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Students' motivations for volunteering

A study on the motivational factors for volunteering in student unions

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Abstract

The objective of this thesis is to uncover the main motivations for, and hindrances against, student volunteer work, and to understand what it is that gives satisfaction from participation for the students.

In order to solve the objective, analyses are performed on collected data from students at NHH in Norway and at Tecnológico de Monterrey in Mexico. The analyses show connections between control variables and ten different motivational factors and five different hindrance factors, as well as connections between these factors and twelve factors for satisfaction. Analyses are also performed to assess the relationships between these factors and specific group memberships. In addition, the thesis discusses the respondents' qualitative impressions of volunteers' career advantages, and if their organization is optimally organized to facilitate volunteering.

These analyses show us some clear motivational differences, depending on the composition of the different response sets and responses to the control variables. We find a stronger motivation to participate for students who are not local, and who have a small network in the city. Motivation is also higher for students who have previously volunteered, and who have a high network in school. Hindrance to participate is found to be higher for those students who have other obligations in the form of jobs, other positions, or more family and friends. These hindrances are generally higher for local students. Satisfaction is higher for those students motivated by social network, interests, and experience, and among those in leadership positions.

We can also conclude that motivation, hindrance, group memberships and satisfaction are strongly connected. It seems that motivation to a degree decides what kind of group the students want to join, and that this again is important for the students' satisfaction.

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Preface

This thesis was written as a part of the Master of Science in Economics and Business Administration program at the Norwegian School of Economics (NHH) and as a part of the Master in International Business program at EGADE Business School, Tecnológico de Monterrey.

For me the student union was not only an arena for learning and experience, but it was also where I met the majority of my friends in school. The positive effects of an active and well-functioning student union are many, and it creates value for individuals, schools and society in general. What fascinates me the most is the fact that this is all based on volunteer work, and that people would put down countless hours, some even more than in their studies, in unpaid volunteer work. This fascination is what laid the foundation for this thesis, to find out what motivates all these students to volunteer. My hope is that the information unveiled in this thesis can be used to improve student unions in the future, by increasing our knowledge of the factors that drives students to volunteer.

The foundation of my thesis is the empirical data collected at NHH and EGADE, and I would like to thank everyone who took the time to answer my questionnaires, and particularly those who helped me to distribute them. I would also like to thank my supervisors. From NHH, Astrid Oline Ervik, thank you for your extraordinary advice and support through the whole process, and for providing me with guidance and direction. You have been an important motivational factor for me in this work. Sincere thanks also go to Consuelo García de la Torre, from EGADE, for good discussions and important input during the second half of the process.

Sydney, Australia, 20 June 2014

Martin Roa Skramstad

1. Introduction

1.1 Background

Student volunteering is a widespread phenomenon, and can be found in different forms and scopes at many educational institutions around the world. Student volunteering can be a source of value creation for society in general and for the student community in particular. This kind of volunteer work can be a valuable supplement to the theoretical part of education, create social arenas for students and provide student services. They can also facilitate charity, student-company relations, consulting services, entrepreneurial communities, and different cultural activities which are also open to the local community. Through these activities students can increase the value of their human capital for society when they enter the labor market. This work is to a large degree facilitated through student unions and student organizations, which are important institutions for organizing these activities, and often necessary to enable efficient work when the scope of activities grows. I want to investigate students' motivation for participating in these organizations, and how the organizations facilitate the driving motivational factors.

1.2 Research Area

My research will be conducted within the field of motivational theory. It will particularly provide insight to what motivates student volunteer work, and an interpretation of this in the context of student organizations. This theoretical field have seen a great deal of development and increased importance as economies have developed, and some researchers promotes an approach more focused on supporting intrinsic motivation rather than extrinsic. I will base much of my work on acknowledged research on extrinsic- and intrinsic motivational sources, and the factors that stimulate them, such as presented by Edward L. Deci and Richard M. Ryan (2000), and Roland Bénabou and Jean Tirole (2003), among others. Another focal point for my thesis is the relationship between the two motivational sources, and how they affect work performance and satisfaction, also known as the crowding-effect (Frey & Jegen, 2001).

