

KYMENLAAKSON AMMATTIKORKEAKOULU

University of Applied Sciences

Degree Programme in International Business

Prayas Acharya

Factors related to group dynamics affecting productivity and performance of a group

Bachelor's Thesis 2014

## ABSTRACT

KYMENLAAKSON AMMATTIKORKEAKOULU

University of Applied Sciences

Degree Programme in International Business

Acharya, Prayas	Factors related to group dynamics affecting productivity and performance of a group
Bachelor's Thesis 2014	64 pages + 1 appendix
Supervisor	Jagat Bahadur Kunwar, lecturer (KyAMK)
Commissioned by	Kymenlaakson ammattikorkeakoulu, University of Applied Sciences
December 2014	
Keywords	Group, Group productivity, Group performance, Grounded theory, Group Cohesion, Group Conflicts

The aim of the study is to find out specific group related factors that contribute to the group's productivity and performance. The context of the study is Kymenlaakson ammattikorkeakoulu, University Of Applied Sciences. The main interest in this research is on students from diverse cultural backgrounds involved in group tasks at the school. Most of the students were pursuing the degree in International Business program.

The methodology used for the research is Grounded Theory Method. Structured interviews were used to collect data. The data used are all primary sources of data. Qualitative analysis software NVivo (version 7) was used for analyzing data which consisted of transcribed interviews from 22 respondents.

The study shows that individual factors such as experience, culture, personality, motivation, punctuality and so on determines an individual's group preference, which further leads to ease and difficulty working in a group. If there is ease in working in groups, it leads to higher productivity and performance. If there are difficulties then various conflicts arises. This research shows that depending upon whether the conflict is constructive or dysfunctional, it has positive and negative effects on the productivity and performance of the group respectively. Towards the end, the study is evaluated and further practical and theoretical implications suggested.

## TABLE OF CONTENTS

### ABSTRACT

1 INTRODUCTION	7
1.1 Research and Development Problem	7
1.2 Research and Development Objective and Limitations	7
1.3 Research and Development Questions	8
2 LITERATURE REVIEW	9
2.1 Definition of a Group	9
2.2 The processes of group development	10
2.2.1 Different stages of group development	11
2.3 Group Cohesion	13
2.4 Group Conflicts	14
2.4.1 Factors leading to conflicts in groups	15
2.4.2 The Conflict Cycle	16
2.4.3 Outcomes of Group Conflicts	17
2.4.4 Resolving conflicts	18
2.5 Group Productivity	19
2.6 Group Performance	20
2.7 Conceptual Framework	21
3 METHODOLOGY	23
3.1 Data acquisition	23
3.2 Choice of method	25
3.3 Principles of Grounded theory method	26
3.4 Data Analysis	27
4 FINDINGS	28
4.1 Personal and Group Motivation	29
4.2 Difficulty	30
4.3 Group performance	31
4.4 Group preferences	32

4.5 Culture	34
4.6 Disciplining	35
4.7 Gender	37
4.8 Group conflicts	38
4.9 Group hierarchy	40
4.10 Performance measure	40
4.11 Group Productivity	41
4.12 Group size	42
4.13 Group work division	43
4.14 Experience	44
4.15 Isolation/Belongingness	45
4.16 Leadership	47
4.17 Own Contribution	48
4.18 Personality	49
4.19 Punctuality	50
<b>5 DISCUSSIONS AND ANALYSIS</b>	<b>51</b>
<b>6 CONCLUSIONS</b>	<b>56</b>
6.1 Summary of main findings	56
6.2 Implications for the commissioner	59
6.3 Suggestions for further research and development	61
<b>REFERENCES</b>	<b>62</b>
<b>APPENDICES</b>	
Appendix 1. Semi structured interview guide	

## LIST OF TABLES

Table 1: Personal/Group Motivation.....	29
Table 2: Difficulty.....	31
Table 3. Group performance .....	32
Table 4. Group preference .....	34
Table 5. Culture.....	35
Table 6. Disciplining.....	37
Table 7. Gender.....	38
Table 8. Group Conflicts.....	39
Table 9. Group Hierarchy .....	40
Table 10. Performance measure.....	41
Table 11. Group Productivity.....	42
Table 12. Group size .....	43
Table 13. Group work division .....	44
Table 14. Experience.....	45
Table 15. Isolation/Belonginess.....	46
Table 16. Leadership.....	48
Table 17. Own Contribution .....	49
Table 19. Punctuality .....	50

## LIST OF FIGURES

Figure 1. Two important realms of the group development process (Crawley, 1978) .....	11
Figure 2 Different stages of group formation (Robbins, et al., 2014).....	13
Figure 3 The conflict cycle (Forsyth, 1999, p. 237) .....	17
Figure 4 Relationships between group conflicts and performance (Griffith & Dunham, 2015) .....	21
Figure 5: Conceptual framework for the study .....	23
Figure 6 Framework of findings .....	56

## 1 INTRODUCTION

### 1.1 Research and Development Problem

I have been a student for the last 19 years and during this time I have been involved in tasks that had to be performed in a group which is commonly referred to as “group work”. Meanwhile, the outcome from the tasks has also been varying constantly depending upon the group I work with. This has motivated me personally to understand the unique characteristics of specific groups that can lead to different levels of productivity and performance of the group as a whole. It could also be said that since team based projects are quite common across different organizations, this issue is one of wider application.

This study was commissioned by Kymenlaakson ammattikorkeakoulu, University of Applied Sciences, hereafter abbreviated as KyAMK in this thesis. It is a multicultural and multidisciplinary institution with many international students. As the school has many students belonging to different backgrounds and cultures, they come in contact with each other for different activities during the study courses. Every individual has their own unique style of working. In this context, I am interested in understanding the way they work together which gives rise to my research question: what are the group related factors that affect group productivity and performance?

The research problem is relevant to KyAMK because even from my personal experience as a student, I have seen that not every group set up to perform different tasks exhibit the same level of productivity or performance. The working atmosphere in groups set up to perform different tasks, often comprising diverse range of members, also varies. Most members also had different levels of satisfaction after the group tasks are completed. All of these group related processes motivated me to conduct this research.

### 1.2 Research and Development Objective and Limitations

The main objective of my research is to understand the student’s perspective related to their ease and difficulties working in a group. I also want to understand the factors that facilitate or inhibit group work or group dynamics as a whole in an educational setting. Since the context of my study is a multicultural educational institution, it pro-

vides me with ample opportunities to study diverse individual characteristics of group members that leads to different group dynamics and ultimately different levels of productivity and performance.

To make this study more focused, I have avoided some issues that could be quite important for understanding group processes. For example, this study does not consider how group dynamics evolve over-time. To be more precise, I am not interested in how a particular group evolves over time to form different dynamics. I am more interested in understanding the common phenomenon that all groups face at a certain point in time. That study therefore is more cross sectional than longitudinal.

Additionally, although group or team based work is common in business organizations my thesis is focused on understanding the view point of students in an educational context. If we were to look at experiences of people working in a project team or any other high functioning teams such as top management teams, the insights could have been totally different. Similarly, performance criteria in educational settings also generally tend to be relaxed and not that harsh compared to managerial settings. Consideration of other types of groups could have made the results more interesting and fruitful. This limitation is also due to the access I had for data collection. Although, I wanted to understand about the relationship between group dynamics and group performance in a more generalizable sense, all of my respondents were students from KyAMK.

### 1.3 Research and Development Questions

Cursory skimming of literature and publications in my research area suggested that the issue of group dynamics is multidisciplinary and well established. There was abundant information available which was related to group processes in general. Many scholars and renowned authors had a varied and different approach on many aspects of group related activities. They proposed many ideas and suggestions for how to establish and develop group dynamics within the teams. There was also a significant number of publications which already talked about the well-established group processes.

However, among these many concepts my research question is much more focused on the relationship between different group related factors that affect group productivity

and group performance in general. Therefore my research question is: what are the group related factors that affect group productivity and performance?

As delimited in my research question, I want to find out different group related issues such as size, experience, personality, diversity, conflicts, group preference, etc. that ultimately determine whether a particular group is going to perform well or not. As I was commissioned by KyAMK, this is also a relevant question that would be of interest to the commissioner because group works are used quite extensively as pedagogical tools in education. It must be interesting for any educator to understand how group dynamics affect productivity and performance of the group.

## 2 LITERATURE REVIEW

This section consists of existing researches available related to the research questions. Regarding the topic of my interest I was interested in learning about how past researches define group, why individuals prefer one group over the other, how group conflicts emerge and the kind of effects they could have on group productivity and ultimately performance of the group as a whole.

### 2.1 Definition of a Group

The existence of groups has been quite common in historical period and only through time it was possible to further understand the concept of group more precisely. Specially, the concept of group seems to be quite discussed in sociological literature although working in groups has been a topic of interest in other disciplines as well as organizations recently. Generally people join groups for many different reasons, whether willingly or by force in order to complete certain tasks with the hope of easing the work process by sharing responsibility among groups (Robertson, 1987, p. 168)

According to Robertson (1987, p.169), a group is a *collection of people interacting together in an orderly way on the basis of shared expectations about one another's behavior*. According to this definition, group should obviously consist of more than one person and there should be also understanding among group members related to what behaviors are appropriate within the group. It also somehow indicates that these understanding of behaviors should be structured in some way.

Bass (1960, p. 39) stated that, *we define 'group' as a collection of individuals whose existence as a collection is rewarding to the individuals*. The definition above tries to show that when a person is associated with a group the collective outcome is better than an individual effort.

Many of these well accepted definitions somehow convey a common understanding of what constitutes a group. It seems like group is a collection of individuals with joint understanding about norms and shared common goals, responsibilities and expectations.

## 2.2 The processes of group development

Group develops with an objective to complete certain tasks assigned or determined for the group. In this process, relationships between the group members should also be maintained so that there are no frictions among the group members. The former has been referred to as “task orientation” and the latter as “maintenance” by Tyson (1998). According to Tyson (1998) while the group is developing, there should not be any conflict between both of these facets of group development process i.e. there should not be a conflict between both task orientation and maintenance. In other words, any task related issues should not damage the relationship between individual group members. Although it would seem that task achievement is the dominant factor in most group works, only prioritizing this sphere can be a source of frustration among group members leading some members to even leave the group. For the group to be very productive and effective equal emphasis should be paid to the both realms. This process is summarized in figure 1.

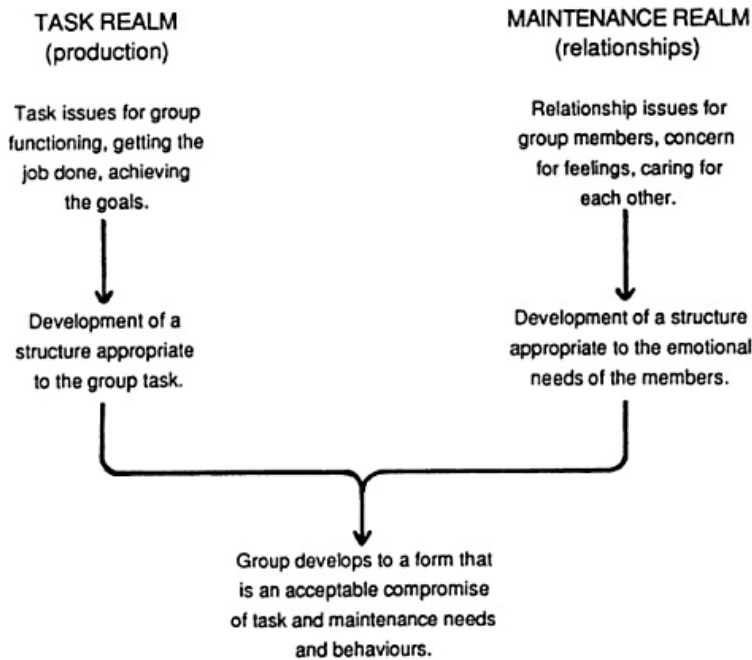


Figure 1. Two important realms of the group development process (Crawley, 1978)

### 2.2.1 Different stages of group development

The development of a group can also be viewed and compared as a life cycle (Crawley, 1978; Tyson, 1998). The groups have a beginning stage which corresponds to birth, development stage corresponding to adolescence and adulthood and finally the end stage corresponding to death of organisms. This fact is also self-evident in organizations and educational institutions where we need to form, develop and end the group in order to complete a certain task. This also means that atmosphere of a group changes over a time as the first meeting is very different compared to the later ones or the tenth meeting of the same group.

As cited in Hughes, et al., (2006: 296), Tuckman was the first scholar to systematically identify different stages of group formation. According to Tuckman (1965) as cited in Hughes, et al., (2006: 296); group development could go through five different stages: *forming*, *storming*, *norming*, *performing* and *adjourning*.

