that you were approximately 65 miles off the course that was filed in your VFR Flight plan.

The immediate area is quite flat and rather barren, except for an occasional barrel and saguaro cacti. The last weather report indicated that the temperature would reach 110 degrees that day, which means that the temperature at ground level will be 130 degrees. You are dressed in lightweight clothing—short sleeved shirts, pants, socks, and street shoes, everyone has a handkerchief.



DESERT SURVIVAL ACTIVITY
ANSWER KEY

The answers to this Desert Survival Activity are based on over 2,000 actual cases in which men and women lived or died depending upon the survival decisions they make. The following answers and rationale were developed for this activity by Mr. Alonzo Pond, former Chief of the Desert Branch, Tropic Information Center of the Air Force University at Maxwell Air Force Base. During World War II, Mr. Pond spent much of his time working with the Allied Forces in the Sahara on desert survival problems. He encountered the countless survival cases that serve as a basis of the rationale for these rankings.

1. Cosmetic Mirror – Of all the items the mirror is absolutely critical. It is the most powerful tool you have for communicating your presence. In sunlight a simple mirror can generate 5 to 7 million candlepower of light. If you had no other items you would still have better than 81% chance of being spotted and picked up within the first 24 hours.
2. 1 Overcoat Per Person - Once you have a communication system to tell people where you are, your next problem is to slow down dehydration. Forty percent of the body moisture that is lost through dehydration is lost through respiration and perspiration. Moisture lost through respiration can be cut significantly by remaining calm. Preventing the hot, dry air from circulating next to the skin can cut moisture lost through perspiration. The overcoats, ironic as it may seem, are the best available means for doing this. Without them survival time would be cut by at least a day.
3. 1 Quart of Water Per Person – You could probably survive 3 days with just the first 2 items. Although the quart of water would not significantly extend the survival time, it would help to hold off the effect of dehydration. Once dehydration begins it would be impossible to reverse it with the amount of water available in this situation. Therefore, it would be best to drink the water during the first day so you can remain as clear-headed as possible when important decisions have to be made. Rationing it would do nothing at all.
4. Flashlight (4 battery size) – The only quick, reliable night signaling device is the flashlight. With it and the mirror you have a 24 hour signaling capability. Also, with batteries removed, the case can be used as a scoop or a container for a plastic still.
5. Parachute (red and white) – The parachute can serve as both shelter and a signaling device. The cactus could serve as ten poles and by folding the

parachute give enough shade to reduce the temperature underneath it by as much as 20%.

6. Jackknife – Although not as crucial as the first 5 items, the jackknife would be useful for rigging the shelter and for cutting up the cactus for moisture. It's innumerable other uses give it the high ranking.
7. Plastic Raincoat (large size) – Can create a plastic sill by digging a hole and placing the raincoat over it, the temperature differential will extract some moisture and produce condensation on the underside of the plastic. The amount of water produced would be minimal, and might not be worth the effort.
8. .45-Caliber Pistol (loaded) – To be used as a sounding device such as firing three quick shots in succession, the international distress signal. Probably not useful for hunting (effort would expel too much water/energy), but could be used as an option for producing a fire. Dangerous item to have because of physical and emotional stress of the group.
9. A Pair of Sunglasses Per Person - The intense sunlight of the desert could be a serious problem. However, the dark shade of the parachute shelter would reduce the problem. Sunglasses would however make things more comfortable.
10. Compress Kit with Gauze – Because of the desert's intensity, it is considered one of the least infectious places in the world. Due to the fact that blood thins with dehydration, there is little danger from bleeding unless a vein is severed. Any serious risks from infection would take days to develop, long after the water would have been gone. The kit materials might be used as rope, for wrapping your legs, ankles and head, including face, as a further protection against dehydration and sunlight.
11. Magnetic compass – The compass is of little use. It would be even dangerous to have around once the effects of dehydration take hold. It might give someone the notion of walking out. Possible usage – only as an auxiliary signaling device.
12. Sectional Air Map of the area – Might be helpful for starting a fire or for toilet paper, head cover, or eye shade. It is essentially useless and perhaps dangerous because it too might encourage walking out.
13. A Book Entitled "Edible Animals of the Desert" – The problem confronting the group is dehydration not starvation. Any energy expended in hunting would be costly in terms of water loss. Even if you actually killed an animal, digestion of proteins takes too much water to be worthwhile. Can be used only as paper – see no. 12
14. 2 Quarts of 180 Proof Vodka - When severe alcoholism kills someone, they usually die of dehydration. Alcohol absorbs water. There is a loss of 2 to 3 oz.

of water per oz of alcohol. The vodka consumed could be lethal in this situation. Vodka could be helpful for a fire or as temporary coolant for the body. However, it represents more dangers than help.

