The impact of culture (individualism and collectivism) on identified multicultural group work challenges

A study at Linnaeus University

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Abstract

This paper aims to measure the kinds of challenges faced by multicultural student groups and the influence of culture (individualism and collectivism) on student's perception of importance on each of the challenges discovered. A 19-item questionnaire was completed by students (N = 234) from different faculties including natural and social sciences at Linnaeus University, students were from 47 countries. Challenges in multicultural groups were measured using a Likert scale (from 1 to 5) that assessed member participation, communication, group processes and group member composition and analysed by exploratory factor analysis. To examine the differences in perception of importance of the challenges discovered between individualists and collectivists based on Hofstede's culture framework, t-tests and Mann-Whitney test were conducted. The results suggested three main kinds of challenges: culture related challenges, generic group work challenges and membership resemblance. Membership resemblance was the only kind of challenge that significantly differed between individualists and collectivists. Further discussions explaining the results and implementation of this study were presented.

Keywords: Multicultural group work, challenges, individualism, collectivism, cultural diversity, teams

Thanks

We would like to thank Abdul Kadir H. Mohammed our supervisor, family and friends for their continued support and encouragement.

Stellah would like to specially thank the Swedish Institute: this thesis has been presented during my scholarship period at Linnaeus University thanks to Swedish Institute Study Scholarship.
As organizations are turning into teams to improve productivity and innovation and the world opening up and becoming more culturally inclusive, the need for graduates who are skilled in working in culturally diverse teams is increasing. According to the Organisation for Economic Co-operation and Development (OECD, 2013), around 4.3 million students worldwide are enrolled for university studies outside their home countries and even more participate in exchange programs. Students venture into studies abroad for various reasons, usually to expand on their knowledge about what they consider important like quality of education, language or society. Similarly, over the past decades, the workplace has been evolving becoming more team oriented. Group based approaches like product development teams, management teams, autonomous work teams are now more common with companies (Ahles & Bosworth, 2004). Teams seem to be the future of organizing work and tasks in the workplace. Dunne and Rawlins (2000) noted that there is an increasing need across the world for college graduates who are not only prepared for employment but also skilled in teamwork.

The modern university environment provides international interaction opportunities and class group work activities which could be a valuable breeding ground for cultivating multicultural group work perspectives and skills. However, most internationalization programs in universities focus on infusing international materials through the course syllabi. International learning is not only about acquiring knowledge cognitively, it also entails active participation to improve teamwork skills and understand the dynamics of multicultural group work (Carroll & Ryan, 2007). According to management literature, teamwork skills are one of the employability skills that are most attractive to the current employer. Employability skills refer to the nontechnical skills that are not job specific but important across industries and job levels (Ahles & Bosworth, 2004).

Multicultural team work experience has been linked to additional benefits over monoculture teams where they require applying multiple skills and judgements (Earley & Mosakowski 2000). Current studies on multicultural teamwork have been however on both ends of the continuum with some scholars arguing on the benefits and richness of cultural diversity in international organizations (Stahl, Mäkelä, Zander & Maznevski, 2010; Shachaf, 2008) like creativity and decision making; while other studies, viewing cultural diversity more of a liability than an asset (DiStefano & Maznevski, 2000; Leung and Wang, 2015) by focusing on problems resulting from cultural diversity like communication. Studies on
multicultural group work are relevant and important to be able to manage teams effectively. As noted by Behfa, Kern and Brett (2006) challenges experienced by multicultural teams are more complex and resulted in more serious challenges compared to same culture group challenges. However, few studies seem to focus on discovering and attending to the specific challenges. Literature is somehow more fixated on analysing the effects of culture diversity either as problems or as assets.

In this study, we seek to move away from the continuum and provide an alternative viewpoint by proposing that multicultural teams can well reap the benefits of effectiveness and productivity by becoming aware of the challenges that they face and the importance of culture in these challenges. What makes culture unique to some respect from other sources of diversity is that culture differentiation is not only below the levels of consciousness, but also strongly influences thinking and behaviour as defined by values and beliefs (Stahl, Maznevski, Voigt & Jonsen, 2010). If multicultural teams can identify the challenges they face as a result of culture, these issues are brought to the surface and can be managed, improving the group work environment. Consequently, this creates a group work environment where the strengths of multicultural teams are not confounded by culture related weakness.

Following the work of Popov et al., (2012) who proposed a theoretical multicultural framework which reviewed organizational and management research in examining the challenges inherent in multicultural student teams, we reviewed multicultural group work challenges literature focusing on cross cultural studies and student group work. Consequently, our study expands on the scope of participants and has two purposes: identifying the kind of challenges faced in multicultural group work, and examining the influence of culture on the importance of the challenges. In what follows, we introduce the framework based on past literature, on which group level challenges seem to affect multicultural student group work and further examine in greater detail the impact of culture diversity on group work. Next, results of this study are presented and discussed. The last part of the paper presents the limitations, recommendations and implementation of the results.

**Theoretical framework**

Multicultural student group work will be defined as “a collaboration of two or more individuals from different (national) cultural backgrounds, who have been assigned interdependent tasks and are jointly responsible for the final results... in an academic
environment” (Popov et al., 2012). In this paper, the terms “group work” and “team-work” are used interchangeably. National culture will be defined as “collective programming of the mind that distinguishes the members of one group or category of people from another” (Hofstede & Hofstede, 2001, p. 9). This means that people from a specific nation share certain characteristics that have been acquired over their lifespan. These characteristics become evident when people from different countries interact bringing out the diversity as a result of national cultures.