*Forming* is the first phase of group development process. In this phase the members get accustomed to each other. According to Griffith & Dunham (2015), in this stage group members try to assess other peers and subconsciously reflect upon their capabilities. In this stage the group members are quite open and polite to each other as they

are exploring the others. Very little amount of idea sharing takes place at this stage of group development. The members highly look up to the leader and are not yet dependent on each other at this point (Hughes et al. 2006). This stage is thought to end when there is a comfortable interaction between the members of a group and they are more familiar with each other.

In the *storming* stage members develop trust between each other and are comfortable with the other members. Any discontent or conflicts in opinions are openly articulated. This stage is very important for a team in its development and many teams fail to perform well in this stage. According to Griffith & Dunham (2015), group members engage in challenging and questioning other group members as they are already accustomed to each other to some extent and the group is no longer new. Discontents can surface related to any issues in the group such as procedures, assignments of roles and other details (Hughes, et al., 2006).

In the *norming* stage, the group tries to maintain stability and cohesion and focus on achieving the goals (Hughes, et al., 2006). As different conflicts are already worked out in the storming stage, more stable structure starts to develop in the group and each member trust their group members more than before. When the relationship is stabilized the group is geared towards obtaining task objectives. The group members also start to align their identity with the group as they have the feeling of belongingness towards the group. Overall a positive atmosphere exists in the group with positive feedback more and more being common (Griffith & Dunham, 2015).

During the *performing* stage, the group is increasingly more focused on achieving task objectives and the group productivity is highest at this stage. Many groups actually could dissolve before obtaining this stage. All group members collaborate with each other and there is interdependence between task structures (Griffith & Dunham, 2015).

Similar to biological organisms, this stage of the group is akin to the death stage. At this stage, the task objectives are nearing towards completion and the group gets ready to disband (Hughes, et al., 2006). Group members develop their own opinion about whether the group work was successful at this stage and whoever has the opinion that they did their part well display satisfaction whereas others might display discontent. This is the least productive stage of the group. However, it is not that these develop-

ment stages are visible in all groups, and some groups actually disband before many of these development stages appear. These different stages of group development are summarized in figure 2.

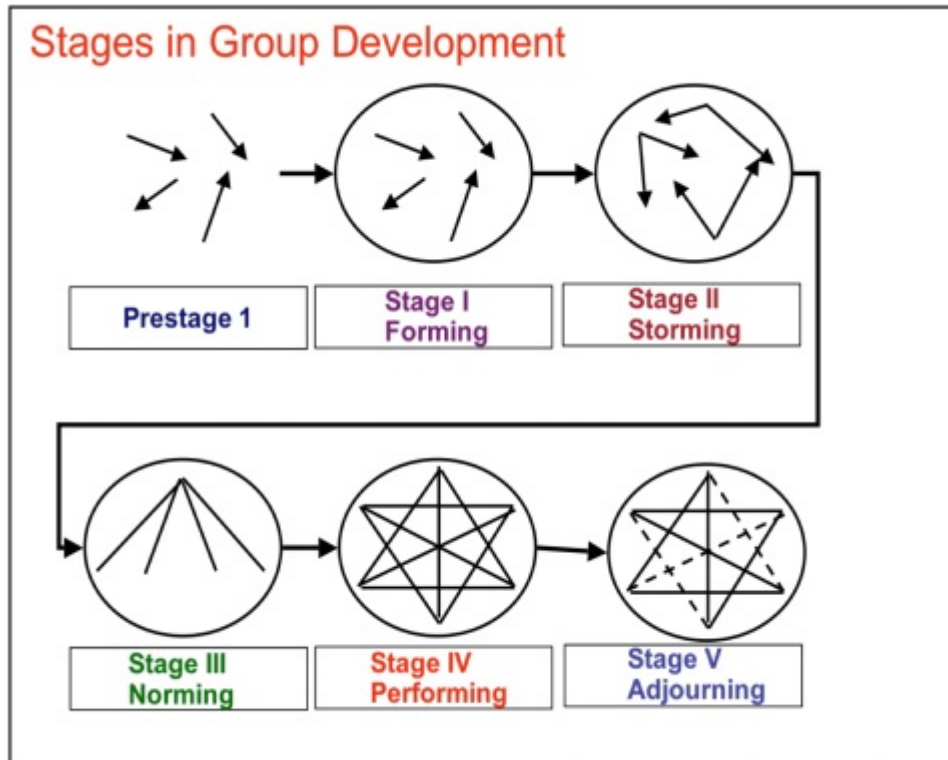


Figure 2. Different stages of group formation (Robbins, et al., 2014)

### 2.3 Group Cohesion

Cohesion is defined in many ways by different authors. Cohesion can be achieved when all the individuals within a group transform into a single body. It is also explained as the factor which causes the members to be attracted towards a group and stick to it. According to Cohen and Bailey (1997), as stated in Griffith & Dunham (2015), “Cohesion acts as a lever to strengthen teams and propel them towards greater adherence and commitment to group norms”.

According to Shaw (1981), if the group is highly cohesive, all of the group members participate actively in performing group tasks. They would also most likely be present in group activities and are emotionally attached to group successes and failures. This interpersonal relationship can act as a bond to cohere the group together.

Members of highly cohesive groups are more energetic in group activities, they are less likely to be absent from group meetings, they are happy when the group succeeds and sad when it fails. It is an interpersonal connection that emerges in a group, and can also be called glue to stick the team together in simple terms. Many scholars (Forsyth, 1999; Griffith & Dunham, 2015; Levy, 2014, pp. 66-68) highlight many different factors that can lead to the development of cohesiveness in a group.

For example, according to Griffith & Dunham (2015), group activities are developed when there is a high amount of information sharing, when there is strong common identity formed in a group and when the group has high competitive mentality in comparison to other groups performing the same tasks. Similarly, Forsyth (1999) also mentions unity within the group, attraction between group members, teamwork and diversity as characteristics of a highly cohesive group.

## 2.4 Group Conflicts

Since group work is a very common practice in organizations and most organizations have a diverse work force belonging to many different countries, cultures and backgrounds “group conflicts” is also a well-researched topic. Although, diversity in the work force and within different groups formed in organization can be conducive to creativity and performance, it is also apparent that these very dissimilarities lead to group conflicts.

When people with differences are working together; disagreement can be created because of differences in personalities, culture, way of doing things, working habits, attitude toward pressure or meeting deadlines and many other factors. Before discussing the causes of conflicts, however, it would be first sensible to present some previous definitions about group conflicts.

Forsyth (1999, p.380), for instance, defines conflict as: “disagreement, discord, and friction that occur when the actions or beliefs of one or more members of the group are unacceptable to and resisted by one or more of the other group members”. Similarly, Singh (2008) considers conflict as the expression of negativities such as “hostility, negative attitudes, antagonism, aggression, rivalry and misunderstanding”. He is of the opinion that conflicts often arise in conditions when interests of two opposing groups are irreconcilable.

Both of these definitions convey similar ideas that whenever there are two or more ideas, attitudes, behaviors, and egos in disagreement, conflict occurs. We can even observe these situations in our everyday work life. This is such a flammable issue that it ignites even with a simple comment passed by one group member regarding presentation of work, punctuality of attending group meetings, disagreement in the slides for a presentation, way of doing things, to another member. As Griffith & Dunham (2015, p.53) put it, “conflict can be difficult because it forces us to consider different point of views, to understand other peoples preferences and priorities, and to accommodate others when we would rather do things our own way”. It is quite obvious that group conflicts have negative relationship with group productivity and performance.

#### 2.4.1 Factors leading to conflicts in groups

Many scholars focus on different factors as sources of conflict. For instance, Forsyth (1999) highlights these following factors leading to conflict in groups: personal conflicts, substantive conflicts, procedural conflict, inter-group competition and self-interests. Differences in personalities can always be a source of conflict within groups. Similarly, disagreements related to goals (substantive) and processes through which group goals can be achieved (procedural) can also lead to conflicts. If the inter-group competition starts to be more influential, the common goal of the group and group members start to act out of their self-interest, these can all lead to conflicts within a group (Forsyth, 1999, p. 264).

Similarly, Singh (2008, p. 36) also mentions many different categories of conflicts. He broadly highlights three different categories of conflict, namely: communicational, behavioral and structural sources of conflict. *Communicational* aspect of the conflict explains that limited and poor communication can be a major source of conflict. When the flow of communication is not proper and if the information is misconceived it can directly affect the main goals and objectives of the group for which everyone is striving. Some factors highlighted by the author as the sources of conflicts are high or low level of communication and channeling of information through many different levels (Singh, 2008, p. 37). This is much more exacerbated when the group members are diverse in terms of their background and their level of experience. When these problems arise there is a high chance of conflict among the group.

Similarly, Singh (2008, pp. 36-37) also mentions that the nature of conflict can be *behavioral*. When there are differences in individual group members in their perception and feelings, thoughts and emotions and other personal attitudes there is a high chance of group conflicts. When group members are diverse and have particular bias towards specific race, religion, gender etc. these can also increase the instances of group conflicts. Behavioral conflicts can also arise when there are differences in ideas and opinions and when some members exhibit self-pride and ambivalence towards other members.

According to Singh (2008. p. 37), the source of conflicts in groups can also be *structural*. Structural conflicts arise in groups due to how task structures are defined and roles are assigned in the group. When the hierarchy is not well established or roles are not clear and there is also ambiguousness in who gets different resources, it can act as a trigger for group conflict. This would mean that when the group work situation is within a large institution or organization, these kinds of structural conflicts can arise.

#### 2.4.2 The Conflict Cycle

Some scholars also describe the cyclical process through which conflict originates and is resolved (Lois Borland Hart, 1991; Forsyth, 1999). Conflicts originate when routine processes are the sources of discontention among group members. If many group members disagree on how a routine process should be carried out due to differences in opinions it can act as a seed of conflict. When more and more group members are involved in the discussion or somehow touch their roles, the conflict escalates. Ultimately, when solutions are obtained or group members work towards resolving the conflicting factors, conflict resolution is achieved (Lois Borland Hart, 1991, pp. 5-6). Figure 3 shows the conflict cycle.

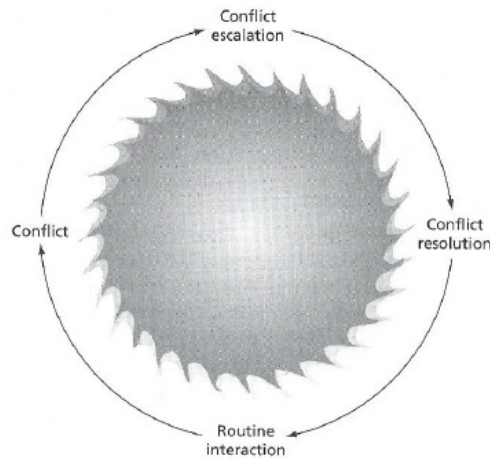


Figure 3. The conflict cycle (Forsyth, 1999, p. 237)

### 2.4.3 Outcomes of Group Conflicts

Although, from the discussion above, it would seem that conflict is inherently negative some scholars such as Sikes, et al., (2010) think that it is always not so. Of course, negative results or outcomes can occur when conflict is not resolved by the members which has a direct effect on the group as well as on the organization. Depending upon the situation, conflicts can also be a constructive measure to achieve group goals. For example, some researchers such as Sikes, et al., (2010) are of the opinion that “An effective team is one where members are capable of handling conflict and drawing out the knowledge gained from disagreements to arrive at a better decision”.

Similarly, some other scholars (Lois Borland Hart, 1991, pp. 8-9; Capozzoli, 1995) discuss many areas when group conflicts can be destructive and detrimental to the achievement of group goals. For example, conflicts can be destructive when they direct the efforts of the group members away from the tasks at hand, decreases the morale of the group members, polarizes group members, leads to unforgivable behaviors and lags in decision making. These are also referred to by Singh (2008, pp. 26-27) as “dysfunctional conflicts”. On the other hand, these conflicts can be constructive only if group members improve their behavior positively after the conflict, builds further cohesiveness in the group, leads to for the source of original conflict and to increased commitment of the group members (Capozzoli, 1995). These are also referred to as “positive functional conflicts” (Singh, 2008, pp. 26-27).

Adding to this, it could also be said that whether conflicts are dysfunctional or positive functional (Singh, 2008) depends upon the attitude and motivation of group members and leaders of the team. If members already have positive attitude towards group works then perhaps, they are more willing to resolve conflicts before they arise or even if they arise to turn it into the favor of the group. Similarly, if leaders also have good communication skills and positive motivation for the group's wellbeing, leaders could have significant role in turning a conflict situation into something that is constructive for the group as a whole.