These new approaches can be particularly useful within volunteer organizations, as their nature requires them to be organized and driven differently than many other organizations.

Historically these areas have not seen a great interest from economists, and as a consequence much of the research available originates from other research fields such as psychology, sociology and anthropology. This will be taken into consideration when interpreting the empirical findings and theories up against my particular case. My thesis will explore how research and theories within these fields can affect and help improve volunteer student organizations.

1.3 Research Questions and Scope

In this master thesis I will present research on students' motivation for volunteer work, and present factors that motivate, hinder and satisfy students who volunteer. I will perform qualitative surveys on students in order to discover their main motivational factors, the relative weighting of the factors, and correlations between different control variables and the factors.

The objective of this thesis is to uncover the main reasons for and against student volunteer work, and to understand what it is that gives satisfaction and benefits from participation for the students. The conclusions and suggestions will be based on existing theory together with my own empirical findings, and can contribute to the limited existing literature on student volunteering.

The empirical research will be limited by the scope of the master thesis to mainly focus on students volunteering in Norway, but I will also include some investigation on similar work in Mexico. This can give a foundation to assess the validity of the thesis in student organizations outside of Norway, and increase the applicability of my results to a broader audience.

1.4 Structure

Following the introduction, Section 2 will go through relevant prior research and theoretical framework, which will later be used in order to answer the research questions. Section 3 elaborates on the research methodology chosen, while section 4 contains the analysis and results of empirical data collected through the mentioned research. Section 5 builds on the theories and my empirical data, and presents conclusions to the research question and suggestions for future progress on the field.

2. Prior Research and Theoretical Framework

This part contains prior research and theories that are relevant to answer my research questions, and that will later be used in the analysis of volunteering in student unions.

2.1 Introduction

This chapter discusses relevant research on motivational theory and incentives that are relevant for volunteer work. I will first present the different reasons for volunteering, mainly divided between intrinsic and extrinsic, before I will evaluate how motivation can change due to external interventions.

2.2 Reasons for Volunteering

The reasons for volunteering can also be said as the motivations people have to work without being paid. *Motivation* can be seen as the "driving force" that makes people act the way they do, engage in specific activities and exert effort towards a goal. To be motivated means "to be moved" to perform a certain behavior, and has influence on the direction, strength, and persistence of the behavior (Campbell, Dunnette, Lawler, & Weick, 1970). Motivation is also, together with ability, important to determine performance, and "motivation theory attempts to explain and predict how individuals' behavior is aroused, sustained, and stopped" (Gibson, Ivancevich, Donnelly, & Konopaske, 2011). Motivation can be divided in two groups, the first being innate *primary drives* including the categories *physiological* (food, air, water shelter) and *safety* (security and stability). The second is *secondary needs* including *belongingness* (interaction and affection from others), *esteem* (self-esteem and status) and *self-actualization* (self-fulfillment and realization of one's potential) (Maslow, 1943). The first two categories do not play a central role for volunteering and will therefore not be included in this work. The last three, belongingness, esteem and self-actualization, can be drivers for the volunteer work in my case, and will therefore be investigated closer through theory as well as empirical research. I will not assess the debated relationship between the needs, but simply use Maslow's definitions to categorize the reasons for volunteering.

Motivation theory deals with two main sources of motivation, extrinsic and intrinsic, and the same "amount" of motivation can be the result of different combinations of extrinsic and

intrinsic motivation. *Extrinsic motivation* refers to performing a task to obtain a contingent reward or outcome, while *intrinsic motivation* refers to "the individual's desire to perform the task for its own sake" (Bénabou & Tirole, 2003). These sources are intricately connected, and actions that increase one source may reduce the other, so the combination of these factors determines the total effect on motivation.