Diversity in the workplace provides important benefits by bringing in different perspectives from the different identities, despite this positive outcome the ability to capitalize on these benefits has been meet with mixed success (Chatman & Flynn, 2001). It is important therefore for students to be able to work with people who they differ not only in age, gender, social and educational background but also in cultural backgrounds to prepare them for the modern work environment. Sweeney, Weaven and Herington (2008) suggested that when students work in teams they learn better and are more attached to their ideas and work since they are creating their own experiences. However, this comes with some anxieties and worries from students. These uncertainties can be minimized if students are aware of the challenges that multicultural group work might encounter.

Literature reviewed on different aspects of challenges that multicultural groups face has been summarized into four groups: member participation, communication, group work processes and member composition (see table 1).

**Member participation.** This refers to the individual involvement and personal investment both passively and actively towards group work. Sweeny et al., (2008) found that issues such as lack of trust among other group members to complete the task on time, one of the issues that contributes to social-loafing, was reported as a problem in group work. Additionally, differing attitudes to group work as a result of prior negative or positive group work experiences was also a problem. Students with negative experiences saw group work as a hassle or inefficient, while those with positive experiences were optimistic about the outcome of the group work.

A common problem in student group work is the level of membership participation. For example some members fail to contribute to their full potential; some leaders overstep (domineering) and actively or suggestively discourage participation from other members. This leads to loafing/ free-riding since some feel their contribution is insignificant and minimize their responsibilities (Pfaff & Huddleston, 2003).
On attitudes and motivation towards the multicultural group, Jiacheng, Lu and Francesco, (2008) proposed that the cognitive process in terms of norms, attitudes and commitment on knowledge sharing in multicultural teams will influence knowledge sharing motivation. If there is a clash on the intention, norms, and different attitudes in knowledge sharing as a result of culture, then low motivation levels may be experienced.

### Table 1. Summary of multicultural group work challenges

<table>
<thead>
<tr>
<th>Multicultural challenges</th>
<th>Description</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member participation</td>
<td>Social loafing and free-riding</td>
<td>Sweeny et al., (2008)</td>
</tr>
<tr>
<td></td>
<td>Domineering leaders and members</td>
<td>Pfaff and Huddleston, (2003)</td>
</tr>
<tr>
<td></td>
<td>Different attitude and motivation</td>
<td>Jiacheng et al., (2008)</td>
</tr>
<tr>
<td></td>
<td>Interpersonal skills</td>
<td>Matveev and Nelson (2004)</td>
</tr>
<tr>
<td></td>
<td>Communication styles</td>
<td>Ochieng and Price (2010).</td>
</tr>
<tr>
<td>Group process</td>
<td>Decision making and problem solving</td>
<td>Robinson et al. (2014); du Plessis (2012);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ochieng &amp; Price (2009)</td>
</tr>
<tr>
<td></td>
<td>Culturally influenced decision making style</td>
<td>Güss &amp; Dörner (2011).</td>
</tr>
<tr>
<td></td>
<td>Conflict management</td>
<td>Marquardt and Horvath (2001); Von Glinow et</td>
</tr>
<tr>
<td></td>
<td></td>
<td>al. (2004); Leung and Wang (2015); Oh (2013)</td>
</tr>
<tr>
<td></td>
<td>Defending group decisions and complying</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group management</td>
<td>Ochieng &amp; Price (2009)</td>
</tr>
<tr>
<td>Member composition</td>
<td>Heterogenousious group composition</td>
<td>Stahl et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>Differences in ambitions</td>
<td>Behfa et al., 2006</td>
</tr>
</tbody>
</table>

**Communication.** Communication is such a dynamic and multidimensional concept. Von Glinow, Shapiro, and Brett (2004) argued that communication while specifically emphasizing on linguistic related challenges in multicultural teams can lead to emotional conflict. Cross cultural communication in terms of ability to deal with misunderstandings, ability to discuss and solve problems and team effectiveness are some of the things Matveev and Nelson (2004) consider important when working multiculturally. Lack of these abilities may lead to communication challenges within multicultural teams. Additionally, they argue
that high interpersonal skills allow for better communication and competency in multicultural teams. Behfar, Kern and Brett (2006) also proposed that interpersonal tensions and ego clashes between team members were some of the issues that let to communication problems.

The problematic context of communication from interpersonal interaction in terms of language barrier and communication style arise because sometimes culture constraints the conditions which define the operations, sentiments echoed by Ochieng and Price (2010).

**Group processes.** Like all other teams, multicultural groups are faced with diverse problems during the group work process. These refer to operational issues that interfere with normal group activities and may result to group ineffectiveness. Over the last decade, scholars have suggested that in multicultural groups, these challenges could be magnified because of the multiple cultural backgrounds (e.g. Robinson, Hogg & Higgins, 2014; du Plessis, 2012; Ochieng & Price, 2009).