#### 2.4.4 Resolving conflicts

Conflict is an unavoidable phenomenon in group work, which is expressed by many scholars, authors and is backed up by the literature above. Therefore, learning how to deal with it is also an important issue. For example Sikes, et al., (2010, pp. 17-18) states, "Conflict is inevitable but the important takeaway is not necessarily knowing how to eliminate conflict all together, but to eliminate the problems before they begin or be prepared deal with the conflict as it is presented". There are many suggestions proposed which are functional in managing and eliminating conflicts. If members in a group have a better idea or experience in resolving conflicts the performance of the group is bound to increase and it can produce better quality of output compared to a team who does not have an idea or skills to do so.

Conflict resolution process proposed by Capozzoli, (1995, pp. 28-30) shows that there are several practices that can be followed to manage the conflicts in the groups. Most of these conflict resolution mechanisms are collective effort of the group and includes exploring the reasons for the disagreement, proposing alternative solutions for conflict resolution and agreeing and implementing the solution in the group.

First of all the members should try to find out the roots for the conflicts, for example, is it the clash of personality? Has someone misunderstood the goals and tasks of the group? If the argument is emotionally intense, there should be a break in between and one should only continue when the emotions have cooled down. After things are normal again the group makes proper and effective decisions otherwise emotions will cloud the judgment and decisions of the people. Listening to people and having an open mind for other's perception and ideas should be implemented during the task.

After the first stage, the sides having the disagreement both should have a chance to fully express their ideas towards the solution of the problem. Every solution must be considered (Capozzoli, 1995, pp. 28-30). All the supporting causes for the solution proposed must be examined properly. This process helps the disputed groups to select the best solution which will address their problem with both of the parties benefiting from it. Negotiations can be done wherever possible. If needed, to end the dispute, neutral third parties can also be introduced.

When the solution is agreed upon, it should be put into action where all the members understand their role in implementing the solution. The misconception of the solution should be averted and the parties should be clear about their responsibilities. The solution proposed to end the conflict should also be examined and evaluated properly. Involved parties should have a clear idea if the solution determined is enough to resolve the discussion, if not, they should try to find out what factor made it unacceptable and start searching for next appropriate solution to the problem. After all the above stages are taken the last is to practice the process. Having detail knowledge about all the process is not the main factor but an ability to implement it is crucial. (Capozzoli, 1995, pp. 28-30)

## 2.5 Group Productivity

From the earlier discussion it is already clear that group productivity is quite much dependent upon the stage of the development of the group (Forsyth, 1999). As previously discussed, during forming stage, very few tasks are undertaken. In storming phase, due to high amount of conflicts, the group productivity is the lowest. It would also suggest that the higher instances of conflicts within the group lead to lower group productivity. It is only during the norming stage when relationships are stabilized, trusts between group members increase and tasks are defined well, that group productivity starts to increase. During the performing stage, the group productivity is the highest as task interdependencies between group members are identified and members engage in collaborative work (Forsyth, 1999; Hughes, et al., 2006; Griffith & Dunham, 2015).

In addition to the stages of group development, it was very difficult to find relevant research that exclusively focused on group productivity. However, Stroebe, et al., (2010) discuss some factors that have effect on the productivity in groups. Although

Stroebe et al. (2010) focused their studies exclusively on brainstorming in groups, they identified that free riding in groups, social inhibition of individual group members and production blocking can lead to a loss of productivity in groups. If there are group members who are involved in free riding or depending upon other members' contribution, they will most likely participate less in productive activities which can lead to loss in productivity. Similarly, if group members in a group are socially inhibited they will most likely not be able to contribute highly to group work which will also lead to loss of productivity in the group. The researchers (Stroebe, et al., 2010) also introduce the concept called "production blocking" in their research, which basically means that in a group there are norms which does not let everybody to contribute at the same time. For example in brainstorming sessions, etiquette dictates that a member waits before fellow members explain their ideas. If group productivity were to be measured by generation of ideas in this context, such as in brainstorming sessions, this would definitely lead to loss in the group productivity overall (Stroebe, et al., 2010).

## 2.6 Group Performance

Some researches e.g. (Guzzo & Dickson, 1996), discuss that group cohesiveness, composition of the group and motivation of the group members have much to do with the performance of the group. For example, the research done by Smith et al. (1994) regarding top management teams, which is thought to be a highly cohesive group, as cited in (Guzzo & Dickson, 1996), has shown empirically that group cohesion is positively related to group performance. Similarly, the more there is temporal urgency or time pressure to reach a decision in a highly cohesive team, the higher performance is seen (Guzzo & Dickson, 1996).

Group composition relates to the selection of group members and identifying roles for each members of the group. Previous researches show that the higher the autonomy or opportunity for self-management in a group, the higher it is likely to lead to higher performance. Interdependence of tasks and diversity among group members is also thought to have positive relationship with the performance of the group (Shaw, et al., 2000). Similarly, if every member of the group has equal access to information related to job tasks it will also lead to higher performance. It was also interesting to find that the time spent in planning such as meetings and the financial incentives offered to the group members did not have any effect in the group performance. However, if there

were high interdependencies between group members while it concerned rewards i.e. if reward was dependent upon each group members equally, it could lead to high group performance. It was in fact shown in Shaw, et al., (2000) that reward interdependence had the highest positive effect on group performance. It would mean that just because a group engages in longer time for discussion does not automatically lead to higher performance.

Previous researchers such as Griffith & Dunham (2015) also show that group performance is related quite significantly with conflicts in group. Either very low conflicts or extremely high conflicts in a group are detrimental to group performance whereas medium level of conflicts can prove to be constructive and lead to higher performance. This relationship is also visible in figure 4.

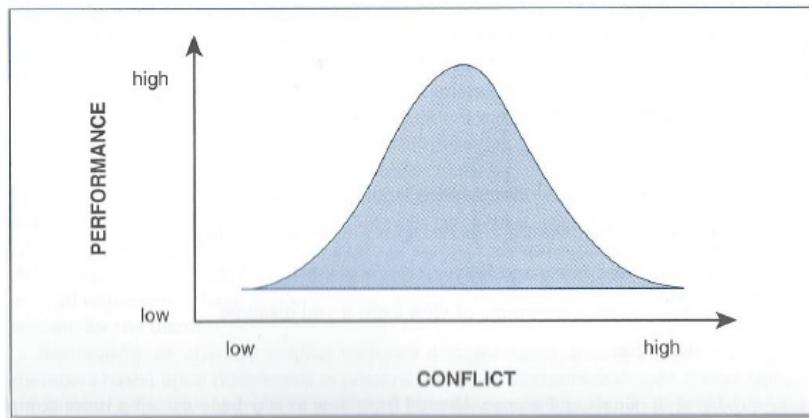


Figure 4. Relationships between group conflicts and performance (Griffith & Dunham, 2015)

## 2.7 Conceptual Framework

Based on the literature review the three most important criteria that seem to have effect on group productivity and group performance are group cohesion, the development stage of the group and the nature of group conflicts existing in the group. For example if the group is highly cohesive the group members tend to have “good chemistry” between the group members. There also seems to be good interpersonal relationships and productive task interdependencies. Therefore the higher the group cohesiveness it would seem that it will lead to higher group productivity which ultimately leads to higher performance.

Similarly, the stage of the development of the group also has positive and negative influence on group productivity. As discussed earlier, groups evolve through forming, storming, norming, performing and adjourning stages. Literature review also shows that before norming stage the group norms are not so well developed and there is ambiguity in defining roles. Before group norms are well developed in the norming stage, the group is rife with conflicts, especially in the storming stage. However, after the norming stage, interpersonal conflicts are lower and tasks are defined more clearly and so the group productivity also keeps on rising. For example during the performing stage the group productivity is the highest.

Literature review also shows that the nature of conflict existing in the group also had much to do with group productivity and group performance. Conflicts existing in a group are not inherently good or bad for productivity and performance, but it is the nature of the conflict that has direct relationships to productivity and performance. If the conflict is dysfunctional both the task realm and the maintenance realm suffers and as a result group performance objectives and inter relationship in a group suffers. However, if the conflicts were constructive it would again have positive effects to productivity and performance.

The relationship between productivity and performance was also evident in the literature. The higher the productivity is, the higher is the performance and vice versa. To summarize then, if groups are highly cohesive, according to the literature it will lead to high performance. Similarly the groups that are after the norming stage in their development stage are likely going to be more productive and perform well. In addition to that if the group conflict is constructive then it will lead to high group productivity automatically leading to high performance of the group. This conceptual framework is summarized in fig 5.

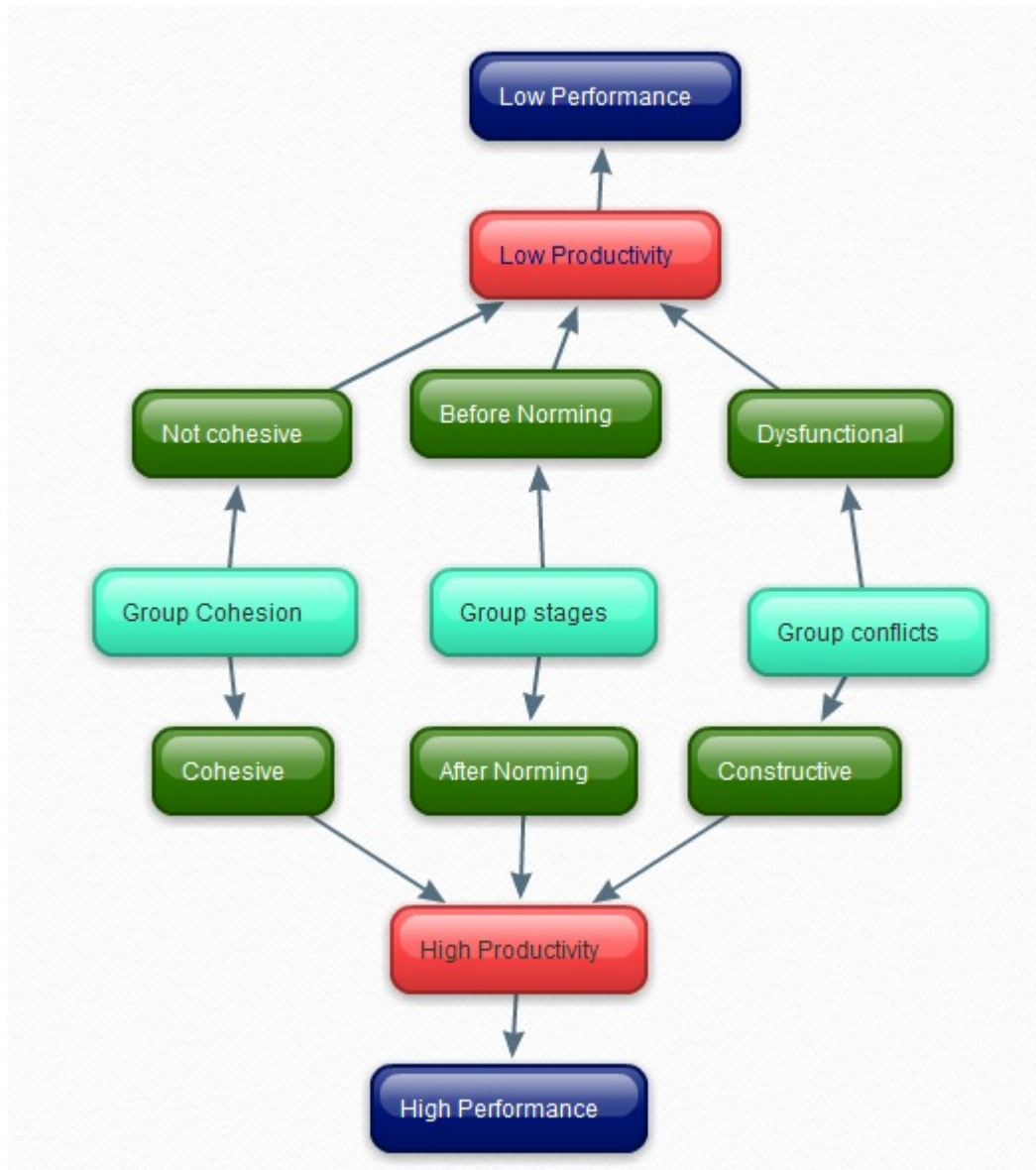


Figure 5. Conceptual framework for the study

### 3 METHODOLOGY

#### 3.1 Data acquisition

The primary method of data collection that I used for this thesis was in-depth interviews. For Grounded theory method, which is the method that I am going to use and elaborate later, in-depth interviews are quite frequently used as sources of data. For my research I prepared a semi-structured interview guideline which is provided in appendix 1. In these semi structured questions, I outlined various questions originating from my previous experience working in the group and my individual understanding of the phenomenon I attempted to understand. In true grounded theoretical fashion, I

relied on my sensitizing concepts, and I decided to use these concepts to prepare the semi structured interview guide. While actually conducting the interview, I took these interviews as only a guide and gave participants the freedom to elaborate on what they thought were major factors that explained their experience working in a group, group dynamics and performance of the group.