Volunteering is not compensated monetarily in the same way as traditional jobs, and it would seem intuitive that intrinsic motivation therefore plays a more central role. It can however still be driven, wholly or partly, by extrinsic factors such as experience and knowledge, or career enhancement through CV building and professional networks. The same theories can therefore be applied as if the motivation was monetary payment, although the reward structure may be different. Through this chapter I will present theory and research that can shed some light on the reasons people have to work voluntarily, which is important in order to build organizations that attract and facilitates the motivation of volunteers.

The reasons for volunteering can be many, and there are not necessarily only one factor or benefit behind the engagement. The reasons can in many cases be divided along the same lines as motivation, namely extrinsic and intrinsic. Another way to divide is between altruistic and egoistic reasons. Common for the division is that they are not to be seen as "black and white", meaning that an individual's motivation for an action are to be found somewhere in between purely altruistic and egoistic, and extrinsic or intrinsic. I will still categorize the different reasons in order to form a more descriptive and insightful presentation.

The amount of volunteering hours and donations could according to economic theory be determined by its *opportunity cost*, which is a term that defines the difference between the chosen option and the best alternative. In the case of economics and volunteering the term is used to measure the utility obtained from volunteering or donations in comparison to the foregone alternative of paid work or leisure time. The theory predicts that volunteering will only be performed as long as the utility received is higher than the alternative of work or leisure time, and that optimal level of volunteering is where its marginal utility is equal to that of other activities. By following traditional economic theory, which disregards intrinsic motivation, we would expect the supply of volunteering to go down as the wage level and opportunity cost goes up. This is however not the case according to American data from 1989-1990, where both volunteer hours and donations of money are shown to be positively

correlated with education and income level, and people who donate to charity are three times as likely to also volunteer compared to people who do not donate (Freeman, 1997). This can possibly be explained by differences in preferences, knowledge or social factors connected to conscience goods if those who have a higher opportunity costs are also more frequently asked to volunteer or donate. Another possible explanation is that the income effect outweighs the substitution effect. These results indicate that students at higher-education institutions can be more inclined to perform volunteer work and that information and social factors can be important to increase volunteering.

Individual differences should be taken into consideration in specific cases when considering motivation for volunteering, and while some prefer challenging and complex tasks, others might prefer predictable and easy tasks in order to achieve their goals. This can be a challenge when applying theories, as they are often supported by empirical averages that do not cover everyone. For this reason individuals might have different motives for volunteering, and interventions that crowd-out (see chapter 2.3.2) intrinsic motivation for the majority might not have a negative effect on some people.

2.2.1 Framework for Motivation

The principal-agent theory explains the relationship "between two (or more) parties when one, designated as the agent, acts for, on behalf of, or as representative for the other, designated the principal, in a particular domain of decision problems" (Ross, 1973, p. 134). This theory addresses the relationship between different levels of an organizational hierarchy, and can help understand the environment for volunteering in student organizations and the factors which affect participants' motivation.

Traditionally the principal-agent theory has been used to determine optimal contracts between principals (employer) and agents (employee), where compensational schemes are designed to optimize the principal's profit by maximizing an agent's output for a given compensation (salary and bonus). This part is of little relevance for my case as the volunteer student work is not paid, and rarely regulated by enforceable contracts. I will not use the standard (simple) model to calculate effort and compensation, but include intrinsic motivation and use it to describe a framework for my research. My focus will be on the parts of the theory that affects motivation, through extrinsic non-monetary rewards and intrinsic factors such as perceived autonomy and competence.

Student organizations that are built up with a hierarchical structure can be analyzed through principal-agent theory. This is the situation both within individual groups between members, middle management, and the board, and in between the groups and the organization's leadership in bigger umbrella organizations. As described in this theory there are mainly two problems to be addressed in the relationship: *Conflicting objectives*, as principal and agent try to maximize their own utility, and *decentralized information*, as the principal is unlikely to be able to monitor the agent's actions without incurring costs and affecting the agent's motivation (Laffont & Martimort, 2001). The solution to these problems in regular work-situations has been through monetary incentives, but for volunteer work we do not have access to these motivational tools although we are faced with many of the same problems. For this reason a different approach to motivate agents is required, and we must find other tools besides the traditional monetary compensation.