Marquardt and Horvath (2001) noted cross cultural conflicts and cultural differences as the most common challenges in multicultural teams. Personal and emotional conflicts are conflicts that multicultural teams might be prone to; this is due to higher levels of mistrust and low group cohesion (Von Glinow et al., 2004; Leung & Wang, 2015). Mistrust and low cohesion may also make it difficult for members to defend team decisions and act as a unit, whilst not in agreement with the decisions. Oh (2013) found that cultural diversity influenced group members’ attitudes towards defending decisions and compliance.

Diverse teams like multicultural teams have previously been argued to be good at problem solving as a result of diverging way of looking at a problem. However, Leung and Wang (2015) propose that negative social processes resulting from cultural diversity might interfere with information and decision making processes which facilitate multicultural teams problem-solving. Previous research also presented that decision making style differences do exist at country level. For example, Güss and Dörner (2011) showed that decision making styles are different among German, US participants and Indian, Filipino, and Brazilian participants.

People usually hold negative attitudes towards what they feel unfamiliar to at first sight, therefore, apart from the problems stated above, multicultural groups also need to manage cultural suspicions, cultural trust and cooperation rules (Schmitt, Currie & Delbosc, 2013; Ochieng & Price, 2009). Ochieng and Price (2009) noted that multicultural group management was important and difficult.
Group member composition. Even in multicultural teams there are potential benefits of demographic heterogeneity with the availability of multiple perspectives and skill sets. However, heterogeneity also makes it more difficult for teams multicultural or not to establish effective group processes (Stahl et al., 2010). This means that although the theoretical benefits of a diverse group member composition both in demographics and in skills can be forwarded, it takes more effort to achieve and maintain in practice. Moreover, members may also have different priorities about the task, both on procedural matters and on the outcome. These differing ambitions in members of the group may result to challenges (Behfa et al., 2006). In general, group member composition influences effective multicultural teamwork. For example, Cheng, Chua, Morris and Le (2012) in their study investigated the importance of group member composition in self-managing multicultural teams and found it is a key determinant of cohesiveness and relationships within the group.

After review of literature, multicultural group work challenges presented seem rather stable while considering both teams in the business world as reviewed by organizational research and management studies (Popov et. al., 2012) and in cross cultural studies and student group work as we have presented.

Culture background

Culture impact on students’ perception of multicultural group challenges is a key process for better understanding multicultural cooperation and facilitating management. In culture studies, many researchers have provided valuable cultural framework (Hofstede, 2010; Trompennars & Hampden-Turner, 1998), however, it showed great freedom in researchers’ personal understanding of culture in multicultural studies. Cultural dimension selection in this study was based on the most productive cultural dimensions in previous multicultural studies and the relevance of the culture dimensions with group work.

Through examination, individualism and collectivism was a common cultural dimension and had the strongest impact in multicultural studies compared to other dimensions (Marcus & Huy, 2013; Schimmack; Oishi & Diener, 2005). In the field of cross-cultural group work studies, it showed that the differences between individualism and collectivism mainly presented on group work attitude and behaviours (Paul, Samarah, Seetharaman & Mykytyn, 2004; Lai, Lam & Lam, 2013). For example, Smith et al., (2011) suggested that individualistic societies emphasise more on goal achievement and task
fulfilment, in contrast, collectivistic societies emphasise on personal relationship in group work.

Additionally, since this study aimed at the work environment, Hofstede’s culture framework was chosen. The framework was build up on organizational research and has been re-examined and showed a continuous robust validity in a large scope of even recent studies and is closely related with group work (Beugelsdijk, Maseland & van Hoorn 2015; Gelfand, Erez & Aycan, 2007; Metcalf & Bird, 2004). Apart from Hofstede’s framework being the most widely used national culture framework in psychological studies, it is also extensive and robust in terms of national culture samples making it exclusive compared to other frameworks (Soares, Farhangmehr & Shoham, 2007). In this study, Hofstede’s individualism and collectivism index will be adopted to measuring the cultural impact on student’s perceptions.

According to Hofstede, Hofstede and Minkov (2010), the differences between individualism and collectivism in group work are stated as below. Collectivism concerns power of the group and people from collectivistic societies are more likely to identify themselves with group, in terms of “we”, and share a value that the group interest overweight individual’s interest. On the other hand, individualism present values in an opposite way. People from individualistic societies consider individual interest more valuable and more likely to identify themselves with “I”.

**Research questions**

In line with this study’s purpose, two research questions are addressed:

RQ1: What kind of challenges do multicultural student group work face?

RQ2: How do students differ in their perception of importance of each of the challenges discovered based on culture (Individualism-Collectivism)?

**Method**

**Participants**

This research was conducted at Linnaeus University- Växjö campus in courses where English was the language of instruction. The aim was to attract participants from different countries. Convenience sampling was used, only participants with previous group-work
experiences were included in this study. The students were from different faculties including natural and social sciences. They were either enrolled in bachelors or master studies.

Participants in this research (N = 234) comprised of 25.6% Swedish students and 74.4% international students. The international students came from 46 countries with majority of them from China (11.5%), Germany (9.4%) and Iran (6.4%). Five participants identified themselves with dual-nationalities. The respondents were 50.9% female with a mean age of 24.34 (SD = 4.65).