I contacted majority of the participants who studied in Kymenlaakson University of Applied Sciences. The respondents that I chose were relevant to my research because I was interested in understanding what they thought were the factors that affect group dynamics and performance. Considering that my commissioner was also KyAMK University of applied sciences, I really wanted to understand what the experiences of the students studying in the school about group works were. Group work tasks/assignments are integral part of degree program here in the university, and by understanding group works in practice, it could be possible to offer recommendations to the commissioner based on the findings of the research.

I used snow ball sampling method to select the participants. Snow ball sampling method is a generally accepted principle in Grounded theory method as well. Following the principle of Grounded theory method, I also choose different kind of respondents based upon evolving theoretical themes which I wanted to explore further. Using my own judgment and recommendations of the participants that I interviewed, I decided to take the respondents who would better provide me with some new themes or explain the phenomenon in a different way.

The number of interviews that were collected were 22 and each was taken following the same interview guideline .They ranged in length from as short as 20 minutes to maximum 40 minutes. After each interview was collected, relevant themes were identified and the next interviews were commenced according to what I wanted to understand more about the phenomenon. All the interviews that were taken were recorded with a tape recorder with the permission of the participants or interviewee, and were then later transcribed verbatim. Most of them were transcribed immediately after the interview in order to identify the relevant themes and to direct further interview collection. Most of the interviewee ranged from being in their first year to the last year of studies. The interviewees were from different cultural background, gender, faculty from whom diverse opinions could be expected.

### 3.2 Choice of method

I am using Grounded theory method (Charmaz, 2006) for my data collection and data analysis. Grounded theory method basically is a qualitative inductive research methodology where the basic idea is to not have a theoretical perspective in the very start or the beginning of the research but to develop a theory from the empirical context. The main focus of the method is to understand the meaning of social actors, so in this context rather than trying to qualify or disqualify the propositions derived from previous theory, I would like to understand the phenomena that are observable in terms of group dynamics in the research context that I am interested in. I think grounded theory method seems the most suitable method for me because in this method rather than following deductive approach where we test propositions or hypothesis we let the theoretical constructs emerge from the research settings.

The basic principle of grounded theory method is that once we derive text of the data like interviews, memos, field notes we have to look for different themes that emerge from the data and each of these themes are later coded into a theoretical category (Charmaz, 2006). In grounded theory method the data collection and analysis takes place at the same time, so I also conducted my data analysis and collection in the similar way using this method (Charmaz, 2006).

For example in the beginning I collected my first interview and then I started looking out for various themes that seemed to be relevant to explain grounded theory method so in the essence I conducted theoretical coding. As soon as I noticed various themes that were emerging from my initial coding (Charmaz, 2006), I tailored my interview questions accordingly looking for the same or additional themes in my other interviews that were going to be commenced in the near future, so this method is also called theoretical sampling (Charmaz, 2006). So in the future interviews I started looking for different kind of themes or categories that already emerged from the first analysis and once I kept on sampling more and more interviews then I constantly compared the codes between these different interviews which is also termed as constant comparison (Charmaz, 2006) in Grounded theory method. As different sources of analytical categories (Charmaz, 2006) emerges from different sources of data it is necessary to keep on comparing between these different sources of data, thus carrying out inductive and deductive approach at the same time (Charmaz, 2006).

The basic idea of Grounded theory method is also that it helps us to understand when the data collection is complete, so once the analytical categories that emerge from additional data collection does not provide any more new data or categories then it is thought to have reached the point of theoretical or categorical saturation (Charmaz, 2006). Once I took 22 interviews and it was very difficult for me to find any new relevant categories or themes so at that point I concluded that I reached the point of categorical saturation.

I first started with identifying emerging theme in the transcribed interviews and as I collected more and more data I constantly compared between the categories from the first interviews and the ones that I did later. I continued this process until I reached the point of theoretical saturation. All of these initial themes were later categorized into analytical categories which were used to develop a theoretical model for explaining the phenomena that I see in the research context. In this situation the research context was KyAMK University of applied sciences, and the phenomena that I wanted to observe was the different factors that affect group dynamics and performance in educational settings.

### 3.3 Principles of Grounded theory method

There are several principles that are needed to be followed when adapting Grounded theory methodology of research. The basic assumption in this method is that we start the research without any sort of pre-conceived theoretical notions about the phenomena being observed (Charmaz, 2006). Most of the time literature review is not conducted and even if it is conducted, basically the concepts that are derived from literature review are used as sensitizing concepts for the researcher to be aware in the research setting (Charmaz, 2006). Following this principle, the literature review for this study was also conducted only after the data analysis was performed.

After that, in the preparation stage relevant data are collected by following appropriate data collection method. The methods of data collection can vary but the most common data collection methods are in-depth interviews and ethnographic observations (Charmaz, 2006). When Grounded Theory method is used to analyze the data so collected, the first step is to conduct substantive coding (Charmaz, 2006), where various themes that were identified beforehand as sensitizing concepts are then used as themes in initial coding. Most of the time the phrases or related terms used for coding is in vi-

vo concepts (Charmaz, 2006) which usually mean that the concepts are something that the participants themselves have used in their own settings and are not constrained by the researcher's bias. In vivo themes automatically emerge from the responses that the participants themselves utter or say.

Once the in vivo themes are identified, after that it is necessary to identify these open codes, from transcribed data. Once these codes are derived the researcher then converts these participants' codes into some other codes that are more theoretical or abstract, than what were expressed by the participants themselves. At this stage, the purpose of analyzing the data is much more theoretical than what the participants themselves use. After conducting these procedures, once we have different theoretical codes derived from in vivo codes of participants, the next procedure is to carry out memoing (Charmaz, 2006).

In memoing, various interrelationships whether causal or non-causal, between different sources of theoretical codes are identified (Charmaz, 2006). In this stage, the linkages between different theoretical codes are identified, and once they are outlined the researcher can then generate a particular model which in a sense explains the empirical phenomena being observed in a much abstract way than what could have been derived just by listening to the participants' views.

### 3.4 Data Analysis

The data analysis was also conducted according to the principles of Grounded theory method. According to the methodology at the beginning, in vivo themes should be identified from the participant's interview or other sources of data. Once they are identified, various recurring themes are identified based on these in vivo themes. After that various related themes are grouped together into categories which are more abstract than in vivo themes. Once these categories emerge, in the process of memoing, relationships between different kinds of theoretical constructs are outlined in order to create a model sufficient enough to explain the phenomenon under observation (Charmaz, 2006).

In this research, I first took interviews with 22 students or participants. Once they were taken, I transcribed those interviews in MS Word. The total number of pages generated after transcription was 101 pages. After all the interviews were transcribed,

I used QSR NVivo (Version 7), qualitative analysis software, where I input all the transcribed material into the software. After importing the document containing transcribed interviews, I read through the transcribed material line by line and whenever some in vivo themes originated, I coded the selection as a new node. If the in vivo themes started to repeat I then coded the in vivo themes into related nodes where they seem similar.

Once I identified all relevant themes, I created around 20 nodes consisting of distinct in vivo themes in the software. Based on the participant's interviews as input, I identified the following as in vivo themes: motivation to work in a group, cultural affinity, difficulties working in a group, disciplining, group size, gender, group conflicts, group hierarchy, group preference, group performance, group productivity, group work division, group work experience, group dynamics, isolation, leadership, own contribution to group work, personality and punctuality respectively. All of these are described in detail in the findings section.

So once these different nodes were identified I reread the transcribed interviews again, and tried to recognize any different themes that might appear in the data, but all these different categories were exhaustive in including different themes. I then used Nvivo software to find links between different themes. In order to do that, I created links between categories using "link to new memo function" in Nvivo. The relevant Nvivo themes and examples of relevant quotations are discussed in the findings section.

#### 4 FINDINGS

In this section, I will present the results after the data analysis. I took the interview based on semi structured interview guide but gave freedom to the participants to elaborate on issues what they thought were important. In the process, I came across many varied and interesting responses related to my original research question. Using Grounded theory method and with the help of qualitative analysis software NVivo, I was able to pin point various themes which I will discuss in detail in this section. After analyzing data from the interviews, I found out that participants considered factors such as gender, culture, motivation, leadership and so on as important issues affecting group productivity and performance. All of these are further elaborated in this section step by step.

#### 4.1 Personal and Group Motivation

As the process continued and when the interviewee were asked what were the reasons that motivated them, many participants gave varied answers. Some emphasized that working in a group is also similar to socializing and making new friends and that there is always a belongingness factor that pushes them to do their best and give a better output. One participant responded, *Group work is nice because it is more of a social activity than working alone that would be my motivation.* Others emphasized the importance of culture and said, *When working with them you can understand different cultural psychology and the work is divided and its way easier to get the credits rather than working by myself for the whole course actually, this motivates me to do group work.*

Risks of disappointing other members and leaving a good impression on the rest of the members so that they will be preferred over others in the class during the next group work seems to be another idea of people that will result in their personal motivation. People felt that they would give it all if the work is fun rather than hectic, and the topic or subject of the work is something that they are interested in. Option of selecting from many different ideas made some people motivated to involve in group work. For example some respondents said, *Working in a group can help with problem solving more as you have more perspectives to look at things, brainstorming together sometimes can give very unexpected results and such things actually are the reason I like to work in the group.*

Some other important reasons were also friendship, trust among the members and the knowledge or personal development after the process makes people to do their best. The fact that there is a sense of shared responsibilities and other people are there to help with different skills. For example one participant responded, *it does make it easier also just because you have different people that are skilled at different things so you can get better results hopefully.* The relevant themes identified from interviews related to personal motivation are summarized in Table 1.

Table 1: Recurring themes in respondent's sources of motivation for group work

**MOTIVATION (PERSONAL)/(GROUP)**

*Pass the course , Teacher says so, Nice people, Socializing, Risks of disappointing other group members, Friends , Group size , Multi-cultural group, Opportunity to show skills, Trust, Belongings, Competition, Fun, Motivating subject topic, Excited and inspired people, Clear goals and milestones, Self-motivation, First meeting, Talented group members ,Past education system and culture, Clear expectations, Social skills , Grades, Good communication, Knowledge, Personal development, Supportive environment*

#### 4.2 Difficulty working in a group

*Like I said the difficulties was just like giving everybody to be on the same page and working on the same goal. This was one of the remarks made by the student. The majority emphasized that they can't do exactly what they want when they are working in a group. When there is a lack of communication or if the group members are not motivated enough, even during the division of work. Well you have to divide the work and sometimes people are lazy. This response suggests that it is hard to work in a group and with people.*

Many said that cultural difference is the major factor that makes it difficult to work in a group because people from different backgrounds tend to have different attitudes and different way of doing things. This response exemplifies the problem, *Yeah, I could say that there were some difficulties but mainly it was because of cultural differences, so some kind of misunderstandings and sometimes it was hard to understand each other and so it was the main root of the problems.*

Cultural factor also tends to separate strong and weak or silent personalities in a group. Dual leadership seems to another noticeable response from the students that when there are two people in command of a single ship the ship is bound to be in the same place because of the imaginary pride that exists between these individuals and when they face these situations it is difficult to work in a group. The relevant themes related to difficulty in group work identified from interviews are summarized in table 2.

Table 2: Difficulty

<b><i>DIFFICULTY</i></b>
<i>Cannot do exactly what you want, You are your own master, Difficult to be in the same page, Difficult to work in the same goal, Managing schedules, Do not trust working in the group, Stressful, Sometimes people are lazy, Cultural differences (Sub Theme), Misunderstandings , Hard to understand, Strong personality in the group, Difficulties in coordination (group size), People slip away from responsibility, Getting used to other peoples working habit, Negative atmosphere, Gender composition (gender), Imaginary pride (personality), Over reliance on particular individual, Dual leadership (Leadership, Group conflict), Belongings to the group (if not), Superiority complex.</i>

#### 4.3 Group performance

One of the main aims in this research was to find out which kind of group performs well. Many respondents emphasized that this element is very important and at the end this is the evaluating factor of all aspects of group work from grades, choosing the prospective group members later, to evaluation of their own contribution and also if the group were up to the standards that they expected.

*I think the longer you work together performance will get better, because I can evaluate the weakness and strength of people and then I will know what kind of work are under his/her skills and which are to be assigned to someone else.* From the above statement we can say that a group which has been working together for a while tends to perform well compared to newly formed groups.

Equal division of work among all the members and equally motivated members in a group can also boost performance. When the group is full of people with wide variety of skills and the communication between members is very strong i.e., there exists open discussion about the ideas and no one's ideas are being neglected, it was apparent from the responses that this factor would increase performance of the group.