Another important point that principal-agent theory points out is the difference between the agent's decision to participate and to exert effort. For an agent to participate his *participation constraints* must be satisfied, meaning he must be offered "a utility level which is at least as high as the utility level that the latter obtains outside the relationship" (Laffont & Martimort, 2001, p. 42). Once participation is secured the *incentive compatibility constraints* should be addressed so that the agent adjusts his effort to achieve the optimal output (as defined by the principal) (Laffont & Martimort, 2001). For student volunteering this highlights two important challenges. Primarily to ensure participation by making available positions attractive for students, and communicating this information to make the positions accessible. Secondarily the positions must be designed and the students must be motivated to work hard in the desired direction.

The literature differentiate between real and formal authority, where f*ormal authority* is the same as having the right to decide, and is held by the principal. *Real authority* is the same as having the effective control over decisions, which in many cases should be the agent. The agent will choose the project that seems best from his point of view, and if the information asymmetry is large and the objectives of the agent and principal are congruent, the agent's decision would also be better from the principal's point of view (Aghion & Tirole, 1997).

According to Aghion and Tirole (1997) delegating of formal authority has two main benefits. Firstly it increases the agent's incentive to acquire information on behalf of the principal, and secondly it increases the agent's participation in the contractual relationship. For the

principal this reduces the workload as well as aligns the agent's objectives with his, but it also incurs a loss of control. The delegation of authority from principal to agent is more advisable when the following factors are present: Large span of control (overload), reputation for little intervention, urgency of decisions, and multiple principals. This is important for volunteer organizations, because the delegation of authority can be one way to increase an agent's autonomy, which in turn can increase intrinsic motivation. An important prerequisite for delegation of authority is good communication of information between the different parties in the relationship.

Through my thesis I will investigate how different factors in the principal-agent relationship affect motivation, particularly for the agent (some students can be both agents and principal at the same time, but in different relationships). I will present insight on how the principal's actions to counter conflicting objectives and reduce information asymmetry can affect motivation, as enforced compliance and more control will reduce an agent's autonomy.

2.2.2 Extrinsic Motivation

Extrinsic motivation can be defined by the motivation for activities done in order to attain some separable outcome, and not for the enjoyment of the activity itself. The source of motivation is coming from outside the person concerned, and can both be positive such as monetary remuneration, or negative such as threat of wage cuts or dismissal (Frey B. S., 1997a).

Volunteer work is not motivated by direct monetary remuneration, as seen through a principal-agent model, which is often associated with extrinsic motivation. My research will therefore not be targeted towards direct monetary incentives, but rather towards other sources of extrinsic motivational that can be connected to volunteer work, such as career motives and recognition. The content of this chapter is used to present different sources and states of extrinsic motivation that are relevant for students' volunteer participation, and which can be used to improve motivation and as a consequence performance and satisfaction.

Although all extrinsic motivation deals with instrumentalities, and the wish to achieve something through an action, the attitudes towards the same activity can be very different. "Extrinsically motivated actions [can be performed] with resentment, resistance and disinterest or, alternatively, with an attitude of willingness that reflects an inner acceptance

of the value or utility of the task" (Deci & Ryan, 2000, p. 55). This means that tasks that are not performed due to intrinsic motivation can still be done willingly and without resent, if there is understanding for the value of the task.