15. Bottle of Salt Tablets (1000 tablets) – Wide spread myths about salt tablets exist.

The first problem is that with dehydration and loss of water, blood salinity increases. Sweat contains less salt than extra cellular fluids. Without lots of extra water, the salt tablets would require body water to get rid of the increased salinity. The effect would be like drinking sea water. Even the man who developed salt tablets now maintains they are of questionable value except in geographical areas where there are salt deficiencies.

Appendix E: Moderation tables of personality traits on relation between diversity and relationship conflict

Table 11.

Moderation of cultural empathy ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.07	.11	-.58	.564
ZCE	-.09	.11	-.75	.455
ZDxZCE	.01	.11	.05	.564

$R^2 = .015$; $F(3,74) = .36$, $p = .779$

Table 12.

Moderation of open-mindedness ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.07	.10	-.59	.557
ZOM	-.13	.10	-1.08	.282
ZDxZOM	-.09	.11	-.81	.421

$R^2 = .032$; $F(3,74) = .82$, $p = .484$

Table 13.

Moderation of emotional stability ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.09	.10	-.76	.450
ZES	-.06	.10	-.51	.614
ZDxZES	.04	.10	.33	.743

$R^2 = .011$; $F(3,74) = .28$, $p = .836$

Table 14.

Moderation of social initiative ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.08	.10	-.69	.491
ZSI	.02	.10	.14	.886
ZDxZSI	.01	.10	.05	.958

$R^2 = .007$; $F(3,74) = .18$, $p = .909$

Table 15.

Moderation of flexibility ($N = 78$)

	<i>B</i>	<i>S.E.</i>	<i>t</i>	<i>p</i>
Zscore (Zdiversity)	-.03	.11	-.22	.829
ZFX	.05	.10	.48	.632
ZDxZFX	.14	.14	1.11	.271

$R^2 = .028$; $F(3,74) = .70$, $p = .555$

Appendix 1: Reversed items*

Cultural Empathy

- Pays attention to the emotions of others
- Is a good listener
- Senses when others get irritated
- Getting to know others profoundly
- Enjoys other people's stories
- Notices when someone is in trouble
- Sympathizes with others
- Sets others at ease

Flexibility

- Works according to strict rules*
- Works according to plan*
- Works according to strict scheme*
- Looks for regularity in life*
- Likes routine *
- Wants predictability*
- Functions best in a familiar setting *
- Has fixed habits *

SI (Social initiative)

- Takes the lead
- Leaves initiative to others to make contacts*
- Finds it difficult to make contacts*
- Takes initiative
- Is inclined to speak out
- Is often the driving force behind things
- Makes contacts easily
- Is reserved *

Emotional stability

- Worries*
- Gets upset easily *
- Is nervous*
- Is apt to feel lonely*
- Keeps calm when things don't go well
- Is insecure*
- Is under pressure*
- Is not easily hurt

Open-mindedness

- Tries out various approaches
- Is looking for new ways to attain his or her goal
- Starts a new life easily
- Likes to imagine solutions to problems
- Is a trendsetter in societal developments
- Has feeling for what's appropriate in culture
- Seeks people from different backgrounds

- Has broad range of interests

Appendix 2: Multi-Personality Questionnaire survey

Multi-Personality Questionnaire

Start of Block: The following statements are about you. Please indicate the appropriate answer.

intro Thank you for your participation in this laboratory study. This part of the lab study is a questionnaire that contains questions about personality. This part is vital for this study. Therefore, I would like to ask you to take this questionnaire seriously. The following statements are about you. Please indicate the appropriate answer.

part. number Please indicate your participant number (the number handed out by the lab study leader)

Q1 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Pays attention to the emotions of others (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works according to strict rules (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has fixed habits (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes routine (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is reserved (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worries (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is looking for new ways to attain his or her goal (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Finds it difficult to make contacts (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works according to plan (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has broad range of interests (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is not easily hurt (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a good listener (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wants predictability (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keeps calm when things don't go well (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Takes the lead (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sets others at ease (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is nervous (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likes to imagine solutions to problems (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is under pressure (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Functions best in a familiar setting (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is inclined to speak out (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Is a trendsetter in societal developments (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Looks for regularity in life (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gets upset easily (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tries out various approaches (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Makes contacts easily (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting to know others profoundly (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes initiative (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Is insecure (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seeks people from different backgrounds (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works according to strict scheme (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Notices when someone is in trouble (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is often the driving force behind things (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is apt to feel lonely (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Starts a new life easily (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 On a scale from 1 - 7, please indicate the answer that fits you the most.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very much (6)	Extremely (7)
Senses when others get irritated (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaves initiative to others to make contacts (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathizes with others (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has feeling for what's appropriate in culture (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoys other people's stories (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 Thank you! Please click the 'next' button to finish the survey.