I felt that there was a great emphasis on the optimum group size for the task. Additionally, if the group members got to choose their partners themselves it could lead to a better chemistry within a team resulting in maximum output. They expressed that if no one from the group seems to be isolated or feels like everyone is willing to contribute alongside with experience gained from previous group work it tends to increase group performance. Relevant themes identified from the interviews related to group performance are summarized in Table 3.

Table 3: Group performance

<b><i>GROUP PERFORMANCE</i></b>
<i>Trust, Know other people,, Equal division of work load, optimum group size, Group members choose themselves, Not only to pass the course, Chemistry in the team, When work is fun rather than hectic, Similar group members, Different kind of mentality, Work division according to skills and interest, No isolated members, Clear goals and milestones, No cultural conflicts, Similar Motivations, Time schedule, Similar level of talent, Communication, Language skills, Interest in topic, Wide variety of skills, Open discussion about ideas, Leader, Spirit of comradery, No over lapping tasks, Equal contribution, Experience increases group performance, Cultural affinity, Ever one is clear what to do, Group size, Sub group of people, Punctuality</i>

#### 4.4 Group preferences

Group preference is a major factor which affects the productivity and performance of the group. It is highly influenced by many of the themes which I will later demonstrate in my discussion part. Most of the students responded that they prefer to work with members they can talk to easily and have good relationship like, *I prefer a group where my friends are, or the people I know, it is more relaxed. Working with new people you have to put an extra effort to understand their way of doing thing and you are not open to them in the beginning till you get to know them.*

Experience was another major aspect that influenced an individual's preference over different group members. This includes previous knowledge about skills of the class-

mates, if the group performed well during the past or previous group works, if there was equal input from the members in the past and so on. Generally students seem to avoid working with the members with whom they had bad experience in the future works. Past group performance indeed plays a very crucial role in the preference of one group over other for many students. *I prefer to work with the same group with whom I had good experience before and working was fun not stressful or similarly, If I get to choose I would think about the past, who has been a good worker.*

Culture also has a significant role in preference. People tend to get attracted to similar culture because they think at the same level and start on the same page. Communication is easy and there is less tension and better understanding among people. *I prefer working with the Russians, because we are from same culture and I can speak Russian with them, it is also easier to meet outside of the school on social context.*

Personality, motivation and skill compatibility of the group members also positively affected group preference. The main idea here is that the participants would like the rest of the group members to be equally motivated, hardworking, open minded, members who have an attitude as *no idea is a bad idea* and with skills that will facilitate each other. All of these aspects also played an important role in the preferences.

Many pinpointed that the preference factor was strong during the beginning of the studies, but as they were more involved in group works and knew how to deal with different culture, they didn't care. The more they gained experience the more they wanted to work with people from different cultures. Many relevant themes identified from the interviews related to group preference are summarized in Table 4.

Table 4: Group preference

<b>GROUP PREFERENCE</b>
<i>Friends , Skills, Assigned vs chosen by self, Motivation , Previous knowledge about skills of other classmates, If the group has performed well in the past, Different culture for cultural experience, Active, Predictability, Experience , Same cultural group , Hardworking, In early period preferences but not later, Work in the same pace and same way, Open minded , Welcome idea, Understand work phase, Good presentation skills , Small group (group size), Equal input , Compatibility of skills, Same faculty, Type of assignment, Interest in topic , Working habits, First meeting, Understanding the topic, Avoiding people with whom you had a bad experience, Innovative and responsible</i>

#### 4.5 Culture

The setting of my research was a multicultural environment, where people from different parts of the world came in contact. Many students had different opinions regarding culture. Some thought cultural similarity made work easy and had its own benefits like; *working with Finnish people, it's obviously easy because I can use Finnish language.* Culture to some respondents meant thinking alike, starting from the same level and had a positive impact on the group preference while some added; *Sometimes good perspectives can be missed out on if there are only Finnish students in a group.*

On the other hand, this was also the main reason for conflict in a group, *It's just mainly, the cultural conflicts, because the eastern and western culture are different, in expressing their opinion and in this case the western culture can overpower the other culture.*

Culture shaped the personalities, motivation, the way people handle stress, communication styles and views of individuals, and most of the respondents pointed out that it is this factor that influences the concept of time in a person. *Time has different meaning depending on which culture you are from, in some cultures 7:00 o'clock means*

*exactly 7:00 while to some it can mean 7:15 or 7:30 even. Cultural differences make a person think differently on the same topic, Cultural difference like Chinese have a completely different way of doing things which might be harder to follow and agree for us Europeans.*

Definition of leadership and hierarchy also varied according to culture. Students from European cultural background, especially Finnish students thought that hierarchy is not really needed in group work and it is generally flat. Working with different culture gives valuable knowledge and experience to the group according to some and is a great source of idea generation because of difference in perspective and opinions. Many different ways how culture affects different facets of group work are summarized in table below.

Table 5: Culture

<b><i>CULTURE</i></b>
<i>Concept of time, Concept of performance, Dealing with people from other culture, How they handle stress, Differences in likes, Concept of deadline, Motivations, Concept of hierarchy, Leadership concepts are different, Communications, Effects motivation for group work, Way of thinking, Getting pissed off, Similarity in ways of doing thing, Punctuality, Concept of gender, Viewing things on a different level, Meeting outside of school in social concepts, Not hurting feelings, Contrary from where group work is not well known, Generally, shy from people of different culture, As I am Finnish, I tend to stay formal and on task, Good perspectives, individual attitude towards work, Attitude towards risks, Difference in expressing opinion, one culture may dominate opinion, one culture may dominate another, Understanding other group members, Personality not culture.</i>

#### 4.6 Disciplining

An interesting fact that came into light after the interviews was that the leader of the group or other group members engage in disciplining when someone is not performing as they are expected to. In case of members who are not doing their part, students

took different kinds of action by discussing with each other. They tend to inform the teachers directly, vote among each other whether an individual who is not pulling their weight should be allowed to continue, be a part of the group or to remove the member out of the group completely. *I will tell them that if they don't give a better input I will complain about this to the project organizer or ask on a vote if they should be kicked out from the group.*

Second or third year student with more experience in group work tend to be polite, relaxed and take a motivational approach when dealing with people not performing well enough, *I will try to motivate the person and if he/she is having difficulties, I would show him/her, how I personally would have done the part.* Majority claimed that if the group is having problem because of members under performance they will tell the person to leave the group directly and do not mind doing extra part in a group work. *We just remove the member out of the group, I do not care, I can do his part but I will not let him get free credits and take his problems in my head, yeah, straight tell him that this is not a free ride.*

Some accepted the fact that they do not want to get stuck in the same course or have a bad grade so they will happily do the part of the under performer but later they will avoid the person and think twice before working with the same member. *To be really frank, I will do the extra work, I want the credits. I do not want to do the whole course all over again just because of one person and especially no re-sits.*

The problem of this free riding member as stated by the participants originates when the groups are assigned by the teacher. If an individual is allowed to choose their prospective members many things are already taken into consideration by a student to prevent this phenomenon especially by the ones with more experience.

*There is no mechanism to evaluate an individual's contribution in group work at our school; this is the main reason for the free riders not to put enough effort.* The relevant themes identified from interviews regarding disciplining are summarized in Table 6.

Table 6: Disciplining

<b><i>DISCIPLINING</i></b>
<i>Discussing with other Members, Informing Teachers, Voting, Democratic way of doing things, Motivating, Trying to engage more in the task, Being angry and ignoring, Either do something or leave the group, Do some extra work, Finding approaches to deal, Talk politely, Remove the members out of the group, Straight tell him that this is not a free ride, I do not care get free credits or whatever, Complain to the project organizer, Have argument, Replace group task to individual tasks, Find someone else who does not like him and talk bad about him, Avoid create bad feeling for the person , I will cover up for the work because it's for the grade at the end, Avoid him/her in other group works</i>

#### 4.7 Gender

Quite frankly most of the students expressed that gender does not influence their activity in a group work. *No problem at all, as long as the work is done I don't mind if it's a girl or a boy so gender has nothing to do with me.* However there were some who have had problems or other experiences regarding gender. They thought that depending on the culture gender brought differences in personality, attitude, expression of ideas and opinions etc. *In eastern and Asian culture females are quite silent while men have louder voices and they make sure that they are heard. When working with these cultures, I pay attention that the females are also expressing themselves because their ideas are equally valuable.*

Some said that it is hard in any culture for a man to let go of his ideas and agree on a different way of doing things. Working with majority of female members in a group also led to interesting consequences. The male members thought that they were paying more attention to how their breath smelled and if they were looking good. Some male respondents shared their experience as; *it is pretty annoying to work with females in some cases because they use rest rooms a lot for makeup and waste valuable time for doing group work.*

The students also uttered that they preferred communicating more with people of opposite sex because it is just natural to get attracted towards them, to some it was the main motivation to give their best input. *I think when I work with girls I am more motivated, I do not want to lose my face and want them to think I am dumb.* The relevant themes related to gender in group work identified from interviews are summarized in Table 7.

Table 7: Gender

<b><i>GENDER</i></b>
<i>In some cultures males find it hard to give up , In some cultures males and females are not equal Do not express, Females in some culture are quitter than males, Finnish girls are silent, I prefer communicating with males, Girls go quite often to toilets, I was only girl in the group and boys ignored me</i>

#### 4.8 Group conflicts

The interviewees quite openly talked about the conflicts that they faced and majority of the times the cause of group conflicts was cultural differences and personality of an individual. *It's just mainly, really often the cultural conflicts, in this case, because the eastern and western culture is different, in expressing their opinion and in this case the western culture can overpower the other culture, because it's really common to say your opinion straight in western culture in this case their opinion is just subdued.*

*When there is a difficult personality in the group, the group at some point is bound to face conflict.* Another source of group conflict as pointed out by the participants was conflict caused by leadership. *If the leader is just prioritizing his or her ideas and not giving space to others it automatically escalates conflict.* Isolation of group members also is a noticeable aspect in cases of conflict because once a person feels isolated they do not tend to pay attention in the group work anymore which causes conflict and that is when disciplining comes in.

It can also escalate during work division, when a member is not happy with his part of work. When there are members who do not prefer each other in the same group, conflict of superiority comes into picture as stated by the respondents. This phenomenon is quite common when the groups are assigned rather than when an individual chooses by himself. *When the teacher or somebody else has put the group together then there are greater chances of these conflicts, compared to when chosen by me personally.*

When group comprises members from different faculty there are times that also lead to group conflict. *At a time when I was working with the design students, there was a lot of tension in the group, arguments and disagreement was always happening. They were not interested in the concept of cost or revenue like us the business students, they were rather creative and did not like studying books or articles.*

When the ideas were put in the report without crediting the member, from whom it came, when important ideas were left out from the final report, preference of own ideas over others, these kinds of factors intensified the chances of conflicts in a group according to the students. The relevant themes related to Group Conflicts in group work identified from interviews are summarized in Table 8.

Table 8: Group Conflicts

GROUP CONFLICTS
<i>Leadership conflicts ( not giving space) , Cultural differences , It is not really a group work if we have a tyrant , Personality , Isolation , New to the group and two other members know each other from before, Competition, Free-ride , Negative atmosphere , Imaginary pride , Difficult/Odd personalities, Division of work load , Lazy people , Punctuality , Agreement about the details of the project, More conflict when group is assigned , Two different programs, Un-cooperative/ Non responsible group members , Own performance vs group performance, Gender , Loud people, Using other people idea without crediting them, Preferring their own ideas, Ignoring, Slow learners, Arrogant group members, Sweet talkers, Assigning tasks where you are not competent , Cultural domination, Groupism</i>

#### 4.9 Group hierarchy

When asked about the hierarchy, the concept was familiar to some students very clearly while some had problems understanding it but in general, as stated by the interviewee the concept of hierarchy depends on culture. Some countries have stronger value of this concept while others take it in a relatively relaxed manner. *I guess this depends upon the cultural background; everyone is equal in the group and does the same amount of work so hierarchy is flat.*

Responses like *hierarchy depends on group size* were also common from the participants. Many believed it can change as the passage of time. *The positions can change because after some time it might be that some people gained more knowledge than they had previously, compared to other.* Others believed hierarchy is formed automatically within a group when someone has a better idea what to do compared to the others. In this case others will listen to this person and even without realizing he is already the leader of the group. The relevant themes related to gender in group work identified from interviews are summarized in Table 9.