Extrinsic motivation is not to be seen as a static state, and it can take different dynamic forms. *Organismic Integration Theory (OIT)*, developed by Deci & Ryan (1985), separates extrinsic motivation into four different forms depending on the task's autonomy, and is based on deCharms (1968) theories on *external*- and *internal perceived locus of causality*. The least autonomous form is *External regulation*, and behavior is usually performed to satisfy the demands of others or to obtain a payment or reward, with little interest for the activity itself. This is the most commonly researched form of extrinsic motivation. *Introjection* is the second most extrinsic form, and actions are performed to avoid guilt or anxiety, or to enhance self-esteem. *Identification* is when an action is perceived to be of personal importance or value, and the motivation becomes even more autonomous. When the reasons for the actions are fully assimilated, and in harmony with values and needs we experience *Integration*, which is the most self-determined form of extrinsic motivation. The theory focuses on activities that are not intrinsically motivated, and shows how their extrinsic value can be accepted, and how the accepted value can lead to self-regulation and increased autonomy (Deci & Ryan, 2000).

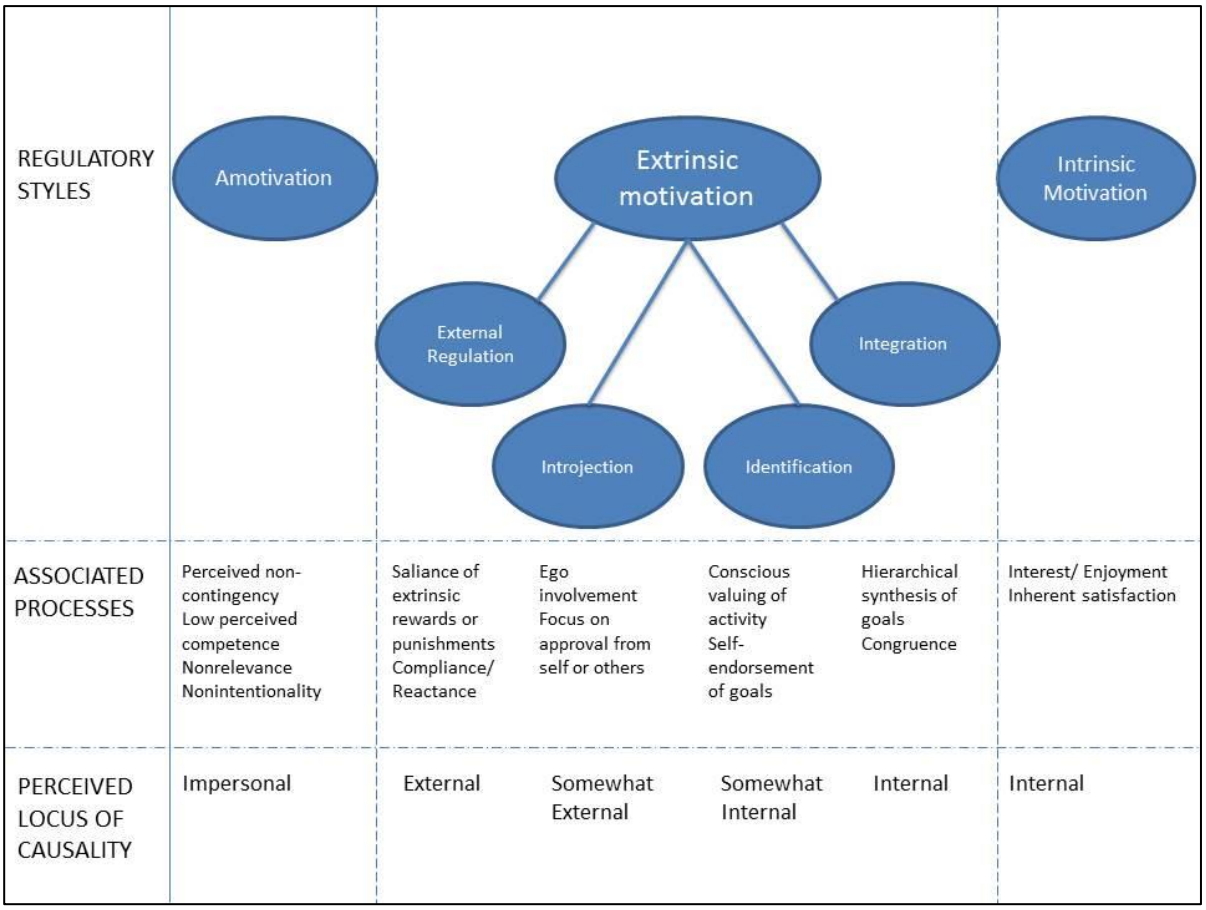


Figure 1: A taxonomy of human motivation (Deci & Ryan, 2000, p. 61)

