The effect of Sweden’s growing cultural diversity in universities on team performance

Milad Numan

Masters of Science in Management. Graduate School. School of Business, Economics and Law at Gothenburg University

Abstract: The effect of cultural homogeneity/heterogeneity on team performance has been known and recognized for some time, though research conducted in Swedish academia has been lagging behind. This thesis strives to further complement the research field of culturally homogenous/heterogenic teams on team performance by conducting a study in Handelshögskolan, the faculty of Business, Economics and Law at the University of Gothenburg. This research will apply theory from previous cultural team performance studies, which have for the most part been undertaken in the US and other countries, and apply it to Swedish universities.

Findings show that culturally homogenous/heterogenic teams do have an effect on the level of team performance and that cultural mindset does moderate this effect. Culturally homogenous teams affect the level of performance differently than culturally heterogenic teams as well as the different cultural mindsets (individualism/collectivism) also plays a role in the level of team performance. Additionally, findings confirm the prediction that Tenure will have a statistically significant effect on the variables as it was used as a control variable whereas Gender did not have any statistically significant effect. In conclusion, this research shows that as Sweden’s universities are becoming more heterogenic, this type of study will be of importance to understand and develop guidelines on how to deal with this phenomena as this has not been thoroughly researched in Swedish academia.

Keywords: Culturally, Diverse, Teams, Homogenous, Heterogenic, Performance

Introduction

Organizations have been moving strategically from individual work towards a more team orientated approach to cope with contemporary competitive challenges (Cohen & Bailey, 1997; Gordon, 1992; Mathieu & Day, 1997). It is apparent that teams are becoming increasingly important in modern organizations as they have an advantage over individuals due to the combination of strengths of team members (Guzzo & Dickson, 1996; Man & Lam, 2003; Sundstrom, De Meuse & Futrell, 1990). We can define a team as two or more people working together towards a common goal (Jackson, 1991). Furthermore, Fullager and Egleston (2008) confirm that teams have become increasingly popular in many organizations
to that extent that much of their operations are reliant on teams working and performing together (Fullager & Egleston, 2008; Shin & Zhou, 2007; Sundstrom, De Meuse & Futrell, 1990).

As the world has become more globalized, culturally heterogenic teams have become more common in the workplace and it is indicated that this heterogeneity will increase in the future (Anderson, 1983; Knippenberg & Schippers, 2007). Cultural diversity relates to the degree of differences among individual’s race, ethnic background or nationality in a team (Knippenberg, Van Ginkel & Homan, 2013). Though some of this increase in diversity may be due to globalization, it also results from the direct initiative that companies have on making their workforce more culturally diverse (Fullager & Egleston, 2008).

Organizations in the 21st century have further developed the strategy of teams by deliberately trying to diversify teams in order to enhance performance (Knippenberg & Schippers, 2007). This diversification is more common in multinational companies where the organization may directly hire people from different cultural backgrounds and construct diverse teams (Man & Lam, 2003). This can lead to organizations becoming more reliant on culturally heterogenic teams, which may be due to the spread of knowledge and information in these teams that can be an asset for the organization (Knippenberg, Van Ginkel & Homan, 2013; Fullagar & Egleston, 2008).

The pattern of diversification over the last decade (Knippenberg & Schippers, 2007) is not specific only to businesses. Universities in Sweden have also seen a pattern of student populations becoming more culturally diverse (Universitetskanslersämbetet, 2014). In the academic year 2012/2013, 19 percent of students starting university in Sweden had a foreign background, exchange students excluded. This figure was one percentage higher than the previous year and 3 percent higher than 2003’s 16 percent (ibid). The 19 percent of students with a foreign nationality represents approximately 13,000 pupils in the academic year 2012/2013 (Universitetskanslersämbetet, 2014).

About 40 percent of the 13,000 pupils who started in 2012/2013 had a cultural and ethnic background in the Middle East, with 10 percent coming from the Balkan countries (ibid). Stockholm University had the highest number of students with a foreign background starting university in the 2012/2013 academic year with approximately 2,000 pupils, followed by Gothenburg’s university with approximately 1,000 students (ibid). The majority, approximately 60 %, of students with a foreign background were either born in Sweden or arrived before their 7th birthday; the remaining 40 % of students with a foreign background came to Sweden after their 7th birthday (Universitetskanslersämbetet, 2014). Overall, the number of students in Swedish universities with a foreign background, including foreign exchange students, represents approximately 25 percent of the total 413,000 students enrolled in universities, with some programs composed of as much as 76 percent foreign backgrounds (Universitetskanslersämbetet, 2014).

As Sweden becomes more heterogenic (Migrationsverket, 2014), research is needed to make the most of heterogenic and homogenous work teams in an academic environment. There has
been extensive research done on heterogenic and homogenous work teams on an organizational level (Fullager & Egleston, 2008; Knippenberg, Van Ginkel & Homan, 2013) and to some extent on an academic level (Watson & Kumar, 1992; Watson, Kumar & Michaelsen, 1993) but there is a limitation of studies conducted on the performance of culturally heterogenic teams and culturally homogenous teams in relation to cultural mindset.

There are many determinants in student’s background such as demographics, work experience, age and so on that may have an effect and thereby influence team performance. However, the focus of this research will be on the cultural factors that can influence the performance of the teams.

**Purpose**

The purpose of this research is to take the strategies utilized and studies completed on previous team research and adapt them to universities, in the context of the changing demography of Swedish universities. Swedish universities have been consciously trying to promote and integrate cultural heterogeneity on an academic level since 2003 (Universitetskanslersämbetet, 2014). The current research aims to contribute to Swedish academia by showing the relation between group dynamics (heterogeneity and homogeneity) and team performance taking into account the cultural mindset of the students. Cultural mindset is defined as the mental programming of individuals have, in other words it is the attitude and behaviors characterized by a culture (Oetzel, 1998). This research may also be applied practically, as it may also help university students to understand and adapt to heterogenic and homogenous work teams that are common in organizations, to cope with the heterogeneity caused by globalization and to prepare the students to work better with heterogeneity.

**Identification of a research question**

As the aim of this research is to see to what extent cultural homogeneity/heterogeneity may affect team performance and to see how cultural mindset may impact this relationship, from the perspective of students in the Business, Economics and Law faculty *Handelshögskolan* at the University of Gothenburg, a research question was developed to shine light on and answer this phenomenon:

“How does group composition (by culturally heterogenic and culturally homogenous teams) interact with cultural mindset to impact team performance among university students?”