Table 9: Group Hierarchy

<b><i>GROUP HIERARCHY</i></b>
<i>Culture , Someone should divide the work and keep people in contact, Establishing rules, Organize meetings, Natural coordinator(Tendency),(Planning, communicating, expressing), Dividing tasks, Experience , Pace of how things go, Positions can change, There are people who don't know what to do , Dividing responsibility equally</i>

#### 4.10 Performance measure

Upon asking the participants about how they would measure the performance of the group, majority of the parties said that the grade will be the factor because at the end it is important for the evaluation of the whole tasks or assignments. Some responded that

positive feedback from the teacher and other group members would be another aspect to see if the targeted goal was achieved. *There are usually feedback given in the Moodle page after you submit the report where the teacher gives various comments on the work done, that in my opinion would be the performance measure of the group.*

Others took more realistic approach and expressed their opinion as feeling of satisfaction after doing the task. For some, the knowledge and experience that they gained during the whole process was the relevant performance measure. Still for others, how other students viewed their contribution was the major criteria for performance. For instance, when presenting the task in front of the class, the other listeners are interested and paying attention to their ideas or just looking out of the window. For majority of the students the appreciation that they received from others in the class later would be the performance measure rather than the end grade. The relevant themes identified from the interview related to performance measures are summarized in Table 10.

Table 10: Performance measure

<b><i>PERFORMANCE MEASURE</i></b>
<i>Grade, Feeling of satisfaction, Learn during the process, keep on growing, When I contribute myself, Feedback, How other people see my contribution</i>

#### 4.11 Group Productivity

The answers regarding how to increase group productivity according to the students made it clear that if the groups agreed on an artificial deadline before the actual one and work to finish the task, the productivity will increase significantly. The work will be done earlier so that the students would not face any kind of stress, which in my opinion is a very good solution. Being a student myself and having faced many difficulties during the assignments, this idea would have saved a lot of us from trouble.

They also uttered that if they find the topic challenging then they feel more motivated to get it done and thus increasing the productivity. Clear goals with good work plan in the first meeting would give the students a good boost and will keep everyone in sync

and at the same page. *When the topic is not close to me or is hard, challenges make me more productive.*

Many agreed that when the work is divided according to the skills and interest the group will definitely increase the productivity of the group, *when I have a part where I have complete control and idea of how to deal with the challenge, I am productive.* There were different responses as, during the middle phase when the whole task is already divided among the members and when they start working individually, that's the time when everybody can do their own part and present it to the group. Everyone is equally motivated to do so which will increase the productivity. The relevant themes related to group productivity are presented in the table below.

Table 11: Group Productivity

<b><i>GROUP PRODUCTIVITY</i></b>
<i>Artificial deadline, Challenging topic, Clear Goals, Good work Plan in first meeting, Assigning tasks according to skills , When I feel like I can contribute, During the phase of Group work ( after getting parts sorted and starting individually)</i>

#### 4.12 Group size

Regarding the group size almost all of the interviewees expressed that 4 members would be an ideal number in a small group, *I think the most projects I have been involved with 4 people was really good so 4 will be the best number of people in a small group.* The preference in number increases according to the task or the nature of group work according to the previous experience they had in our school. They emphasized that if the group is relatively large there is a very strong need of a leader in the group to coordinate and keep track and it is very easy for someone in the group to remain passive and not share responsibilities. *The bigger the group the easier it is for someone to hang out in the side lines and not take responsibility, for the small group everyone takes responsibility and it's not easy to slip away.*

Some said that the number of members in a group depends upon the type of skills required to finish the task while some gave contradictory opinion like if there are many members there will be too many voices talking at the same time and the ideas might be left out. The relevant themes related to Group size are presented in the table below.

Table 12: Group size

<b>GROUP SIZE</b>
<i>Two members easy to divide work, More members difficult to keep track / communicate, Co-ordinate, Group members 4-5 ideal, there should be a leader, Understanding the tasks better , Shared goals (small group), past experience says 4 members ideal, Too many voices talking at the same time, Finding directions, Members isolated , Organization (schedules, meetings), Depends upon tasks, Types of skills required</i>

#### 4.13 Group work division

On this particular theme the respondents had very diverse and interesting thoughts. First of all majority of them told me that the number of hours are divided according to the credit value of the course so even work load to every member was the main preference from the students. *I mean even work load is always the best, it does not make sense if one person does half and the rest do not do that much or a small portion of the work.*

Many said that group work division should be done according to the task and skills of the members and from the previous experience at the first meeting. There were many that also voiced that the leader should be the one who should divide the task if there are no preferences. *I think that first everyone should tell their skills if it's already not known, like what are you good at or what you are bad at and what part you prefer and then analyze the task and search for parts, divide it according to skills exactly.*

An interesting fact that came to light from the respondents' answers was the fact that people having strong personality are very likely to take their preferred part and then there might be members who just have to do the part that is remaining. Topic also

plays an important part in the division of work alongside with the interests of the students. They shared that if they are not interested about the topic they do not really care which part they do because at the end it is just for the credit and for a sole intention of passing the course. The relevant themes related to group work division are presented in the table below.

Table 13: Group work division

<b>GROUP WORK DIVISION</b>
<i>Even work load , Choosing members , Previous skills, I always end up being the coordinator , At the first meeting , Leader assigns if no preferences, According to credit number of hours divided, Problem in evaluation, According to topic, Difficulty or ease of topic , Avoid overlapping, People who have strong personality take their preferred part in the tasks, Based on IT and content skills , Interesting and boring</i>

#### 4.14 Experience

This in my opinion is one of the major themes of my data collection and the answers from the respondents were relatively interesting for this. They expressed that they have learnt and grew as an individual compared to the first year that they were here. As the time goes by they tend to have knowledge about individual skills of the fellow students, more control over emotions and a general knowhow about the cultural differences. *As for myself I think there is a huge difference now because I have more experience than before, like now I don't get pissed off easily like before.*

They stated that the experience factor tends to improve the ability to work with new people, culture and also the skill to handle misunderstandings and conflict will automatically develop with the passage of time. After understanding and facing different phenomena students tend to be comparatively relaxed. *It's just because I have had worked in many group related activity now that I am capable of resolving conflicts within a team and I have even done it so many times.*

People in our school come from different backgrounds and are habituated to different learning styles, after knowing the school system better for example using Moodle, Winha, Soleops etc. properly they feel more confident to work with other members. Another noticeable aspect would be the increased trust and the ability to deal with different culture. *Experience has the same importance in group work as a hero has in the movies, it is the main character.*

This particular theme is related to many of my findings and influences many behaviors of the members both positively and negatively. It provides crucial insights for some while makes some better at making decisions or interacting with others. The relevant themes related to experience are presented in the table 14.

Table 14: Experience

<b><i>EXPERIENCE</i></b>
<i>You know the people , Trust , Easy to work, Knowledge about individual skills , Fun element, Who is hard worker, You know what to expect, Easy to evaluate strength and weakness, With new people you have new emotions, Experience tends to improve the ability to work with new people, Misunderstandings will end, I do not get pissed off easily now, I want to change partners, Build upon previous tasks , Know the school system better (Moodle, enrolling in courses, sole ops etc.), Increased trust, Past experience , Knowledge about schedule and habits, Cultural skills, Social skills, More knowledge , Compatible skills , Dynamics gets better , Productivity gets better, Language skills, Confidence, Responsibility , Confidence with different gender, I care less about final results, Avoid unknowing group members</i>

#### 4.15 Isolation or Belongingness

Isolation directly affects the morale of a person, thus affecting his motivation and productivity which in turn affects performance. This element is very important to the students, according to them; no one should feel isolated in a group. *Yeah I think it's really important to make sure everybody feels that they are involved because if they don't feel so they might stop working or be an outsider in the group.* There was a sig-

nificant number of interviewees that had felt this sense of isolation or belongingness during their group activities and they think communication is a major cause for this phenomenon.

There were other responses like, *I don't have an idea or understand what to do in the task then I feel isolated*. If there is less understanding about the topic of study compared to other group members then some said they felt isolated. In addition to that they revealed that when they are new to the group and let's say some members have been working together for a while or have better communication and understanding between themselves they feel left out of the group. *If the people have been working in the same group and I am the new one*.

Ignoring ideas and ideas being left out from the final work is the worst feeling and just takes down the morale of the respondents, while if there is a sense of belongingness they expressed work suddenly doesn't feel like work. Rather, it is very fun and exciting to work in that kind of group where there are no misunderstandings and the communication is just good. *Belongingness makes you motivated, it makes you a team and gives a sense of competition, and you want to be better than the rest of the groups in the class, like we have to be better than this group or that one and working is fun rather than hectic*. The relevant themes related to isolation are presented in table 15.

Table 15: Isolation/Belongingness

<b><i>ISOLATION</i></b>
<i>Working atmosphere, When other people understand better than me, Language skills, Ignoring persons, I am the new one, Communication , Ignoring ideas, When ideas are left from final report, Left out from social happenings where other group members are present, Motivation , Different faculty , When people are shy and silent, Productivity, Gender , Culture .</i>

#### 4.16 Leadership

After the interviewing process I was able to understand during which cases this trait is present in a group work and how it is developed. Leadership is needed when there are some members who do not have an idea of what to do. *In a group there might be members who don't know what to do then, there should be a leader for the team I think.*

There is a need for a leader in a group when there are difficult personalities, because of whom there are some complications and problems for the other group members. Some expressed that in the beginning everyone seems equal but natural leadership qualities in some individuals can be noticed clearly as the work is advancing. If the members are not motivated then role of a leader is crucial. *If people don't raise their hand be excited then it is also a sign of members not being motivated then someone has to say you are doing this and your part is that, end of the story.* The leader according to the students must have a clear idea and knowledge about the topic more than the other members so that he can guide them in case of difficulties. *If there is someone in the group who knows about the topic more than the current leader then, he or she who have more knowledge should be the leader.*

*When the group is large, it is very hard to divide the work, manage schedules, plan meetings, know that everyone is on the same page etc. There must be a leader to take care of this.* This justifies that there is more need for a leader in large groups compared to the small ones, however the students also pointed out that when there is presence of two leaders in the same group the boat is going in different directions because of two captains sail the boat differently as long as there is a strong flow of communication and no personal struggle. The relevant themes related to leadership are presented in table 16.

Table 16: Leadership

<b>LEADERSHIP</b>
<i>Giving space to other people, Respecting opinions, Concept of hierarchy , Knowledge about work tasks, Group size , Motivation , Co- ordination, Strong personality , Natural tendency , Experience , Responsibility , Disciplining , Isolation, if someone feels like it then a leader is needed, Scheduling, Better at communicating, expressing and planning, More than one leader leads to conflict</i>

#### 4.17 Own Contribution

I was interested in knowing how students evaluated their own contribution to group work. Many did not know how to evaluate own contribution and said similar things like grade of the course, which is also a criterion to evaluate performance measure. *At the end of the day I get the credits for the course and good grades I feel that I have contributed.* Self-satisfaction, that the respondents feel after the whole process is completed also acted as a reward for individual contribution for some. *The feeling that I get at the end, when I look at the work if I am satisfied or not that will be the factor to evaluate my contribution.*

Positive feedback from the other group members and their willingness to work with an individual again would be another standard of measuring own contribution. Some replied as, *when I see that the part that I had written is there on the final report of the group work unchanged, I feel like I have contributed.* Relationship with the group members, when the members learn something new and unknown and if the member had the same level of enthusiasm till the end of the task they believe, these factors will be a measure to evaluate own contribution to group work. The relevant themes related to own contribution are presented in the table 17.

Table 17: Own Contribution

<b><i>OWN CONTRIBUTION</i></b>
<i>Feedback , Feeling of satisfaction , If people want to work again, When task is complete, Excitement about subject/ topic, Did my part, When ideas are valued, How much I learnt, My morale, If my skills were utilized, Class perception ( presentation, if people were paying attention or were bored), Member feedback, Type of material/part done by individual.</i>

#### 4.18 Personality

Personality is another important trait that seems to influence people's group preference choices. Upon asking the participants on how they deal with difficult personalities in the group the replies were, *it is a good question actually, it's hard stuff to deal with, and when there is a strong personality you can't do much than to agree because the person will have some influence in the group.*

The respondents admitted the fact that difficult personalities in a group can cause conflict in the group. *Usually it is about this imaginary pride that I have to have my way and I am always right and that is the main root for conflict.* Personality also depends on the culture that you belong to as it plays an important role on how people express their views and opinions. *Some can easily say what they want whereas some might speak for 30 minutes and say the same thing like the other person who has said it in 5 minutes.* People from the same cultural background also seem to be affected by personality of the people, *Disagreements I think depends upon the personal characteristics because I have faced problems with people from my own culture that had different characteristics, we had conflict and they were sometimes aggressive and we weren't in the same road in the tasks.*

Personality tends to be a factor leading sometimes to isolation of some students and as a result students make a major decision of leaving the group and not pay attention at all to the work, *unfortunately I have left groups because of people with difficult personalities before and have replaced group tasks with individual tasks given by the lec-*

*turer*. Personality according to some students also impacts the work division and in selection of individual part of the group work. *During the group work people who are strong in expressing themselves pick what they like and the remaining just have to do the part which are left for them.*

#### 4.19 Punctuality

When I asked the students how important punctuality is in group work according to them, many replied that it is one of the most important factors in group work, *Punctuality, that's one of the most important thing for me for example if you have group meeting at six that means that everyone is already there at six.* This element is highly influenced by culture as stated by the participants. *Well, regarding different cultures, one of the biggest problems is punctuality, the definition of time is a bit different; well I mean that if people are coming from complete different cultures there can be some complications with them, I mean some people tend to take time in different manner and so on.*

Group members find it annoying when someone is late for group meetings and discussions. *Coming late to meetings can waste other group member's time and we have to explain or repeat the same thing again which is actually a bit annoying.* Punctuality does not only mean being in time for the meetings it is also about submitting individual part on time and also meeting deadlines of the course or the tasks. The relevant themes related to group hierarchy are presented in table 19.