According to Deci and Ryan (2000) the more autonomous extrinsic motivation have been associated with greater engagement, performance and well-being, which makes it relevant to find ways of promoting a more internal locus of causality. To facilitate this process, and internalize and integrate values and behavioral regulations, you need to assess the three psychological needs (see chapter 2.2.3). By stimulating the needs for competence and relatedness an external regulation can become introjected, but for it to be identified and integrated the agent must also experience a sense of autonomy in the behavior.

The Organismic Integration Theory is supported empirically by Vallerand and Bissonnette (1992), who assess the completion or failure of a compulsory course among of 1042 college students, whose motivation was measured at the time of enrollment. The researchers use a scale covering intrinsic motivation, the four forms of extrinsic motivation as presented by OIT, and amotivated. Their results support the theoretical suggestions of OIT, as intrinsic motivation, identification, and integration were positively related to behavioral persistence. On the other hand, introjected- and external regulations were not related to persistence, and

amotivation had a strong negative relation. The theory has also received support through research on the quality of couples' relationships, which emphasize the positive influence of autonomy driven processes, compared to controlling and amotivated processes (Blais, Boucher, Sabourin, & Vallerand, 1990)

Career Motives

Career motives are present when volunteer work or other activities are performed in order to improve future position, for example to obtain a job or to get a higher salary. This is formalized through the *investment model* presented by Menchik & Weisbrod (1987), and is based on the assumption that volunteering is done for its extrinsic motivation. It suggests that the volunteering today will increase the individual's utility in the future, mainly through increased earning ability due to work experience, potentially valuable contacts and signaled morale and values. The perceived future value of actions will lead to different types of donations, so if the goal is increased experience the donation will be of time, and if the goal is to signal good values by support of a good cause the donation might as well be monetary. Their research also shows that the validity of the investment model is negatively correlated with age, which means it is more relevant in the case of students than in the case of seniors. The total amount of supplied volunteering increased until the age of 43 and decreased from there, which is in accordance with this model as investments can be expected as long as there is a sufficient amount of work years left to give a satisfactory return on investment. There is no exact explanation to the peak age, but there is little doubt that students in the age group 18-25 are within the target range of this model.

In a survey on the French labor market Proteau and Wolff (2006) investigated the motivation and economic payoff for volunteering, and they did not find support for the investment theory and a job-search motive. Their findings were more consistent with the consumption model, and suggest that the volunteering is performed with a relational purpose. It seems plausible to me that volunteer work unrelated to your profession, such as low level participation in local charities and your kids' sports team, are not driven by career motives, which this survey supports.

The investment model, and related empirical research, indicates that age and the tasks' relevance to future career is an important factor for volunteering. Accordingly it appears likely that students will be more motivated to participate in volunteer activities closely related to their prospective future careers and business areas, and that they will do so

together with people that are likely to end up in similar careers. This makes the investment model interesting for my particular case, as many student activities fit the description above.

The investment model can be seen illustrated in the figure below. An investment cost will incur in the form of an alternative cost, as the salary during the investment period will be lower than the optional salary. In my case this can be seen as the foregone opportunity of paid work in order to participate in volunteer activities. At the point t* the investment results in a salary higher than what would have otherwise been achieved, which can last until retirement. The model predicts that if the loss incurred by the investment is lower than the gain achieved in the period after, the investment should be conducted. This shows the importance of the time frame (age) and expected increased future salary (relevance).