**Measurement**

Group work: The measurement was adapted from the Multicultural Study Group Questionnaire - MCSG (Popov et al., 2012). The MCSG is a 19 item self-report questionnaire that measures group work challenge perceptions. For this study, the MCSG was modified into statements that could be generalized to measure group work experiences. The modified MCSG also included demographic questions on nationality, gender and age. The modified MCSG questionnaire attempted to measure four group level dynamics: member participation (e.g. I find it challenging to work in groups that one team member imposes his /her own visions and ideas on others), communication (e.g. I find it challenging to work in group that team members have insufficient English language skills), group processes (e.g. I find it challenging to work in groups which have conflict) and group member composition (e.g. it is important for me to work in groups that team members have similar knowledge backgrounds). For each item, responses were on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree.

Culture: Hofstede cultural dimension (2010) was used to categorize countries into individualism and collectivism (see fig 1). The index ranges from 1 (collectivism) to 100 (individualism). Countries with values between 45 and 55 were excluded to contrast individualism and collectivism. Dual-nationalities did not obtain a value and were therefore excluded. Countries that did not have a value at the individualism and collectivism dimension in Hofstede’s cultural index were also excluded.
Fig. 1. Individualism and collectivism values for countries using Hofstede's Cultural Index and No. of participants per country

**Design & Procedure**

An exploratory design was used, comprising of two steps to understand the structure of group work challenges and to detect cultural influence on group work challenge perceptions. Participants were given information about the research which was on their school group work experience. Instructions for participating, and assurances regarding the confidentiality of all data collected before responding were given. Response time was also emphasized. Their participation was entirely voluntary.

**Statistical Analysis**

**Exploratory factor analysis.** To extract underlying factors, exploratory factor analysis (EFA) was run and Cronbach's Alpha was computed to examine their internal reliability.

Before conducting the analysis, suitability for running a factor analysis was checked and the data was found adequate for analysis. 5-10 participants per variable or above 200 participants has previously been recommended by researchers (Kass & Tinsley, 1979; Field, 2009), therefore, in this research, participants’ adequacy was met. Z -scores (> 3.29) and Mahalanobis distance by use of critical values were used to detect and delete univariate and multivariate outliers respectively (Swisher, Beckstead & Bebeau, 2004). Listwise deletion was specified for Principal Component Analysis in order to exclude incomplete responses.
which is typical in EFA (Maxwell, 2014; McPherson, Barbosa-Leiker, Bums, Howell & Roll, 2012).

**t-test and Mann-Whitney.** In order to compare students' perceptions on each multicultural group-work challenges discovered based on culture (Individualism-Collectivism), independent \( t \)-tests were conducted and the Mann-Whitney test was used where the parametric assumptions were not met.

**Results**

Principal component analysis was conducted on the 19 items from the adopted MCSG questionnaire. Two items were excluded due to low inter-item correlations which was an indication of poor relationships (Field, 2009; Tabachinick & Fidell, 2006). Kaiser-Meyer-Olkin (KMO) test for sampling adequacy, KMO = .76, exceeded the recommended minimum value of .50. Although the KMO value was good, on examining the anti-image matrices which detect the KMO values for individual variables, three items did not meet the recommended matrix value of .50 and were also excluded leaving the analysis with 14 items. (Field, 2009)

The final, PCA using direct oblimin rotation extracted four factors with eigenvalues (>1) and examining a scree-plot. The scree-plot although slightly ambiguous, started tailing off after 4 factors supporting factors obtained from eigenvalues. The combined factors explained 55.08% of the total variance. On checking the pattern matrix, two items loaded to more than one factor. The items were retained to the factor in which they had higher loadings. However, considering the reasons stated below, only the first three factors were retained from the extraction. First, items in factor 4 did not share any common ‘underlying theme’. Second, the factor had an extremely low Cronbach Alpha (\( \alpha = .07 \)), an indication that the items may not be a reliable measure for Factor 4. Moreover, researchers are not bound to factors extracted by SPSS, it is upon them to make ‘critical judgements’ (Field, 2009).

The adopted MCSG therefore resulted in three factors showed in Table 2 with the final loadings of items on each of the factors as well as their Cronbach’s alpha. The three factors were labelled as Factor 1 (culture related challenges), Factor 2 (generic group work challenges), and Factor 3 (membership resemblance). Culture related challenges refer to issues within the group that are as a result of having people from diverse cultural backgrounds. Generic group work challenges are universal issues that frequently occur across
both heterogeneous and homogeneous groups. Membership resemblance refers to issues that come up when working with people whom one perceives as significantly different from them.

In order to investigate differences between cultures on the discovered factors, $t$-tests and Mann-Whitney Test were conducted. The Mann-Whitney result showed there was no significant effect of culture on Generic group-work challenges. Individualists ($Mdn = 2.67$) did not differ significantly from collectivists ($Mdn = 3.00$), $U = 4057, p = .29$. The