**Theoretical Framework**

Hofstede (1980) states that culture is: “The distinctive collective mental programming of values and beliefs within each society”. This collective mental programming of values and beliefs works as a common ground (Neal, 2010) which enables culturally homogenous teams to be more cohesive and perform better on tasks (Oetzel, 1998). A culturally homogenous team can be defined as a team where the members have the same cultural background whereas in a culturally heterogenic team, the team members have a different cultural background,
hence heterogeneity (Watson, Kumar & Michaelsen, 1993). The cohesion in culturally homogenous teams is due to the fact the team members’ mindsets and norms are already aligned by their shared culture, whereas in culturally heterogenic teams, the collective mental programming of values and beliefs differs (Oetzel, 1998). This means that culturally heterogenic teams are more likely to encounter disagreement which leads to a decrease of cohesion and performance due to their cultural differences. Culturally heterogenic teams must first overcome their differences before they can meet on a common ground thus allowing them to start working together as a team (Neal, 2010).

To further understand how and when these two different types of teams express their positive and negative attributes of cultural heterogeneity and cultural homogeneity one can adopt Tuckman’s (1965) model of group formation and development in order to understand where these tensions and conflicts may occur. Tuckman (1965) did not apply his model to culturally homogenous/heterogenic teams, but his model will work as a foundation to understand these types of teams.

Tuckman (1965) states that any group regardless of setting will undergo a few phases or stages before they can work and perform as a team. When it comes to team structure, Tuckman (1965) states that the four stages are:

1. **Forming (Testing and dependence)**, when behaviors are tested to result in an acceptable behavior of members;

2. **Storming (Intragroup conflicts)**, when team members become hostile and try to state their individuality and principles;

3. **Norming (Development of team cohesion)**, when members are accepted and a common goal and ground is set, hence, cohesion;

4. **Performing (Functional role-relatedness)**, when the team works together and all members know their role which in turn results in a problem solving team (Runkel, Lawrence, Oldfield, Rider & Clark, 1971; Tuckman, 1965)

The four stages of Tuckman’s (1965) group development model can clearly be influenced by Hofstede’s (1980) definition of culture and cultural mindset (ibid). A homogenous team whose cultural mindset has already been aligned by their common cultural background may ease their effort of going through Tuckman’s (1965) Storming and Norming phases as they do not need to undergo conflict as intensively due to any cultural differences nor even find a common ground, as this has already been established by their homogeneity (ibid). On the contrary, a heterogenic team may not go through the Storming and Norming phase of Tuckman’s (1965) model as easily as their homogenous counterparts as they will have to overcome the cultural differences set by their cultural mindset and also find a common ground where they can work together (Watson & Kumar, 1992) and (Oetzel, 1998). When a common ground is reached by these different teams, cohesion occurs which, according to O’Reilly, Caldwell and Barnett (1989), is rooted in the member’s emotional opinion about the other
team members together with their cultural mindset towards other cultural backgrounds (ibid).
Knippenberg, van Ginkel and Homan (2013) suggest that the mindset of team members may have an effect on the performance of the team when there is a clash between individual-collective cultures, which is related to the different characteristics of their culture (ibid).

Cox, Lobel and Mcleod in their 1991 study came to the conclusion that individuals from a collective cultural background from Asian, African or other non-Western countries are more inclined to sacrifice oneself for the team and are also better in cooperating with other members or teams to achieve the final goal. Whereas team members from more individualistic cultures such as Western countries with an Anglo-American background tend to be more competitive and more concerned with the self than the team (ibid). Wagner and Moch (1986) also state that individuals from an individualistic culture also tend to diminish or ignore the team’s interests if they conflict with the individual’s own interests (Cox, et al 1991; Hofstede, 1980; Wagner & Moch, 1986). In summary, the team members’ beliefs about the cohesion of the team are based on their personal (individualistic-collective) mindsets (Carron & Brawley, 2012).

**Literature Review**

**Group composition:** Research has indicated that culturally heterogenic teams have both positive and negative impacts on team performance. This heterogeneity can be more efficient and achieve higher productivity if the groups can overcome their cultural differences (Knippenberg, Van Ginkel & Homan, 2013). The negative impacts include difficulties with communication, frequent disagreements, mistrust, attitudinal problems, risk of conflicts due to cultural differences and a struggle to maintain unity in the group (Watson & Kumar, 1992). These in turn have a negative impact on the cohesion which can lead to a lower performance level (Carless & De Paola, 2000; Evans & Dion, 2012; Fullager & Egleston, 2008). These problems relate to Hofstede’s (1980) theory of culture as the collective mental programming of values and beliefs which work to form a common ground (ibid). When the cultural mental programming is not collective, such as in the case of heterogenic teams, the difficulties as stated above are more likely to be present. This also relates to the Storming and Norming phase of Tuckman’s (1965) group development model, where a team’s cultural differences clash and no common ground is set (ibid). This cultural clash, together with an unreached common ground, may result in heterogenic teams not being cohesive and thereby affecting performance (Evans & Dion, 2012; Fullager & Egleston, 2008). These cultural differences need to be counteracted extensively in the heterogenic team in relation to a homogenous team where the common ground is already set by the common culture (Andersson, 1983). Research has indicated that “social glue”, or mutually accepted norms, can help teams to overcome cohesion issues associated with heterogeneity (Neal, 2010). These arguments lead us to make the following predictions:

**Hypothesis 1:** Culturally homogenous teams will have significantly higher levels of performance than culturally heterogenic teams
Oetzel (1998) states that culturally heterogenic teams can enhance performance in a positive manner due to the heterogenic team’s different experiences and knowledge spread (ibid). Heterogenic teams are also more prone to generate positive effects such as better performance and a wider range of ideas in relation to homogenous teams (Knippenberg, Van Ginkel & Homan, 2013). For this to happen, culturally heterogenic teams must first find the common ground and overcome their problems linked to diversity (Watson & Kumar, 1992) and (Knippenberg, Van Ginkel & Homan, 2013) which takes more time for culturally heterogenic teams than for culturally homogenous ones (Oetzel, 1998). These above mentioned issues are related to Tuckman’s (1965) Storming and Norming phases of his group development model. If a culturally heterogenic team can align their cultural differences and form common norms and reach for a common ground related to the Norming phase (ibid), they can then promote team performance in such a way that it exceeds the performance of culturally homogenous teams (Watson & Kumar, 1992). This Storming and Norming phase (Tuckman, 1965) does take more energy and time for the culturally heterogenic teams to reach cohesion and work together, which is related to Hofstede’s (1980) theory, that the mental programming of the different cultures need to first align and find a common ground where understanding is present (ibid).