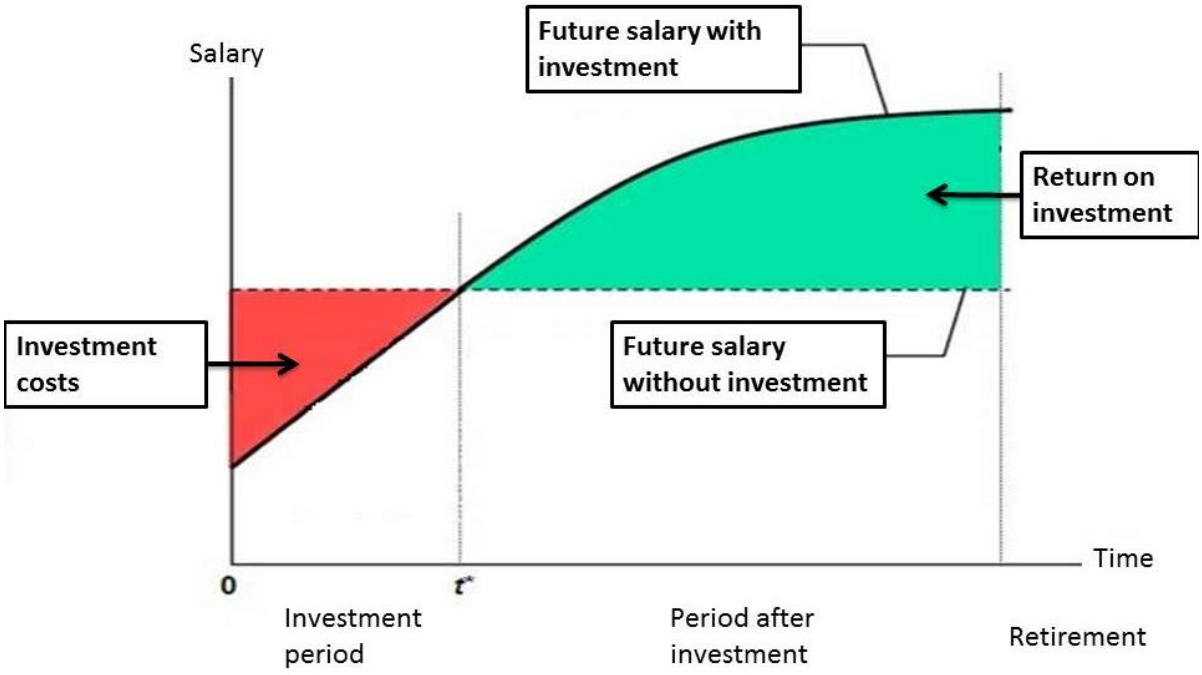


Figure 2: The Investment Model

Conscience Goods

Volunteering, which would have been avoided had it not been requested, and performed because of social pressure and moral obligations, is known as a "*conscience good*". Another requisite beside social pressure is that it is recognized as a valuable activity, even though people would prefer someone else to do the job. Freeman (1997) shows that one of the main reasons for volunteering is that of being asked to volunteer, and not the result of freely

offered services due to intrinsic motivation. This is backed up by many surveys, such as the 1984 Gallup survey for the Independent Sector in the US where 44 percent of respondents said that they volunteered because they were asked (Hodgkinson & Weitzman, 1986). The updated numbers for 2013 in the US are 40.8 percent volunteering due to being asked, and 43 percent became involved on their own initiative (US Bureau of Labor Statistics, 2014). This type of motivation seems to fall under the categories introjection or identification as presented under organismic integration theory.

The motivation behind acceptance of such requests can be to altruistically help a friend or because the activity is fun, which is intrinsic, but more often it appears to be extrinsic, such as to comply with social pressure, increase self-esteem or because you expect a favor in return. In many cases we will have a mix of intrinsic and extrinsic motivation. The effect of requests seem to be bigger when it is personal than by telephone or mail, and from someone familiar than by strangers, in other words when they feel a closer relation or bond to the source of the request (Freeman, 1997).