<table>
<thead>
<tr>
<th>Scale</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
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<tbody>
<tr>
<td><strong>Culture related challenges ($\alpha = .74$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that members have different styles of decision making and problem-solving because of cultural backgrounds</td>
<td>0.761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that members have different styles of complying with supervisor's guidelines because of cultural backgrounds</td>
<td>0.858</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that team members have different styles of conflict management because of cultural differences</td>
<td>0.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generic group work challenges ($\alpha = .69$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups where some team members are free-riding (do not contribute to the team work in their full potential)</td>
<td>-0.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that have conflict</td>
<td>-0.750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that one team member imposes his/her own visions and ideas on the others</td>
<td>-0.520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it challenging to work in groups that has ineffective teamwork management</td>
<td>-0.622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to work in groups that members have similar ambitions (for example, not a group where some members aim to get 60% when others aim to get 90%)</td>
<td>-0.574</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Membership resemblance ($\alpha = .54$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to work in groups that team members have similar knowledge backgrounds</td>
<td>0.695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to work in groups whose team members are homogeneous (for example similarities in age, gender, culture)</td>
<td>0.727</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to work in groups that team members have similar academic attitudes</td>
<td>0.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Eigen Values</strong></td>
<td>3.478</td>
<td>1.794</td>
<td>1.382</td>
</tr>
<tr>
<td><strong>% of variance</strong></td>
<td>24.841</td>
<td>12.813</td>
<td>9.873</td>
</tr>
</tbody>
</table>

*Note*: Only factor loadings over .40 reported
independent *t*-test on *Culture related challenges* *t* (189) = -.99, *p* = .32 indicated a non-significant difference between the two cultures. However, on *Membership resemblance* *t* (189) = -2.33, *p* = .02, *r* = .17, results indicated there was a statistical significant difference based on culture. Further analysis showed students from both cultures differed in perceptions of all identified challenges (see table 3).

Table 3: Summary of means (M) & standard deviations (SD) for identified challenges

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>CULTURE</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture related</td>
<td>Collectivistic</td>
<td>M = 3.20, SD = .86</td>
</tr>
<tr>
<td></td>
<td>Individualistic</td>
<td>M = 3.09, SD = .83</td>
</tr>
<tr>
<td>Generic group work</td>
<td>Collectivistic</td>
<td>M = 3.52, SD = .81</td>
</tr>
<tr>
<td></td>
<td>Individualistic</td>
<td>M = 3.69, SD = .70</td>
</tr>
<tr>
<td>Membership resemblance*</td>
<td>Collectivistic</td>
<td>M = 2.93, SD = .86</td>
</tr>
<tr>
<td></td>
<td>Individualistic</td>
<td>M = 2.61, SD = .79</td>
</tr>
</tbody>
</table>

* *p* < .05

Discussion

Following the first aim of this study, three main kinds of challenges were identified: cultural-related group work challenges, generic group-work challenges and membership resemblance. To fulfill the second aim, a further analysis revealed that students’ cultural background only had an impact on how students perceive membership resemblance with collectivistic students viewing it more important in group work than individualistic students did.

Culture related group work challenges refer to issues that come up with working in a culturally diverse environment and include aspects of different ways of complying with guidelines, decision making, problem solving and conflict management. Although group work challenges do arise even in groups where members have a shared culture, these difficulties are usually heightened when members have different cultures - sentiments shared by Strauss and U, (2007). This comes about as culture influences people's attitudes towards authority as well as norms. Attitudes towards cultural differences have been noted as a potential barrier to intercultural interactions with some societies emphasizing shared meaning while others emphasizing more on uniqueness and openness (Nesdale, 2000; Sosik & Jung, 2002). Additionally, values carried by different cultures influence people’s thinking styles due to different modes of information processing. Societies with analytic thinking styles mainly focus on important information while, societies with holistic thinking styles spend
time on both important and less crucial information. These two styles of information processing lead to different decision making styles (Li, Masuda & Russell, 2015; Podrug, 2011; Mann et al., 1998). These culturally inherent attitudes, values and thinking styles result in different cultures presenting diverse ways of decision making, complying with deadlines, problem solving and conflict management, which makes culture important or challenging in multicultural group work.

It is interesting to note that despite aspects such as richness in creative information processing, decision making and problem-solving, that make researchers argue that diverse teams outperform homogeneous teams (Van Knippenberg, De Dreu & Homan, 2004); the richness that cultural diversity brings also emerges as one of the major challenges facing multicultural teams. Cultural diversity makes it harder for multicultural teams to make decisions and increases the possibility of conflicts, making team-work even more tasking since multicultural groups might be slower at overcoming their divergence and developing cooperative norms. Similar results were reported by Chatman and Flynn (2010), while Stahl et al., (2010) in a meta-analysis found a positive relationship between cultural diversity and task conflict in schools where teams worked towards set goals.

The other side of culture diversity therefore cannot be ignored in the role it plays in group work. Although studies have shown the importance of diversity, the benefits can only be met when teams are able to identify and cope with the challenges that culture introduces to multicultural group work.

Generic group work challenges include common issues that groups usually face like free-riding, differences in ambition, conflicts, domineering team member and ineffective team management. Harrison, Price and Bell (1998) found that attitudes and values, core components of culture, are overall more important than surface level variables like demographic factors in determining social-functioning in groups. However, the surface level factors, although not as important, pose as challenges regardless of group member composition. The factors could include individual differences in personality, ambitions and drive and are unavoidable in group work. Differing in attitudes and behaviours, members’ personal preferences in group work might deprive the group of healthy task process and group member relationships (Pelled, 1996; Ely & Thomas, 2001).