End of Block: The following statements are about you. Please indicate the appropriate answer.

Appendix 3: Questionnaire

Questionnaire

Start of Block: Default Question Block

intro Thank you for your participation in this laboratory study. This part of the lab study is a questionnaire that contains questions about the task, your experience and some demographical questions. This part is vital for the lab study, therefore we would like to request to take this questionnaire seriously. Please read all of the questions, read categories carefully and answer them accordingly.

part. number Please indicate your participant number (the number handed out by the lab study leader)

info The following part of the questionnaire will focus on how you and your group experienced and approached the task.

info We are interested in how you and your group approached and experienced the task. Please indicate in the space provided the degree to which each statement applies to you. There are no right or wrong answers. Please read the statements carefully. Many of the statements are similar to other statements – do not be concerned about this.

perception Five statements about the solution of the task are displayed below. Please indicate in the space provided the degree to which each statement applies to you.

	Not at all (1)	Very little (2)	Little (3)	Moderate (4)	Big (5)	Very Big (6)	Extremely (7)
How satisfied are you with the quality of the solution (or outcome) which you and the other party reached? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent does the final solution (or outcome) reflect your inputs? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you feel committed to the solution (or outcome)? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent are you confident that the solution (or outcome) is optimal? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you feel personally responsible for the solution (or outcome) which you and the other party reached? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

perception On a scale from 1-7, how would you describe the problem solving (or negotiation) process you and the other party used?

On the scale, 1 indicates efficient and 7 indicates inefficient.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Efficient vs. Inefficient (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coordinated vs. Uncoordinated (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fair vs. Unfair (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understandable vs. Confusing (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Satisfying vs. Dissatisfying (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

conflict We are interested in how you and your group approached and experienced the task. Please indicate in the space provided the degree to which each statement applies to you. There are no right or wrong answers. Please read the statements carefully. Many of the statements are similar to other statements – do not be concerned about this.

	Not at all (1)	A little (2)	A moderate amount (3)	A lot (4)	A great deal (5)
How much tension was there among the members of your group? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much were personality clashes evident in your group? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much friction was there among the members of your group? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much jealousy or rivalry (grudges) was there among the members of your group? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often did people in your group disagree about how things should be done? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How frequently were there conflicts about ideas in your group? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much conflict about the work you did was there in your group? (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent were there differences of opinion in your group? (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

info For the last part of this questionnaire, we would like to ask you to answer some questions about the design of the lab study, followed by some demographical questions. Please click continue.

gender What is your sex?

- Male (1)
 - Female (2)
 - Other (3)
-

birth year What is your year of birth?

ed. level What is the highest level of school you have completed or the highest degree that you have received?

- Less than high school degree (1)
 - High school graduate (High school diploma or equivalent including GED) (2)
 - Some college but no degree (3)
 - Bachelor's degree in university (4)
 - Master's degree (5)
 - Doctoral degree (6)
-

occupation Which statement best describes your current employment status?

- Student (1)
- Working (paid employee) (2)
- Working (self-employed) (3)
- Employer (4)
- Not working (looking for work) (5)
- Not working (temporary layoff from a job) (6)
- Not working (other) (7) _____
- Prefer not to answer (8)

nationality What is your nationality?

native lang. What is your native language?

Q24 Please indicate how much you identify with a (national) culture on a scale from 1 to 5. If you feel attached to more nationalities than one, you can indicate this below by writing your nationalities in the boxes and indicate how much you consider yourself to identify with each nationality. If you feel attached to one nationality, please write your nationality in the box and indicate how much you consider to be from that nationality.

1 (1) _____

2 (2) _____

3 (3) _____

4 (4) _____

5 (5) _____

living outside HC Have you ever lived outside of your home country for longer than 3 months?

Yes (1)

No (2)

travel How many continents have you travelled to?

int. news Do you follow any coverage of international news? If yes, state few sources please.

Yes (1) _____

No (2)

end Thank you for participating in this laboratory study and completing this questionnaire. Please click the continue button to complete the survey.

End of Block: Default Question Block