The issue of communication and interpretation in culturally heterogenic teams occur because the individuals in culturally heterogenic teams interpret through their own cultural mindset (Oetzel, 1998). This problem, which is more common in heterogenic teams, results in disunity which leads to the performance of the team to suffer (Oetzel, 1998). According to Watson and Kumar (1992) in the short term, the more culturally heterogenic a team is, the higher level of difficulty in communication which in comparison to more culturally homogenous teams where the communication was interpreted better, decisions were more unified (Carron & Brawley, 2012; Evans & Dion, 2012). When the culturally heterogenic teams have worked out their differences and have normed their values and beliefs, as explained in the Norming phase of Tuckman’s (1965) model, they will perform better. It is harder to achieve high levels of performance for culturally heterogenic teams than it is for culturally homogenous teams so the prediction here is that culturally homogenous teams will perform significantly better in this study, due to the fact that homogenous teams already share a common ground and do not need to go through Tuckman’s (1965) group development model as extensively as culturally heterogenic teams (ibid). Even if studies have shown that culturally heterogenic teams do perform better than culturally homogenous ones, this is only true if and only if they solve their different cultural problems and meet on a common ground, which in many cases they do not which jeopardizes their performance. Also, the negative aspects of culturally heterogenic teams are more extensive than for culturally homogenous teams which gives homogenous teams the upper hand as they are able to form and start performing straight away (Watson & Kumar, 1992).

Performance: Earlier studies support that cohesion (Norming) is one of the most important factors when it comes to the functionality of a team as well as its performance (cf. Carron & Brawley, 2012). In a meta-analysis done by Evans and Dion (2012) the correlation between
team cohesion and team performance was moderately strong, meaning that cohesive teams performed on average 20 percent better than non-cohesive ones. This supports the claim that cohesive teams are in fact more productive and perform better than non-cohesive teams (Evans & Dion, 2012). This supports the notion that the common cultural background of culturally homogenous teams allows them to become cohesive straight away rather than going through the different stages and spending more energy on communication and unity which later leads to cohesion (Oetzel, 1998).

Cohesion or Norming, which is the third phase of Tuckman’s (1965) group development model, relates to the teams’ understanding of each other together with the development of a common ground (Tuckman, 1965 & Neal, 2010). A homogenous team goes through the Storming and Norming phase much faster than a heterogenic team resulting in a higher performance level in its initial stages due to the similarities in cultural background and thinking which is stated by Hofstede’s (1980) collective mental programming theory (Fullager & Egleston, 2008; Hofstede, 1980; Tuckman, 1965). In a heterogenic team the phases of Tuckman’s (1965) model will take more energy to go through due to the differences of cultures and thinking but when the team can norm (find a common ground and become cohesive) they will outperform the culturally homogenous teams as they will have a larger knowledge pool together with better interaction within the team (Fullager & Egleston, 2008; Tuckman, 1965; Watson, Kumar & Michaelson, 1993). This can be related to other studies on culturally heterogenic and homogenous teams’ performance. Oetzel (1998) also indicated that homogenous teams reach a higher level of performance much faster than heterogenic ones in their initial stages which can also be related to Tuckman’s (1965) group development model as mentioned above (ibid).

Cultural Mindset: According to Cox, Lobel and McLeod (1991) people from collective cultures tend to show bicultural traits when living in an individualistic country, meaning that while they normally show collective traits they have been influenced and can adopt individualistic traits in certain situations such as being in a team with the majority of its members being individualists (ibid). Individualism relates more to the self and in this mindset the individual is more important whereas a collectivist mindset, the family or the community goes before the individual (ibid). Although Watson and Kumar (1992) state in their research that the more culturally heterogenic a team is the more problems and less performance they will have in their initial stage (ibid). Cox et al. (1991) state that a person from a collectivistic culture is more likely to perform better in an individualistic team than an individualist in a collective team, which will result in collectivists being better at adapting to other cultures and will perform better in different cultural teams than individualists (ibid).

More broadly, research has indicated that diverse teams (heterogenic) with an individualistic mindset will in its initial stages perform better than a diverse (heterogenic) team with a collectivistic mindset (Watson & Kumar, 1992). This statement is related to the culture theory presented by Hofstede (1980), where the bicultural traits of collectivists will be an advantage as their ability to adapt to individualist culture minimizes the risk of disunity and other difficulties associated with heterogeneity (ibid). This means that collectivists can act as
individualists, making the team seem homogenously individualist in its cultural mindset (Watson & Kumar, 1992), in which case homogenous teams perform better than culturally heterogenic teams. This is also supported by Tuckman’s (1965) model, where the bicultural traits of collectivists allows the team to go through the different phases with ease in comparison to individualists who do not possess the bicultural traits which results in extensive time being spent in the Storming and Norming phase (ibid). Even if it takes more effort for culturally heterogenic teams with a collectivist mindset to go through the Storming and Norming phase (Tuckman, 1965) due to the individualist members who are not bicultural (Oetzel, 1998; Tuckman, 1965).

Previous research also states that heterogenic collectivist teams will perform better in comparison to homogenous individualistic teams (Oetzel, 1998). This may be due to that heterogenic collectivist teams focus on social interaction and conflict solving, more cooperative tactics rather than competitive ones. On the other hand, homogenous individualist teams tend to be more task focused, less interested in interaction and cooperative tactics which results in a lower level of performance (Man & Lam, 2003; Oetzel, 1998). Even if collectivists may perform better than individualist teams, one must consider the group composition. As mentioned earlier in the paper, culturally homogenous teams do perform better than culturally heterogenic ones due to their similar cultural background which enables them to be more cohesive and perform better much faster than culturally heterogenic teams (Oetzel, 1998; Watson, Kumar & Michaelsen, 1993). Collectivists teams tend to perform better than individualist teams but when the group composition is either collectivist or individualist, it changes the outcome. Even if a team is collectivist and tends to work on creating cohesion which can lead to better performance, the fact that there are culturally heterogenic can drag them down (Oetzel, 1998). Previous research also states that low diversity (almost homogenous) collectivist groups will perform better in comparison to individualistic teams with low diversity (Oetzel, 1998). This may be due to that homogenous collectivist teams focus on the social interaction, conflict solving, more cooperative tactics rather than competitive one. This is contrary to the fact that homogenous individualist teams tend to be more task focused, less interested in interaction and cooperative tactics which in the long run results in a lower level of performance in comparison to homogenous collectivist teams (Oetzel, 1998). Culturally homogenous teams with a collective mindset will not only focus on social interaction but also on the task itself, according to Oetzel (1998) Culturally homogenous teams with a collective mindset had the best performance in comparison to both culturally homogenous teams with an individualistic mindset and culturally heterogenic teams with the different mindsets (ibid). These arguments lead us to make the prediction:

**Hypothesis 2: Culturally homogenous teams will have significantly higher levels of team performance compared to culturally heterogenic teams, but only when collectivist.**

The conclusion is that overall, collectivists will be more cohesive in different teams as they not only can show individualistic traits in certain situations but also focus on conflict solving and cooperative tactics that can increase the cohesion of the team. Also collectivists show that overall they perform better than individualists in different teams when compared (Carron &
Brawley, 2012; Chin, et al, 1999; Evans & Dion, 2012). This also shows that culturally heterogenic teams will perform better than culturally homogenous teams if they are able to go through Tuckman’s (1965) group development phases and work together as a team.

**Overall Model**

This model illustrates the relationship between how a team is composed to performance of the team which is affected by the cultural mindset of the students. This research will look at the perception of students with different cultural mindsets where students will be asked about their most recent team experience.

![Overall Model Diagram](image)

**Research objectives:**

As mentioned, the objective of this research is to shine light upon the relationship between culturally homogenous/heterogenic teams and team performance with cultural mindset moderating the relationship. This study will hopefully assist students and universities to understand the dynamics and challenges of these different teams and to actively increase the performance level as there has been no research conducted on this topic for Handelshögskolan in Gothenburg. This research will be of interest for the university as well as other Swedish universities to gain knowledge about how culture will affect team performance of the students as the universities in Sweden become more culturally heterogenic.

**Methodology**

The method used for this data collection is a quantitative approach with the use of questionnaires. The reason for choosing survey questionnaires is to effectively engage with a large research population (Quinlan, 2011). Due to the fact that the population being researched are students which are of vast numbers in universities, this method will provide a generalizable conclusion of how the broader population of students perceive performance in teams (ibid). The key aspect for the use of surveys is to analyze and measure the relationship between variables (Rowley, 2014) such as the relationships between different group compositions, cultural mindsets and performance.

This survey questionnaire consists of structured statements which can be answered with a Likert scale (Quinlan, 2011). The reasoning for the usage of Likert scale is that this
measurement is appropriate for measuring attitudes or perceptions. It not only measures the direction of the attitude but also its strength (ibid). The different statements in the questionnaire relate to group composition, cultural mindset and performance.

Control Variables: The analysis will be controlled for both Academic Tenure and Gender. According to Becker’s (1964) human capital theory, individuals will perform better if they are invested in education over a time period (ibid). A person with long academic experience will perform better and show higher quality of work in relation to a person with short academic experience (McEnrue, 1988; Myers, Griffith, & Daugherty, 2004). This tenure relates to what Ng and Feldman (2010) and McDaniel, Schmidt and Hunter (1988) describe, that long tenure may result in increased performance due to an increase in knowledge and education (ibid). Research has shown that as employees gain tenure their norms align which will increase self-efficacy and will enhance performance levels (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Kristof-Brown, Zimmerman, & Johnson, 2005). Other research has shown that the reason long tenured employees perform better may be that they are more dedicated in helping each other, coming up with new ideas and also are more supportive of each other (Beier & Ackerman, 2001).

According to Leding and Westwood, (1994), women react differently to culture than men (ibid). The adaption of other cultural mindsets might arise more amongst women than man because females usually experience cultural differences more than males but are also more accepting to cultural differences, making them better at adjusting to different cultures. The prejudice of sexism can also be a factor for women being more sensitive to other cultures or cultural mindsets than men (ibid). Su and Wall (2010) identified that demographic factors such as gender play an important role in cross cultural interactions or in this case a culturally heterogenic team (ibid).

Survey population and sample size: The study will be conducted in Handelshögskolan (the School of Business, Economics and Law) which is part of the University of Gothenburg. The population size of Handelshögskolan in 2013 was 3848 full time students (GU, 2014). Only first and third year students will be surveyed resulting in a population for the survey of approximately 1100 students (GU, 2013). The whole population cannot be surveyed due to limitations of time amongst other factors, so a sample will be taken from the population size. The sample size will be used as a representation of the population of the study. The sample size will be drawn from a clustered sampling method where the clusters will be classes in the 1st and 3rd year of the university (Neuman, 2000). According to Neuman (2000) a sample size should not be less than 50 in big population sizes such as the above mentioned. The sample size chosen will consist of at least 60 1st year and 60 3rd year students. Neuman (2000) states that if the population is large, the sample which is drawn from it can be small and still not have an effect on the accuracy of the study. Hence the population size for this study is approximately 1100 students so the sample size of 120 students is sufficient and reliable (ibid).

Sample criteria: The students being surveyed must attend Handelshögskolan and be either in their 1st year of studies or their 3rd year of studies. The students must be from both Sweden
and other nationalities and the sample must include culturally heterogenic and culturally homogenous backgrounds. They must also have some experience in working in both culturally heterogenic and homogenous work groups throughout their university studies.

**Measures**

**Group composition:** Group composition is the independent variable (IV) in the model that relates to how the team can be either culturally heterogenic or culturally homogenous, hence this effect is determined by whether or not the teams are culturally heterogenic or culturally homogenous (culturally diverse or not). This variable will be measured by asking the students to think back to their most recent team or group project and answer whether the team was composed by members from different cultural backgrounds or from the same background as theirs. This will then be coded into either culturally homogenous (0) or culturally heterogenic (1) teams.

**Performance:** Performance, which is the dependent variable (DV), relates to the overall performance of the team. This will be measured with a 13-item scale from Management Library (2014). Some statements were modified to better address the sample of university students. An example of this is changing the phrase “contributed equally to group discussions” to “All members contributed equally to group discussions”. Participants indicate their agreements with the statements on a 10-point scale ranging from 1 (to no extent), 3 (to a limited extent), 5 (to some extent), 7 (to a considerable extent) and 10 (to a great extent) retrieved from Gibson, Randel and Earley (2000).