Group work is a collaborative working format which means the outcome should be a collective result of each individual. Generic challenges introduce social and personal differences further intensifying the challenges faced by multicultural group work. Free riding
is one of the aspects contributing to the generic group work challenges in multicultural group work. This could be a result of students’ attraction and perception towards group cohesion: students could either perceive the group as capable without their contribution or could feel they are inadequate resulting to free riding (Høigaard, Säfvenbom & Tønnessen, 2006). In agreement with our study, previous studies like Hall and Buzwell (2012) and Burdett (2003), found unequal distribution of effort like free riding as one of the greatest concern in student teams across all disciplines.

Similar to differences in participation stated above, group members may also have different goals in what they want from group work. Although earlier studies argued that there were cultural differences in distinctiveness (Triandis, Chan, Bhawuk, Iwao & Sinha, 1995), current research suggests that distinctiveness like having differences in ambition is more of a universal drive that everyone possesses, but it is expressed differently and given different weight depending on culture (Hornsey & Jetten, 2004). These recent findings resonate with our results where multicultural teams found different ambitions among them to be a challenge.

Although conflict came up as a cultural related challenge, it is also an issue in multicultural groups without necessarily being a result of culture. Member differences such as different ways of thinking, or differing opinions in how to get things done in the group could also contribute to conflict. Similar results were found by Montgomery (2009) and Pelled, Eisenhardt and Xin (1999) supporting the findings that conflicts within multicultural groups can be a result of differing directions on the task or even personality differences and not explicitly a result of national cultures.

Membership resemblance challenges refer to an individual’s similarity appraisal compared to other members in the group and the issues that come up when one perceives others as being significantly different. Membership resemblance measures the degree of importance students place on working with members who have similar characteristics. This could be shared interests, knowledge background, and age. This appraisal is a universal and necessary process and occurrence that is not necessarily a negative attribute. Membership categorization based on similarities could act as a self-image reflection that helps building up positive relations, and also helps people reduce chaos and confusion by creating meaning (Iles & Hayers, 1997; Earley, 1993).

These innate processes allow for people to discriminate opportunities from threats. However it might also lead to biases, stereotypes and prejudices, which result in failures of mutual understanding and cooperation in multicultural group work. Members who appraise
others as being significantly different may hold inadequate or incomplete images that consciously or unconsciously influence their cognitions and interactions. For instance, they may adapt their communication styles based on stereotypes or cognitively hold negative attributes towards multiculturalism, creating tension within the multicultural group. Similar opinions are shared by Iles and Hayers (1997). Additionally, differences in nationalities regarding value systems and norms heighten membership resemblance challenges, making it more likely to become an issue in multicultural group-work.

It is important to note that although literature on membership resemblance issues such as prejudices and social categorization have been extensively reviewed for example in Dovidio, Hewstone, Glick, and Esses (2010) and Brewer and Gaertner (2004), it appears current empirical research on the subject matter is limited.

Addressing low Cronbach alpha. Although the factor (membership resemblance challenges) resulted in a low level Cronbach alpha of \( (\alpha = .54) \), further considerations were given since the items in the factor shared a common and interesting theme. Keeping in mind that statistical results like the Cronbach alpha based on a single test administration convey little information about the measurement adequacy (Sijtsma, 2009), a low Cronbach alpha value alone might not be enough to dismiss the factor. In his paper, Cortina (1993) notes “...those who make decisions about the adequacy of a scale on the basis of nothing more than a level of alpha are missing the point.... The level of reliability that is adequate depends on the decision that is made with the scale. The finer the distinction that needs to be made, the better the reliability must be” (p.101). Considering there were only three items in this scale, a low Cronbach alpha value could be expected and a further development of the measurement by adding more reliable items could improve the internal consistency (Schmitt, 1996). Moreover, Padilla (2004) argued that in multicultural research, a Cronbach alpha of .50 is acceptable for outcomes measuring differences between groups without intervention. Based on these arguments we decided to retain membership resemblance as an important factor in this study as well as a starting point for future investigations.

The second aim of the study was to find out how students differed in their perception of importance of each of the challenges discovered based on culture (Individualism-Collectivism). The results showed there were no significant differences in perception of culture related challenges and generic group work challenges between students from individualistic and collectivistic cultures. These results were not consistent with previous
research which suggested that generic challenges were more problematic among students from individualistic cultures than collectivistic cultures, while cultural related challenges were perceived more important among collectivists (Popov et al., 2012).

With the world becoming more open and cultural interactions more common than in the past, the view on working multiculturally, especially among young people has shifted over the years. Although previous studies noted differences among cultures on challenges when working in teams (Sosik & Jung, 2002; Popov et al., 2012), this study found that these differences were not significant within student groups for culture related and generic group work challenges.

The first reason could be data collection was conducted in the spring semester when most students had already spent the fall in the multicultural environment. Previous multicultural experience, including studying in a multicultural school, working in multicultural groups and growing up in multicultural family, will build up positive attitudes towards multicultural environment. This is developed by appreciating the value of shared interests and mutual commitment towards the task which overcomes the cultural differences, consistent with findings by Volet (2004) and Volet and Ang (2012). However, this does not mean the generic and culture related group work challenges will be less important in multicultural group work, it only might diminish the perceptional differences between cultures. In this study, the participants, regardless of culture, had previous multicultural group work experience.