Table 18: Punctuality

<b><i>PUNCTUALITY</i></b>
<i>Culture , Motivations, attitude, Facebook groups, Artificial deadline , Motivating members , Disciplining , Concept of time, Organizing schedules, Apologizing after being late</i>

## 5 DISCUSSIONS AND ANALYSIS

Commencement of this thesis was with one major objective that was going through in my mind. It is clear from my research question that my objective was to find out about group related characteristics that determined whether a particular group will perform at higher productivity level which ultimately will lead to higher performance. From the literature review I found out that the most discussed factors related to group dynamics are group cohesiveness, different stages of group development and group conflict and resolution of group conflicts.

In the literature review section, there were many discussions about stages of group development and its relation to group performance as mentioned earlier (Forsyth, 1999). The group which is at a performing stage, which comes after norming stage, tend to perform well (Griffith & Dunham, 2015). Also it was not the group conflicts themselves that led to adverse effect on group performance but it was the nature of the group conflict i.e. whether it was constructive or dysfunctional (Singh, 2008). Similarly the cohesiveness level of the group also had positive relationship to group performance (Levy, 2014). In the conceptual framework I diagrammatically showed the conceptual relationship.

However, after the data collection and data analysis I discovered that this relationship is not as simple as it is shown in the previous literature. For example, I found out that group cohesiveness is not automatically given in many ways. Group cohesiveness is influenced by whether the group members have an options to be a member of a group which they naturally prefer. Similarly, the past literature shows a negative relationship between dysfunctional conflict and group cohesiveness i.e. the higher the dysfunctional conflict the lower the group cohesiveness and vice versa (Capozzoli, 1995). It also discusses many factors that lead to group conflicts. However, most of the theoretical discussions on factors leading to group conflicts do not include or discuss in detail the factors that are unique to my empirical context. In addition to that, the results of the present study showed that the group members collectively or individually get involved in “disciplining” actions. It is something that I found from my research and during the skimming of literature this element was not discussed.

To summarize, I have several unique findings in my research. At first, I found out that different factors such as experience, culture, gender, personality, motivation to work

in a group, etc. lead the individuals to prefer one group over the others. I discuss all of these factors in detail in this section and explain how these factors are related to preference of one group over the others.

Culture which is a very influential and major aspect of the group work seems to play a very important role when the students are choosing their group as well as prospective group members. The participants explained that when working in a culturally different groups there is differences in likes and the concept of performance might also be different depending on the person. When people are from different backgrounds the way that each individuals handle stress is also different. On top of that they also expressed that when they are working with the people from same culture, meeting outside of the school in social context is also easy. These are some among the many reason why group members preferred working with people from same culture, whereas, learning many different skills, the way of interaction with people, many varied ideas during brainstorming seems to be the attracting factors to work with different culture.

Another related factor for group preference tends to be experience. According to the participants, as the years passed by and as they were more habituated to group work they learn how to deal when differences among group members persists. Experience also informs students better about the skills and temperament of prospective group members. Experience played an important role regarding the students, when they faced conflict in the group, difficulties in work division, punctuality and many other factors. It also impacted directly to the group preference. Based on either positive or negative experiences, people decided whether to work with the same people in the other group works organized in various courses at the school or not to work with them ever again. Now for the personality and preference relationship, a group with difficult personality seems to make members grow apart and cause a bad impression about group work. Many expressed that there should be a leader who should make sure that the people with difficult or strong personalities should give a room to other people's ideas and opinions. Conflict was another issue that seems eminent when there were people with difficult personalities. Personality of a person tend to have an impact on the emotions of others, the fact that people and culture are emotionally different and the nature of perceiving these aspects are also varied. Majority of the students said that if they had faced the personality issue negatively during a group work the tendency to work with the same group or the person is very low.

Gender did not influence the preference of the group to some whereas it was a deciding factor to many. The people from same gender tend to get attracted to the opposite sex which is a natural phenomenon. Males especially wanted to work with groups consisting female members and explained that they feel more motivated and give better output to make a better impression whereas the females wanted to work with males. The reasons were the girls engaged in gossips and some do not like working with the same sexes. So this natural attraction and personality issue regarding gender also tend to influence the judgment of the students regarding group preferences. Motivation for doing work depends on the personality and the attitude of the person. Many explained that motivational factor for being a part of group work is the fact that there is shared responsibility and working with other people will make the work easy. Motivation of acquiring knowledge and developing an ability to deal with people from other culture and handling stress lead the students to choose their prospective group or group members to work with.

Secondly, the outcome was that group cohesiveness is not really automatically determined for the group. A group that has individuals who are there after choosing the prospective group members to work with by themselves will have more cohesiveness as a group compared to the ones that are assigned. It is already known that cohesiveness of the group diminishes when there are higher amounts of group conflicts (Griffith & Dunham, 2015). Most of the factors leading to group conflicts discussed in the literature focuses on structural, communicational and behavioral sources of conflict (Singh, 2008). Differences in personalities between the group members also seem to lead to group conflicts.

In works done in educational setting, however, conflicts seem to arise from host of quite different factors. For example, after asking the respondents, the results were that, when specifically doing group works in educational settings, conflict is affected by work division, group size, feeling of isolation or belongingness, dual leadership and punctuality. So among these factors group size and work division can be classified under the structural sources of conflict. Punctuality in turn could be classified under behavioral source of conflict (Singh, 2008). However, feeling of isolation within a group that can lead to group conflicts was not discussed in much detail in the literature that I scanned through for writing my literature review.

In my own research though most of the conflicts in the group seemed to have arisen whenever a group member feels isolated or has no feeling of belonging to the group. Considering that the majority of the respondents discussed this issue, it seems to be a quiet common problem leading to group conflict at least on the educational context. This also has a serious effect on group productivity thus affecting group performance. Inclusion of this factor in group-related literature would lead to enriched understanding of the relationship between group dynamics and performance (Lois Borland Hart, 1991).

In addition to that I also found from my research that group conflict can also arise when the phenomenon of dual leadership starts to emerge in a group. Dual leadership as already explained in my result section is the situation when there are more than one individual who have natural tendency to become a leader. Judging from the responses of the participants, whenever dual leadership emerges in a group it can lead to the group being divided into two fractions or cliques. This situation was explained metaphorically by a respondent as a situation when there are two captains of the ship who want to go to different directions and the ship is bound to stay on the same place. However, this does not seem to have been emphasized enough or strong importance of this factor has not been found in the literature that I reviewed.

During group work division the members tend to be lazy and try to get the easiest part in the whole task. Some just sit back and expect other people to do their work which is a reason of disagreement and discord among the members. Majority claimed that when there is division of work it should be even and according to skills so that the conflict does not arise at all. Group size when big (more than 4 or 5 group members), causes confusion and according to the students and it is very hard to keep in track of the work done by each individual in this situation. The communication is the biggest challenge in a large group which is the root for conflict. Optimum number of members in the group is four as expressed by the respondents. When a group is small it is easy to make sure that there is no overlapping work done by two members, easy to manage schedules and meetings. When the group is small the chances of conflict is relatively small.

Similarly, most of the accounts of how group dynamics affects group performance seems to indicate that groups which are highly cohesive at the performing stage of

group development process with constructive conflicts lead to higher group productivity and performance (Griffith & Dunham, 2015). After my research, I started to realize that it is perhaps when members are allowed to choose their own preferred groups this will lead to lower conflict in the groups and higher cohesiveness. As a result it is the group preference that leads to group cohesiveness and reduced conflicts which will ultimately lead to higher productivity and then higher performance.

Additionally, after doing this research I also stumbled across these interesting dynamics in a group that is “disciplining”. Although previous literature discusses to some extent how leader is directly or indirectly involved in disciplining the group members when they transgress (Hughes, et al., 2006), my results showed that group members themselves as a whole could be involved in disciplining those members who violate the group norms. Mostly I saw that disciplining occurs during the group conflict stage when some members engage in social loafing. The members applying disciplining in the team can take two approaches: positive and negative respectively. In the positive approach the members tend to be polite and try to motivate the member who is not pulling his or her weight, whereas in the negative approach, they tend to be very straight forward in telling them, if you do not work there will be consequences, or the member will be kicked out of the group. I also noticed that although disciplining occurs when there is conflict in the group, it also affects the preference of the group members at a later stage when those who have been through this stage are prospective candidates to be included in a group or not. In other words, if some members are disciplined at any point their chances of selection in future group work are comparatively low. So after the group performs or when task objectives are met, disciplined members will rarely be considered as a choice of the group.

Lastly, most of the criteria used to measure group performance in other organizational context other than educational setting include outcome that are acceptable to the stakeholders concerned. This could be a product, design ideas or whatever is required from the group. In the educational context though, whether the group performed well or not could be determined by the grades that the students receive for their tasks. In addition to that, most of the respondents in my interview also included future capabilities of the group and individual satisfaction working in the group as measures of group performance. Future capability of the group means whether the group members have increased their capabilities to further work in the same group or other groups. I have

included all of these findings from my research in a diagrammatic framework in figure 6.

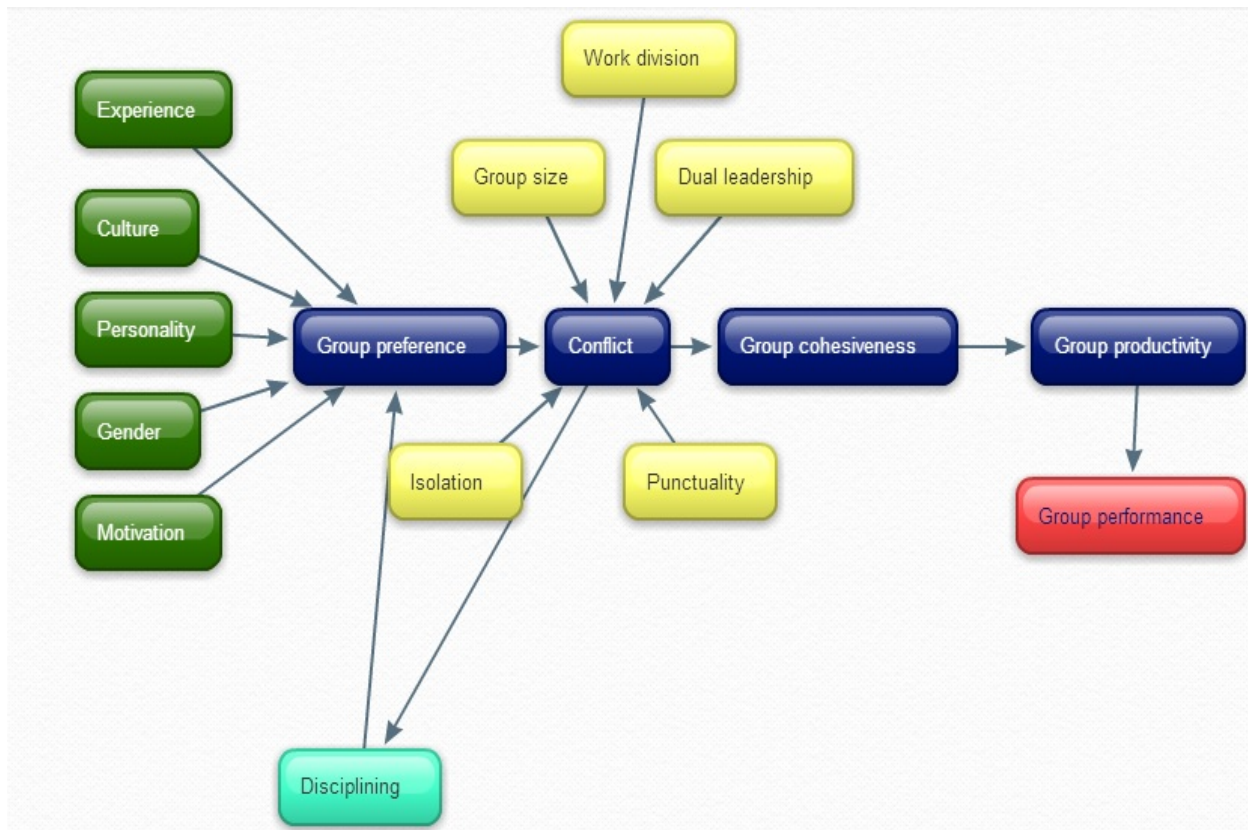


Figure 6: Framework of findings

## 6 CONCLUSIONS

### 6.1 Summary of main findings

The major themes that appeared after data analysis, as pointed out in the result sections such as experience, culture, gender etc. tend to have an influence or some relation among each other. First, I will summarize the relations between those factors that makes a person choose his or her prospective group members or determine group preference.