**Cultural Mindset:** Cultural mindset is the moderator in the model as it is proposed to alter the relationship between GC and performance. Cultural mindset will be measured by a 14-item scale from LeFebvre and Franke, (2013) which was originally from a 30 item scale from Shulruf, Hattie and Dixon, (2007). Cultural mindset relates to whether the group members are from an individualistic or collective culture. A sample question is “Before I make a major decision, I seek advice from people close to me”. Participants indicate their agreement with the statements on a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (Strongly Agree). Questions 1, 3, 5, 10, 11, 12 and 13 are statements referring to Individualistic traits whereas questions 2, 4, 6, 7, 8, 9 and 14 are statements referring to collectivist traits.

**Control Variables:** I will control for the respondents’ gender and academic tenure. Tenure is measured by one question which asks which academic year the students are in, either 1st year or 3rd year. This will be coded into either Short tenure (1st year, 0) and Long tenure (3rd year, 1). Gender is also measured by one question which asks which gender the students are, either Male or Female. This will be coded into either Male (0) or Female (1). Inclusion or exclusion of these control variables should not change the conclusion based on the results presented.

**Analyses**

The hypotheses were tested using ANCOVA for Hypothesis 1, while Hypothesis 2 used a hierarchical regression analysis, standardizing the variables before their entry into the
equation. We first entered the two control variables Academic Tenure and Gender in step 1. Group composition was inserted and coded as Culturally homogenous (0) and Culturally heterogenic (1). The column Average. CM is dedicated to the mean of the statements. A column is also dedicated to Group composition*Cultural mindset and is named GCxCM which is the interaction (moderation) variable. The Performance column dedicated to the mean of the statements was named Average.Perf. The averages of CM and performance were taken together with the percentages of gender and tenure.

After the input of all the respondents’ scores into SPSS and the reversal of some CM statements the means of both CM and Performance were calculated. After that the Group Composition was multiplied by the Average CM (mean of CM) to get the interaction variable named as GCxCM. For Hypothesis 1, ANCOVA was used by first inserting the control variables Tenure and Gender. After that the IV, GC (Group Composition) and the DV, Performance was inserted into the equation to get the statistical results for the hypothesis. For Hypothesis 2, a hierarchical linear regression analysis was used by first inserting the DV (Performance) into the dependents and then the control variables (Tenure and Gender) in the first step, the IV (GC) and the moderator was inserted in the second step, lastly the interaction variable (GC*CM) was inserted into the equation in the third step to calculate the results.

**Results**

Means, standard deviations, and inter-correlations of study variables are reported in the Appendix.

**Hypothesis 1: Homogenous teams will have significantly higher performance than heterogenic teams**

A one way ANCOVA was conducted to determine if there is a statistically significant difference in the means between homogenous and heterogenic group composition (GC) on Performance when controlling for Tenure and Gender. Looking at Table 2 we can see that there was a marginally statistically significant effect on Performance as \( p=0.063 \) and \( \text{Partial ETA}=.029 \) meaning that Hypothesis 1 is marginally supported. Partial ETA indicates how much of the variance that could be explained by the given variable. In the case of GC, only 2.9 % of the variance can be explained by the variable which is reflected in the \( p \) value. Furthermore the ANCOVA showed a statistically significant effect of the Control variable Tenure \( p=.000 \) and \( \text{Partial ETA}=177 \). Tenure account for 17.7 % of the variance on Performance. The second Control variable Gender had no statistically significant effect on performance as \( p>.05 \).

Table 1 shows the adjusted estimated means of homogenous teams and heterogenic teams without the effect of the control variables, Homogenous \( \text{Mean}=6.669 \), Heterogenic \( \text{Mean}=6.148 \). This table shows that Homogenous teams have a higher level of performance than heterogenic teams but as stated above, this is only marginally statistically significant as \( p=.063 \) which means that Hypothesis 1 marginally supported.
Hypothesis 2: Homogenous teams will have significantly higher performance compared to heterogenic teams, but only when collectivist.

A hierarchical linear regression analysis was conducted to determine if there is a statistically significant difference between culturally homogenous teams with a collectivist/individualist mindset in comparison to culturally heterogenic teams with a collectivist/individualistic mindset on Performance while controlling for Tenure and Gender. There was a statistically significant difference in Performance, Homogenous teams with a collectivist mindset had the highest level of performance, with a Mean=7.097, followed by heterogenic teams with an individualistic mindset with a Mean=6.023. Homogenous teams with an individualist mindset had a lower level of performance with a Mean=5.612 followed by heterogenic teams with a collectivist mindset with the lowest level of performance Mean=5.362, as \( p = .003 \) meaning that Hypothesis 2 is supported.

The Beta value represents the magnitude or effect the interaction has on the relationship of Performance. The Beta value for the interaction showed that the interaction variable has the second highest effect on the on Performance of the tested variables. The means and the interaction between the different teams are plotted in table 6 while the p values and Beta are displayed in table 5. Furthermore, the linear regression analysis showed that both Group Composition (GC) and Cultural Mindset (CM) separately had a statistically significant effect on Performance with GC having the largest effect on the relationship, \( p = .001, Beta=1.445 \) while CM had a smaller yet significant effect, \( p = .018, Beta= -.443 \). Lastly, the analysis showed that of the two control variables Tenure and Gender, only Tenure had a statistically significant effect on performance: \( p = .000, Beta= .403 \). Gender did not have any statistically significant effect on Performance as \( p > .05, Beta= .070 \).

Discussion

Hypothesis 1: Although when looking at Hypothesis 1, which stated that culturally homogenous teams will have a higher level of performance than culturally heterogenic teams, the ANCOVA showed that this was marginally true. The statistical significance for the first hypothesis was \( p = .063 \) which is rather close to \( p = .05 \) which is commonly considered a statistical cutoff. It has been stated by Knippenberg et al. (2013) that culturally heterogenic teams have several negative impacts on team performance, such as difficulties with communication, risk of conflicts due to cultural differences and the issue of being unified as a team (Watson & Kumar, 1992), which are insignificant in a culturally homogenous team would lead to a culturally homogenous team to perform better than a culturally heterogenic team as stated by the hypothesis.