Secondly, multicultural studies could be very sensitive to contexts such as time. Gruenfeld (1996) and Koutrouba, Kariotaki, and Christopoulos (2012) found a positive relation between familiarity and group work. Data collection in this research was conducted at the end of a course period, when students had already been exposed to their class study groups. During this time, students with different culture background, had naturally gotten more familiar with each other, and more likely to have developed cooperation norms. Therefore, the cultural differences between collectivism and individualism on the perceptions of group work challenges could have been minimized. Watson, Kumar, and Michaelsen (1993) also showed that time duration would minimize the influence of culture on group work.

Thirdly, perspectives held on diversity in group work affects how groups manage the difficulties that arise when working multiculturally, and how people interpret the meaning of the differences. This has implications on group work processes. It means recognizing the strengths and skillsets brought in by different members. Ely and Thomas (2001) found that in
a diverse workforce which focuses on harnessing skills, insights and experiences of members, provides the rationale for sustained benefits of diversity. The non-significant differences recorded between the cultures could be because the interpretation of meaning of the challenges was different, especially due to the international nature of the group and internationalization as a modern concept.

Montgomery (2009), who did a comparison of how internationalisation had influenced student group work between 1998 and 2008 found that students’ views on multicultural teams had changed greatly. Although students were still culturally aware, they seemed to have developed a positive social perspective towards multicultural teams. Conflict in groups had shifted from being associated with national culture differences in student groups to variation and differences in opinions and designs on how to get things done. This could explain for example why there were no significant differences in culture related challenges.

Membership resemblance challenge was the only kind of challenge that showed significant differences. Students from collectivistic cultures scored slightly higher indicating that this was more likely to be an issue in multicultural group work compared to students from individualistic cultures.

Working in a multicultural group, members usually prefer to cooperate with people who they share similarities with, such as knowledge background, attitudes and so on. This could help build up interpersonal connections, facilitate group work communication and ease misunderstandings. Similar results were found in an empirical study conducted by Volet and Ang (2012).

Collectivist societies emphasize more on harmony and group association therefore making shared similarities important, while individualistic cultures are more open to uniqueness and openness, meaning that membership resemblance may not be as important as it is in multicultural interactions (Kim & Markus, 1999). Additionally, compared to collectivistic societies who tend to get their identities and sense of belonging from the group, individualistic societies are marked as more independent on self-identity (Hofstede et al., 2010). In multicultural group work, the group identity, to some extent, relies on the amount of shared characteristics. Considering that collectivistic students depend more on group association, it might be a reason why students from collectivistic societies would perceive membership resemblance as more important than the individualistic students.
Alternatively, it could be the thinking styles that are influenced by cultural values. Li, Masuda and Russell (2015) also found that analytical thinking style is more typical in individualistic societies, while holistic thinking style is more common in collectivistic societies. This means that, in group tasks, collectivists are also concerned with other elements of group work apart from the task itself, while individualists are more concerned with the task and satisfying personal goals. Students in both cultures will consider membership resemblance attributes; however, it may be more important to collectivists who consider a wider view of the group work process, consistent with Popov et al., (2012).

It should be noted that compared to the other challenges (culture related challenges and generic group work challenges), membership resemblance was the least important challenge among the multicultural student challenges. As noted earlier, searching for resemblance is rather a universal and natural occurrence which carries both positive and negative attributes. The slight differences between individualists and collectivists might indicate a minimal impact on students’ group work attitudes and behaviours. Moreover, participants previous multicultural work experience helps establish positive attitudes towards multicultural group, and exposure to group members given them a sense of familiarity, minimizing the effects of membership resemblance as a challenge.

A few limitations in this research are noted. Firstly, there was a procedural flaw. Although respondents were part of a multicultural class, no clear guideline was given on which experiences to recall. Respondents could have chosen from worst to best multicultural experiences. In retrospect, it would have been better to ask participants to think of their latest multicultural student group work experience when responding to the questionnaire to reduce bias on the group work experience they choose to recall. Additionally, effects of other variable not controlled for within the scope of our study, such as time (length of group interaction), type of the task and group size should be considered in future investigations or studies. Hofstede cultural dimension also raised a concern. Although data from Hofstede’s dimensions dates back, change in culture is very slow and relative cultural differences which are the focus should be very stable. Hofstede argues that cultural changes enough to invalidate the index scores is not foreseen in the near future - perhaps till 2100 (Sivakumar & Nakata, 2001; Hofstede 2001). Even so, we acknowledge that there are limitations with Hofstede's cultural index (see Schimmack, Oishi and Diener, 2005). Internationalisation, migration and multicultural families are becoming more common, future multicultural studies could take this into consideration and use alternative cultural frameworks (e.g.,
Hofstede/Triandis’ combined index of individualism-collectivism) when measuring individualism and collectivism, as suggested by Popov et al. (2012).

**Implementation and Future Suggestions.** This study identified three kinds of challenges that multicultural group work could encounter. By identifying the weakness and challenges in multicultural teams, students can build effective multicultural teams that boost numerous benefits. These benefits include the competitive advantage students may gain on having worked in multicultural groups that employers are growing keen to. Teams are becoming a key part in contemporary organizations and multicultural teams are more common with global companies and migration. Utilization of a tool measuring multicultural challenges could assist organizations prepare their multicultural teams better, ripping the associated benefits like creativity and innovation. Numerous studies have also found and argued the immense potential and benefits of multicultural group work from more effective problem solving to novel ways of making decisions in groups (Watson et al., 1993; Fowler, Gudmundsson & Whicker, 2006). These benefits cannot be realized if multicultural teams are not even aware of their weaknesses. “Man know thyself” - Socrates.