Experience and culture are one of the major elements that seems to attract or repel the students looking for a group towards or away from it. Experience gives the members more knowledge and skills to handle different difficult personalities within a group. The students from second or third year of studies expressed that they already have an

idea of how to deal with people who are not pulling the weight or with whom they have a disagreement with. As the students gain more experience they tend to be relaxed and calm in time of stress and conflicts. They become more task-oriented. Experience also seems to make the students make a decision of whether to work with the same group or group members in the future. This depends whether they had good experience or bad one working with other members. The group who had experienced the need of a leader in the previous tasks, are willing to work in such a group where there is already a leader or the leader is about to be appointed. They claimed that the group with a leader is easy to work with and has better results based on their experience. However, they also expressed that when there is dual leadership in the same group it causes confusion and leads to conflict in the group.

Isolation or belongingness element indicates the emotional factor of an individual. This directly affects the motivation of an individual to work in a group. Someone has felt this before and expressed that this is a major factor that makes them think if they would like to work with those members or not.

Some respondents expressed that they would prefer a group where the members belong from different cultural background because they will learn and have an experience of how to deal with different cultures which might come in handy later in the real working life. On the other hand there were some expressing the opinion that working with the people from the same culture is easy and they prefer the people from the same background in the group that they are going to work in or are working at the moment. Cultural factor also tends to have a direct impact on the personalities of the people. The interviewees said that personality depends on which culture the members are from. Some people have a very good personality while the others are rude, shy, and aggressive and the roots for these differences were determined by the culture of the member. Punctuality is also determined by the culture according to my findings because different cultures have different definition of time. If the members are late for meeting and schedules agreed upon the members find it annoying to go through the same thing again just for one person and decide that they would not work with the person that does not have a sense of time according to them.

Group size and group work division is another noticeable factor that drives a person to choose particular group over the other. Many have experienced that working in a

small group with 4 people is far easier because the communication can be done easily and it is easy to divide the work compared to the larger groups. Group size can be swayed by the cultural and experience factor mentioned before. Another aspect can be work division in a group. Group where the tasks are the same to every member and those who share equal responsibility seems to attract more prospective members towards it than the group where this is not taking place.

Students seem to prefer those groups that they can select by themselves compared to the groups that are assigned to them by the teacher. They expressed that if there is a chance to do so it will definitely increase productivity and the chances of conflicts are really low. All of the above mentioned factors have a direct influence on the choice of a group. They all decide whom they want to work with based on these factors according to my results. After the group preference, the ease or difficulty working in a group is determined which further determines group productivity. However, if there are difficulties working in the group, various conflicts comes in the picture. Main causes for conflict in the group are differences in culture and personality, punctuality and dual leadership. When the conflict arises in a group the members tend to adapt disciplining.

Disciplining during group work, which is also my unique contribution to this research problem, seem to play a decisive role. Disciplining comes into action when there are members who are not doing the part of the task that they are supposed to do. In simple words, this occurs when there is social loafing. The approaches to address disciplining in the group can be positive and negative; where in the positive approach the members tend to be polite and try to motivate the fellow members while in the negative one, they tend to be straight-forward and just say the matter in the face of the members as illustrated from quotations in my results section. After the disciplining takes place and if the group members realize that their contribution is not enough and start to work for the group, it then leads to productivity of the group. If not again conflict occurs.

When conflict is sorted out by the implication of conflict resolving approaches which is mentioned in my literature review, the group again moves to productive stage. If not then the group can disband and get separated even before they reach the productivity phase. After the productivity stage the next step is towards the group performance. It is evident from my research that a group with higher productivity is a group with better performance and vice versa.

To conclude, in my effort to answer the research question, I showed the relationship between the major factors that affect the productivity and performance of the group. Thus these factors, their interrelationship, dependence and influences determine the productivity and performance of the group which is the answer to my research problem.

## 6.2 Implications for the commissioner

Based on my understanding from the research conducted, there are several implications for fostering group dynamics so that it is conducive to increasing the productivity and performance of the group which might be relevant to the commissioner. In the educational context, when group works are used as pedagogical tools there can be several ways of making the group dynamics better so that the student group performs better by being productive. I present those implications below.

From my research respondents expressed that there should be a *mechanism* to evaluate individual contribution in the school so that there would be significantly less amount of *free riders* in the group and the students will be motivated to perform in their groups. A group should be comprised of 4 members and should be small because it is easier to manage. Students tend to have problems when there is a large group.

While forming a group *gender composition* should also be taken into consideration because of the fact that we have a lot of people from different cultural background and in some cultures male are stronger than female in interaction and expressing themselves. The *role of the teacher* (monitoring) should be more pronounced during the middle stage of group work, and he or she should interact with the team members. It is because on the surface everything might look normal or the work is going on smoothly but there might be deeply seated conflicts brewing among group members. Teacher should try to find out if someone from the group is *isolated* or if they are having certain kind of difficulties. Feedback should be given during the work phase quite often because students tend to use it as a performance measure of the work. As my result shows feeling of isolation impacts motivational factor of an individual thus taking down the productivity and finally affecting the performance of the group.

Majority of the students expressed a need for a *leader* to deal with difficult personalities within a group and also in the case of large working groups. They shared their

views and gave importance to work division and communication between the group members, so in case of conflict in a group or large groups the teacher himself or herself can appoint a leader or ask the group to choose a leader among themselves to ease down the tension.

Students who are used to different learning and *educational practices* may take a certain amount of time depending upon the personalities of an individual to cope with a Finnish or different educational settings as some students might not have worked in groups or multicultural environment at all. They might not know what to expect and how to react, so special attention and care should be taken for the first year students are just getting familiar to our school.

*Experience* of a student tends to shape the behavior and expectations with the passage of time and is able to give more confidence and an ability to deal with conflicts which is a major factor that affects the productivity and performance of the group. As it also surfaced from my analysis, the students with the passage of time do not care about who the members in the group are and become more task-oriented than emotion-oriented. Therefore, it seems like the practice of making the second or third year student work with the same group for relatively long time will help increase the performance of the group.

If the group members are given an opportunity to select the prospective group members by themselves, results show that there will be ease in working in a group and the atmosphere will be relaxed. The chances of conflict will be less because the group members choose themselves rather than when they are assigned. The productivity tend to increase thus increasing the group performance.

When students from different faculties are working together, there seems to be difference in the involvement and commitment toward the topic of the work. From my research, I acquired responses from business students where they expressed that the students from non-business faculty are more relaxed, reading text books and some business concepts are completely unknown to them, so the motivation factor for group work where they have to skim through text or the individual part that they have to read and get the result showed poor results, so extra care should be given when the division of work and groups in this context.

### 6.3 Suggestions for further research and development

To develop this research further, I would like to suggest following ideas. I did my research for Kyamk which is an educational institution, so I did it only in an educational setting. There is room for doing the research in managerial setting, which could be even more interesting. In this research all the data used were primary data sources, so use of secondary data sources could have given better clarification and backed up the research under study.

The results that have appeared came only after examining the subject studying at one university of applied sciences so cross-context evaluation, where the results can be compared to another educational institution is not done in this research. Some study groups had majority of similar cultures compared to other study groups that I examined for my research. Different distribution of members in groups based on their cultural differences could have also generated more cultural specific insights. From the research, I came across the disciplining factor that takes place when the groups are performing the tasks. I am very interested in this element present in the group works. Had there been more time or the possibility to conduct this research further, I would like to look into this factor deeply. In any case, it can be a good avenue for future researchers to take upon. Although this research is primarily inductive, future research could deductively check the validity of my claims using more quantitative and deductive approach.

## REFERENCES

- Capozzoli, T., 1995. Resolving Conflicts within Teams. *Journal for Quality and Participation*, 18(7), pp. 28-30.
- Charmaz, K., 2006. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, California: SAGE Publications Inc.
- Crawley, J., 1978. The Life Cycle of a Group. *Small Groups Newsletter*, pp. 39-44.
- E.Shaw, M., 1981. *Group Dynamics the Psychology of Small Group Behavior*. New York: McGraw-Hill Publishing Company.
- Forsyth, D. R., 1999. *Group Dynamics*. Belmont (California): Wadsworth Publishing Company.
- Griffith, B. A. & Dunham, E. B., 2015. *Working in Teams: Moving from High Potential to High Performance*. Thousand Oaks, California: Sage Publications Inc.
- Guzzo, R. A. & Dickson, M. W., 1996. Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, Osa/vuosikerta 47, pp. 307-338.
- Hughes, R. L., Ginnett, R. C. & Curphy, G. J., 2006. *Leadership: Enhancing the Lessons of Experience*. 5th Edition toim. New York: McGraw Hill/Irwin.
- Levy, D. J., 2014. *Group Dynamics for Teams*. 4th toim. Thousand Oaks, California: Sage Publications.
- Lois Borland Hart, E., 1991. *Learning from Conflict: A Handbook for Trainers and Group Leaders*. Second toim. Manchester: Human Resource Development press, Inc.
- Robbins, Bergmean, S. & Coulter, 2014. *Tuckman-Stages of Group Development*. [Online]  
Available at:

[http://sydney.edu.au/education\\_social\\_work/groupwork/staff/sect2/Tuckman.pdf](http://sydney.edu.au/education_social_work/groupwork/staff/sect2/Tuckman.pdf)  
[Haettu 21 11 2014].

Robertson, I., 1987. *Sociology*. 3rd toim. New York, NY: Worth Publishers, Inc.

Shaw, J. D., Duffy, M. K. & Stark, E. M., 2000. Interdependence and Preference for Group Work: Main and Congruence Effects on the Satisfaction and Performance of Group Members. *Journal of Management*, 26(2), pp. 259-279.

Sikes, B., Gulbro, R. D. & Shonesy, L., 2010. *Conflict in Work Teams: Problems and Solutions*. Cullowhee, NC, DreamCatchers Group, L.L.C.

Singh, B. D., 2008. *Managing Conflict and Negotiation*. First toim. New Delhi: Excel Books.

Stroebe, W., Nijstad, B. A. & Rietzschel, E. F., 2010. Beyond Productivity loss in Brainstorming Groups: The Evolution of a Question. *Advances in Experimental Social Psychology*, Osa/vuosikerta 43, pp. 158-200.

Tyson, T., 1998. *Working With Groups*. Chapel Street, South Yarra: Macmillan Education Australia.

## APPENDIX: Semi-structured interview guide

1. Could you introduce yourself and tell which year did you start your studies at our school??
2. Have you had experiences working in a group? During your schooling period, before, could you tell briefly about it?
3. Have you had any difficulties while working in a group? What kind of difficulties were there?
4. According to you what were the ease and difficulties comparing to working individually?
5. If you were to evaluate your own contribution to group works, what does it usually depend upon? In other words, what motivates you to do group work?
6. In terms of performance, what kind of group in your own experience tend to perform well and what kind of group in your own experience do not perform well?
7. What type of group do you prefer to work in personally?
8. Do you find it difficult to work with people with whom you have cultural affinity?
  - a. Why?
  - b. Why not?
9. During the group work division how are the tasks divided? How do you think it should be divided? How do you prefer your own workload?
10. What kind of criteria do you use to choose your prospective group members?
11. Do you like it when your group members are assigned or do you prefer to choose yourself?
12. Do you think Number of members in group effects group productivity?
  - a. How, why, why not?
13. Do you tend to work usually with the same group members or do you prefer changes?
14. If you work in the same group, does the group performance gets better or worse?
15. What is the main criteria for evaluating your group performance?
16. Did you ever feel isolated from the group? / When did you felt that you truly belonged to a group? Is it important?
17. What kind of group motivates you to do your best?

18. Did you find any difference working in a group in the last year as compared to say the first year of studies?
19. When do you feel the most productive while you are working in a group?
20. Do you think Punctuality is a major factor during group work?
21. Do you prefer being told what to do by other group members?
  - a. If yes, in what condition?
  - b. If not, in what condition?
22. What kind of conflicts arise while decision making within a group?
23. Do you think there is hierarchical flow in the group?
24. Gender? Do you feel comfortable working with the same gender or with a different one? Why, why not??
25. How do you deal with difficult personalities within a group?
26. Describe a disappointing team experience. What could you have done to prevent it?
27. How do you respond to a team member who is not pulling their weight?
28. Explain what you would do if a team member was rude/not meeting deadlines/going behind other team members' backs/aggressive, etc.