This is not the case as the statistical significance \( p = .063 \) was only marginally significant even though culturally homogenous groups have the advantage of working on a common ground set by their collective mental programming as stated by Hofstede (1980). The Partial ETA, which indicates how much influence the variable has on the variance states that in the case of GC (Homogenous and Heterogenic teams), only 2.9% of the variance can be explained by the independent variable GC which is fairly low.
One possible explanation of why the results and the p value of Group Composition had a marginal statistical significance might be due to the limited sample size. The sample used for this study was only 120 respondents whereas the smallest sample size used by Watson, Kumar and Michaelsen (1993) was composed of 173 participants while Oetzel’s (1998) study consisted of 184 participants. If the sample size used in this study would have matched the one used on Watson et al’s (1993) study or was even larger, the p value might have become statistically significant at $p<.05$. This could be reason to further investigate this by using a larger sample size in the future.

The control variable Tenure showed a statistically significant effect $p=.000$, Partial ETA=.177 which can be understood that Tenure did in fact have a significant impact on performance and accounted for 17.7% of the variance. McEnrue (1988) and Myers et al. (2004) stated that a person with long academic tenure will outperform a person with short academic tenure. This is due to the fact that a longer academic tenure results in increased knowledge and education which in turn will lead to better performance (Ng & Feldman, 2010). This correlates to Watson, Kumar and Michaelsen’s (1993) and Watson and Kumar’s (1992) studies that showed that tenure does have an effect on team performance. In their work, during the initial stages of team formation culturally homogenous teams showed a better level of performance in comparison to culturally heterogeneous teams (ibid). In the same study by Watson et al (1993), the culturally heterogeneous teams showed a higher level of performance than the culturally homogenous teams after a 12 week period, resulting in better performance (ibid).

This could be a reason why the hypothesis was marginally significant as the study was conducted on 1st year students in their 2nd semester as well as on 3rd year students in their 2nd semester. The tenure of the students that have participated in this study has allowed them time to align their norms and values but also to find a common ground (Neal, 2010) within their respective groups and also within their classes. This might explain why the p value was only marginally significant as the respondents have had time to go through Tuckman’s (1965) group development model for a time before being subjected to this study, hence raising the possibility for culturally heterogenic teams to norm and perform the same or even better than culturally homogenous teams which in turn lowers the statistical significance.

The adjusted estimated means of culturally homogenous teams and culturally heterogenic teams (Homogenous Mean=6.669, Heterogenic Mean=6.148) are listed in Table 1. This table shows that Homogenous teams have a higher level of performance than heterogenic teams but the difference in Means between the two might have been larger if the study would have been conducted at the start of semester 1 or it might also have been different due to the limitation of the sample size as mentioned earlier.

The second control variable Gender showed no statistically significant effect on performance as $p>.05$ which was of note because, as discussed earlier, according to Leding and Westwood (1994) women react more to differences in cultures than men but also that women are better at handling differences in cultures (ibid). This makes women more adjustable to different cultures which should have produced in this study a statistically significant effect as performance is measured on both culturally homogenous and culturally heterogenic teams. A
reason why this is the case might be that there was an overrepresentation of male respondents but when looking at Table 3, one can see that males represent 54.2% of the respondents which is fairly balanced.

Another reason for the lack of statistical significance of the control variable might be due to the fact that the study was conducted in a Swedish university. Sweden was ranked fourth in Gender Equality (World Economic Forum, 2013), which could explain why there was no statistically significant effect. Would the study have been conducted in a country where gender equality was lesser than that of Sweden, there is be a possibility that the results would have been different. Again, the sample size was not large enough compared to other studies, so this could also be a reason of why the results for gender was not significant.

**Hypothesis 2:** When looking at Hypothesis 2, which stated that culturally homogenous teams with a collective cultural mindset will have the best performance, the linear regression showed that this was statistically significant and true. The statistical significance for the second hypothesis was $p = .003$ which is well under $p = .05$. The Beta = 1.258, which represents the magnitude that the interaction has on the relationship on Performance and was the second highest effect from the tested variables, this shows that there is a strong relationship between the interaction variable and performance. Looking at Table 6, one can see that Homogenous teams with a collectivist mindset ($Mean=7.097$) has the highest performance out of all the different teams followed by Heterogenic teams with an individualist mindset ($Mean= 6.023$) homogenous teams with an individualistic mindset ($Mean=5.612$) and Heterogenic teams with a collective mindset ($Mean=5.362$).

As stated by Oetzel (1998), culturally homogenous teams with a collectivist mindset had the highest level of performance due to this type of group having some attributes that the other teams did not possess. Culturally homogenous groups do not need to go through the group development model (Tuckman, 1965) as extensively as culturally heterogenic teams as they are already on a common ground set by their common culture (Hofstede, 1980; Watson, Kumar & Michaelsen, 1993). Homogenous teams are also more task oriented in comparison to heterogenic teams which in some cases can be a negative aspect (Oetzel, 1998).

Due to their collectivist mindset, they are also focused on social interaction as well as being task oriented which makes them focus on both the cohesion of the teams and the task which makes them perform on high levels (Man & Lam, 2003; Oetzel, 1998). Heterogenic teams with an individualistic mindset had the second highest performance because as stated by Cox, Lobel and McLeod (1991), collectivists that live in an individualistic society can adopt individualistic traits in certain situations such as when they may be part of an individualistic team (ibid). Cox et al. (1991) mean by this that a collectivist will perform better in an individualistic team than the other way around, and this can be seen in the means as culturally heterogenic team with a individualistic mindset ($Mean=6.023$) performs better than a culturally heterogenic team with a collectivist mindset ($Mean=5.362$).

Culturally homogenous teams with an individualistic mindset had the second lowest performance level, which comes as a surprise considering homogenous teams should perform
better than culturally heterogenic teams. This might be due to the mindset which does not allow them to focus on the social interaction as much as collectivists (Oetzel, 1998) but also due to their homogenous nature, they tend to fall into groupthink and not have a wide spread of knowledge as in the culturally heterogenic teams (Watson, Kumar & Michaelsen, 1993).

Furthermore, the hierarchical linear regression analysis showed that the variable group composition and cultural mindset were statistically significant and had an effect on performance. Group composition had the highest effect on the relationship as \( p=.001, \text{Beta}=1.445 \) confirming precious research from Watson, Kumar and Michaelsen (1993) and Fullager and Egleston (2008), among others, that group composition does have a statistically significant effect. The Beta, was also the highest which shows that group composition has the biggest effect on the variance. Cultural mindset had a smaller Beta but it was still statistically significant as \( p =.018, \text{Beta} = -.443 \). This confirms the study made by Oetzel (1998) and Man and Lam (2003) that cultural mindset does have an effect on the outcome of performance (ibid).