Universities, as organizations can provide an environment where international students can experiment with multicultural teams. Universities should therefore play a more proactive role in packaging multicultural group work experiences as skills students can acquire. Our results could be valuable for universities to help multicultural teams to identify their challenges and develop productive measures/skills to deal with their weakness. Such skills are important future employability skills attractive to most employers. As Carroll and Ryan (2007) note institutions which are serious in internationalization of higher learning can create spaces that foster intercultural learning through multi-cultural group work.

Consistent with internationalization, this study also shows that culture although important is becoming less of an issue when defining student perceptions as a result of exposure to exchange programs, international student organizations, studying abroad and multicultural families. When culture becomes the context and not the subject it becomes easier to identify other issues that multicultural teams might need to focus on. Instead of attributing multicultural group work challenges to cultural differences, the group can concentrate on the actual problems and exploit the diverse skills that team members bring. Recognizing this change could help both managers and future researchers to better manage multicultural groups.
Our research is a stepping stone on member resemblance challenges, where empirical research is scarce, when it comes to exploring how similarities and differences impact multicultural interactions. Future research could explore on resemblance issues and build up a longer scale to reliably measure its influence on multicultural group work.

**Conclusion**

Team work as a basic working format, is growing popular among international companies and organizations. Multicultural group work experience can be an attractive employability skill for graduates who will work in the international environment. Identifying the kinds of challenges in multicultural group work can provide a foundation for understanding group work dynamics and help improve management.

The purpose of this study was to discover the kinds of challenges multicultural student group work face and the role culture plays in determining the importance of these challenges. The study highlighted the benefits of identifying kinds of challenges as an important starting point of building up effective multicultural teams and how internationalization is changing the culture aspect from subject to context. The role universities can play to prepare students for the international workplace by providing a learning platform especially practically was suggested.

The overall findings of this study can be summarized to mean that multicultural student group work does present challenges including culture related challenges. However, culture neither appears to be the cause of the most important challenge to student teams nor an obvious influencer on how students differ in perception of challenges. These findings can be instrumental to both educators and organizations when managing multicultural teams in the modern environment. Taking advantage of cultural diversity as a team work resource and exploring other non-cultural aspects of team work that may pose as challenges to the team could help build more productive and successful teams.
References


Sijtsma, K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach’s alpha. *Psychometrika, 74*(1), 107-120.


Instruction for the Questionnaire:

Hello, my name is Vera (Shuangjie) and my name is Stellah.

We are master students from the organizational psychology department here at Linnaeus University.

Today we would like to ask for your help to fill in this questionnaire for our study. The purpose of our study is to find out about your experiences at school, especially as international students.

The questionnaire is about your experiences in team/group work. It will take you approximately 10mins to complete the both parts of the questionnaire.

Your responses will be confidential. You do not need to write your name on the questionnaire. Your participation in this study is voluntary and it will be highly appreciated.
Introduction
Below are statements about your experiences working in groups. There are no right or wrong answers. Do not spend too much time on one statement; your responses will be kept in absolute confidence. Please try not to skip any item. This Questionnaire Approximately takes 10 mins to complete.

Have you ever worked with a person or people from a different country?  Yes □ No □

Gender: Female □ Male □ Age: _____ Nationality: __________________

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<th>Questions</th>
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<td>1 I find it challenging to work in groups where some team members are free-riding (do not contribute to the team work in their full potential)</td>
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<td>2 I find it challenging to work in groups which have conflict</td>
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<td>3 I find it challenging to work in groups that one team member imposes his/her own visions and ideas on the others</td>
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<td>4 It is important for me to work in groups that team members have similar knowledge backgrounds</td>
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<td>5 It is important for me to work in groups whose team members are homogeneous (for example similarities in age, gender, culture)</td>
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<td>6 It is important for me to work in groups that team members have similar academic attitudes</td>
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<td>7 I find it challenging to work in groups that team members do not communicate properly with fellow members and teachers</td>
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<td>8 I find it challenging to work in groups that team members have insufficient English language skills</td>
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<td>9 I find it easy to work in groups that team members have different attitude towards deadlines (some students want to complete assignments directly/immediately, others wait for the deadline)</td>
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<td>10 I find it challenging to work in groups that has ineffective teamwork management</td>
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<td>11 I feel pressure when I need to defend team decisions whilst not agreeing with these decisions</td>
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<td>12 It is important for me to work in groups that members have similar ambitions (for example, not a group where some members aim to get 60% when others aim to get 90%)</td>
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<td>13 I find it challenging to work in groups that team members have attitude problems such as dislike, mistrust and lack of group cohesion</td>
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<td>14 I find it challenging to work in groups that have a low level of motivation</td>
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<td>15 I find it easy to work in groups that members have different ways of interaction because of cultural background</td>
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<td>16 I find it challenging to work in groups that members have different styles of decision making and problem-solving because of cultural backgrounds</td>
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<td>17 I find it challenging to work in groups that members have different styles of complying with supervisor’s guidelines because of cultural backgrounds</td>
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<td>18 It is important for me to work in groups that members come from diverse education majors</td>
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<td>19 I find it challenging to work in groups that members have different styles of conflict management because of cultural differences</td>
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Thank YOU 😊