Lastly the analysis showed that of the two control variables Tenure and Gender, only Tenure had a statistically significant effect on performance as \( p=.000, \text{Beta}=.403 \). Studies have shown that tenure does have an effect on team performance as stated earlier (Watson, Kumar & Michaelsen, 1993). The other control variable Gender did not have any statistically significant effect on performance as \( p>.05, \text{Beta}=.070 \). A plausible reason of why Gender did not have an effect might be due to that Sweden is one the most gender equal countries in the world (World Economic Forum, 2013) which could explain why there was no statistical significance between the two genders. If the study would have been conducted in a gender unequal country the outcome might have been different.

**Conclusion**

As Swedish universities have become more diverse, the need of this study is important to determine how cultural diversity affects team performance which will in turn affect the level of quality and grades of students. This research will help Handelshögskolan and other universities to understand how diversity affects performance and to actively be able to construct teams to enhance the level of performance as well as minimizing the negative issues by these culturally different teams. The limitation of studies conducted on this phenomena in academia has led this paper to answer the question “How does group composition interact with cultural mindset to impact team performance among university students?” I have concluded that group composition does have a marginally statistically significant effect on team performance but that the sample size may have been too small to determine this definitively, but nonetheless group composition alone does have an effect. When including cultural mindset into the equation, one could see that it had a clear effect on team performance which was statistically significant.

This leads us to make the following conclusion that group composition together with cultural mindset does affect the outcome of team performance in such a way that culturally homogenous teams with a collectivist mindset has the highest level of performance and that
this combination of both cultural homogeneity and collectivist mindset is the most efficient and productive team formation according to this study. This can seem to be negative for Swedish universities as they are becoming more culturally heterogenic but the study also showed that culturally heterogenic teams were not lagging too much behind. The study also showed that tenure did have a positive effect on team performance and according to literature, tenure is in favor of culturally heterogenic teams as they will perform better as tenure increases.

Handelshögskolan and other universities in Sweden can use this information and possibly develop a framework on how to construct teams to increase team performance. For example, that a culturally homogenous team with a collectivist mindset has the highest level of performance does not necessarily mean that culturally heterogenic teams will not have a high level of performance. As tenure is in favor of culturally heterogenic teams, universities should let students form culturally homogenous teams in their first year whereas in their third year they should adopt a more culturally heterogenic team structure.

Recommendations

Further research should be done on this topic with a larger sample size as the sample for this study showed to be too small. Another recommendation should be to conduct this type of study across several universities and programs across Sweden to see how different university cultures and academic programs may affect team performance in relationship to culturally diverse teams. Lastly, as tenure showed a statistical significance, it would be of great importance to further investigate how tenure can affect a culturally diverse team’s level of performance in Swedish universities.

Limitations

The limitations for this study occur when students are unable to participate or are not willing to take part in the study. Another limitation found is that students may not be totally honest or deviate from the anticipated criteria. Time can also be a limitation whereas the time laps excludes 2nd year students in the study. Due to the narrow spread of the study as it was only conducted at Handelshögskolan, the results of the surveys may deviate from the results of conducted surveys done in other universities in Sweden. Another limitation might be that the sample size was not big enough to conduct a proper study. Lastly, a limitation may have been that there were not any diverse or homogenous students to conduct surveys on, which is highly unlikely.

The limitations of questionnaire are many but the most common is that one can never be sure of whether the respondents of the study have fully understood the questions or not. Another limitation can be that you it is impossible to know whether or not the respondents have taken their time to provide you with accurate answers (Rowley, 2014). Furthermore, one will always come across respondents leaving some questions unanswered which could be the effect of the respondents either running out of time to being bored of the questionnaire (ibid). The respondents may also be non-willing to provide an answer to a certain question as they
may feel that they wish to give their opinion or even the respondent feeling that they do not have an opinion for the specific question (Rowley, 2014).
References


Appendix

Table 1

Estimates

Dependent Variable: avgPerf

<table>
<thead>
<tr>
<th>GC</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homogenous</td>
<td>6,669</td>
<td>.196</td>
<td>6,280 - 7,057</td>
</tr>
<tr>
<td>Heterogenic</td>
<td>6,148</td>
<td>.196</td>
<td>5,760 - 6,536</td>
</tr>
</tbody>
</table>

a. Covariates appearing in the model are evaluated at the following values: Tenure = .50, Gender = .46.

Table 2

Tests of Between-Subjects Effects

Dependent Variable: Average.Perf

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>65,408</td>
<td>3</td>
<td>21,803</td>
<td>9,494</td>
<td>.000</td>
<td>.197</td>
</tr>
<tr>
<td>Intercept</td>
<td>1492,807</td>
<td>t1</td>
<td>1492,807</td>
<td>650,078</td>
<td>.000</td>
<td>.849</td>
</tr>
<tr>
<td>Tenure</td>
<td>57,264</td>
<td>1</td>
<td>57,264</td>
<td>24,937</td>
<td>.000</td>
<td>.177</td>
</tr>
<tr>
<td>Gender</td>
<td>3,384</td>
<td>1</td>
<td>3,384</td>
<td>1,474</td>
<td>.227</td>
<td>.013</td>
</tr>
<tr>
<td>GC</td>
<td>8,070</td>
<td>1</td>
<td>8,070</td>
<td>3,514</td>
<td>.063</td>
<td>.029</td>
</tr>
<tr>
<td>Error</td>
<td>266,377</td>
<td>116</td>
<td>2,296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5259,793</td>
<td>120</td>
<td>2,296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>331,785</td>
<td>119</td>
<td>2,296</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .197 (Adjusted R Squared = .176)
### Table 3a and 3b

#### Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>65</td>
<td>54,2</td>
<td>54,2</td>
<td>54,2</td>
</tr>
<tr>
<td>valid</td>
<td>Female</td>
<td>55</td>
<td>45,8</td>
<td>45,8</td>
</tr>
<tr>
<td>total</td>
<td>120</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

#### Group Composition (GC)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>valid</td>
<td>Homogenus</td>
<td>60</td>
<td>50,0</td>
<td>50,0</td>
</tr>
<tr>
<td></td>
<td>Heterogenic</td>
<td>60</td>
<td>50,0</td>
<td>100,0</td>
</tr>
<tr>
<td>total</td>
<td>120</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4

#### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>avgPerf</td>
<td>6,4083</td>
<td>1,66976</td>
<td>120</td>
</tr>
<tr>
<td>Tenure</td>
<td>.50</td>
<td>.502</td>
<td>120</td>
</tr>
<tr>
<td>Gender</td>
<td>.46</td>
<td>.500</td>
<td>120</td>
</tr>
<tr>
<td>GC</td>
<td>.50</td>
<td>.502</td>
<td>120</td>
</tr>
<tr>
<td>avgCM</td>
<td>3,5298</td>
<td>9,0982</td>
<td>120</td>
</tr>
<tr>
<td>GCxCM</td>
<td>1,6125</td>
<td>1,78778</td>
<td>120</td>
</tr>
</tbody>
</table>
Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>5,898,232</td>
<td></td>
<td>25,401</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
<td>1,353,280</td>
<td>,407</td>
<td>4,832</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-362,281</td>
<td>-109</td>
<td>-1,290</td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>5,737,667</td>
<td></td>
<td>8,596</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
<td>1,373,279</td>
<td>,413</td>
<td>4,917</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-340,279</td>
<td>-102</td>
<td>-1,217</td>
</tr>
<tr>
<td></td>
<td>GC</td>
<td>-456,296</td>
<td>-137</td>
<td>-1,539</td>
</tr>
<tr>
<td></td>
<td>avgCM</td>
<td>104,163</td>
<td>,057</td>
<td>,641</td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>9,227,1309</td>
<td></td>
<td>7,049</td>
</tr>
<tr>
<td>2</td>
<td>Tenure</td>
<td>1,339,270</td>
<td>,403</td>
<td>4,965</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>-233,272</td>
<td>-070</td>
<td>-1,859</td>
</tr>
<tr>
<td></td>
<td>GC</td>
<td>-4,807,1449</td>
<td>-1445</td>
<td>-3,317</td>
</tr>
<tr>
<td></td>
<td>avgCM</td>
<td>-814,339</td>
<td>-443</td>
<td>-2,403</td>
</tr>
<tr>
<td></td>
<td>GCxCM</td>
<td>1,175,383</td>
<td>1,258</td>
<td>3,063</td>
</tr>
</tbody>
</table>

a. Dependent Variable: avgPerf

Table 6

![Graph showing the relationship between performance and GCxCM]
This questionnaire is designed to understand how culture can influence performance on an academic level as an increase of foreign cultural backgrounds has been seen in Swedish universities. Control will be done for participants’ academic tenure and gender.

The questionnaire is organized under 4 main heading:

- General
- Cultural mindset
- Previous group dynamics
- Group performance

The questionnaire consists of 4 subheadings with a total of 30 items. The subheadings consist of statements or questions which require a response. A response is given by either circling, ticking or stating the relevant answer on the corresponding questions.

All questions need to be answered even if some question might be repetitive!

**Description of Measure:**

**General:** These questions such as academic tenure and gender, these will be needed to be used as control variables for this study. These items will coded and held constant in order to assess the relationship between the other variables.

**Cultural mindset:** A 14 item scale designed to measure the cultural mindset (individualism-collectivism) of the students. These items are answered on a 5 point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Previous Group Dynamic:** Two item question designed to see what type of group the student was in. This will be answered by stating where the group members were from, which will be coded into either Homogenous or Heterogenic.

**Performance:** A 13 item scale designed to measure the performance level of the group from a student’s perspective. These items are answered on a 10 point Likert scale ranging from 1 (To No Extent) to 10 (To a Great Extent).

**Disclaimer!!**

**Respondent Criteria:** You can take this questionnaire IF:

- You are a Full time student at Handelshögskolan
- You are either in your 1st or 3rd year of studies
- You must have some experience with working in either culturally homogenous or culturally diverse groups
General (2 Questions) Please circle or tick your answers accordingly!

1. Please state your gender:
   -  Male
   -  Female

2. Please circle your academic year:
   -  1st
   -  3rd

Cultural Mindset (14 Questions): Please Circle your answers in the corresponding scales!

1. I define myself as a competitive person.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

2. Before I make a major decision I seek advice from people close to me.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

3. I believe that competition is part of human nature.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

4. I consider my friends’ opinions before taking important actions.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

5. I like to be accurate when I communicate.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

6. It is important to consult close friends and get their ideas before making a decision.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree

7. I ask the advice of my friends before making career related decisions.
   - 1  2  3  4  5
     - Strongly Disagree
     - Neutral
     - Strongly Agree
8. I sacrifice my self-interest for the benefit of my group.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. I take responsibility for my own actions.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. My personal identity independent of others is very important to me.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Winning is very important to me.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. I see myself as “my own person.”

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. I consult my family before making an important decision.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Neutral</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Group Dynamics (1 Question)** Please state your answers!

Think back to your last group.

1. Please state the cultural background (country of origin) of each member starting with yourself:

_______________________________________________________________________________
_______________________________________________________________________________
Again, think back to your last group and answer the remaining questions!

**Group Performance (13 Questions):** Please Circle your answers in the corresponding scales!

1. All members participated in the group activities

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

2. Members listened to others in the group.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

3. Members helped and encouraged others in the group.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

4. Group members stayed on the task assigned.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

5. Group members worked well together

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

6. No one dominated the group discussion.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

7. Each group member contributed a fair degree of effort.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

8. All members attended group meetings.

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent

9. All members were knowledgeable about assignments and fulfilled that role:

   1. To No Extent
   2. To A Limited Extent
   3. To Some Extent
   4. To A Considerable Extent
   5. To A Great Extent
10. All members respected each group member's opinions:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To No Extent</td>
<td>To A Limited Extent</td>
<td>To Some Extent</td>
<td>To A Considerable Extent</td>
<td>To A Great Extent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. All members contributed equally to group discussions:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To No Extent</td>
<td>To A Limited Extent</td>
<td>To Some Extent</td>
<td>To A Considerable Extent</td>
<td>To A Great Extent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. All members gave input for work-in-progress promptly and with a good faith effort:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To No Extent</td>
<td>To A Limited Extent</td>
<td>To Some Extent</td>
<td>To A Considerable Extent</td>
<td>To A Great Extent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. All members met all deadlines for work-in-progress and the final presentation:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To No Extent</td>
<td>To A Limited Extent</td>
<td>To Some Extent</td>
<td>To A Considerable Extent</td>
<td>To A Great Extent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>