The acceptance to volunteer when asked can be linked to behavioral norms, which is defined as "a somewhat general rule of voluntary behavior" (Kreps, 1997). The adherence to norms can have different explanations but conscience goods are, by definition, driven by extrinsic motivation. One possible solution is that "Adherence, while immediately costly, leads to better treatment by others than will violation" (Kreps, 1997), implying that by not following the norms of helping out when asked can lead to unfavorable treatment in the future. This suggests that the actions are not necessarily performed with the motive of reciprocity (although that may also be the case), but for the fear of being punished, and can help explain why the action is only performed upon requested

Conscience goods can also be driven by the need for belongingness, and people might perform actions to be accepted by a group and adhere to its norms. In such cases an action does not have to be personally valuable to an individual, but rather valued by the group as a whole. The individual will then adapt to fit the requirements of the group, which with time can change the person's identity, as the norms or values behind the actions are internalized. This view is supported both by identity theory (Akerlof & Kranton, 2005) and by organismic integration theory (Deci & Ryan, 2000).

As mentioned above a volunteer action as a consequence of a request is not in all cases a conscience good, it can also be intrinsically motivated. Maybe the request involved access to new information that was not previously known, and that the opportunity to volunteer was made possible or easier by this new information. Whether the motivation is extrinsically or intrinsically based, it must be "made available" to the potential volunteer to take effect, and requests can be one way to create awareness of opportunities and their advantages (deGuzman, 2007).

2.2.3 Intrinsic Motivation

Intrinsic motivation is when people are moved to act for the fun or challenge entailed, and where the reward is in the activity itself, rather than because of external prods, pressure, or tangible rewards (Deci & Ryan, 2000). A more technical approach is that intrinsically motivated actions directly take part in an individual's utility function, compared to an extrinsically motivated action which is indirectly part of the utility function, for example through money or status (Kreps, 1997). An intrinsically motivated action is characterized by being interesting to perform, meaning that extra motivation represented by external instruments is not necessary in order to execute it.

Volunteer work can be motivated extrinsically as shown in the previous chapter, even though it lacks the important driver of direct monetary payment. Due to its unpaid nature, volunteer work is often associated with intrinsic motivation, and it can be of importance both for participation and effort exerted in this kind of work, which I will investigate through this chapter.

Intrinsic motivation has been deemed especially important when it comes to complex activities, as it induces curiosity which again leads to creativity and learning. It fosters investigation around the whole activity and puts it in context with different theories (double-loop learning), and not only to aspects which would be necessary in order to attain a contingent reward. This tend to give a more holistic set of knowledge and skills on a subject, as compared to extrinsic motivation (Frey B. S., 1997a)

Psychological Needs

Intrinsically motivated activities are heavily influenced by the satisfaction of psychological needs, in particular the needs for *competence*, *autonomy* and *relatedness*, together with engaging in interesting activities (Deci & Ryan, 2000). Similar categorization has also been

presented by others such as the "learned needs theory" with the needs for *achievement*, *power* and *affiliation* (McClelland, 1985), "drive" with the needs for *mastery*, *autonomy* and *purpose* (Pink, 2009), and "cognitions" with *sense of impact*, *competence*, *meaningfulness*, and *choice* (Thomas & Velthouse, 1990). For my purpose I will not discuss if the needs are innate or learned, and I will use the terms *competence* (including achievement and mastery), *autonomy* (including power and choice), and *relatedness* (including affiliation, purpose, sense of impact and meaningfulness). Through these needs we can interpret the effect on intrinsic motivation from external instruments as well as changes to the work environment.

Perceived *competence* is the self-esteem or self-evaluation of skills and abilities, and can be stimulated in context with a certain action or activity to increase an agent's intrinsic motivation. This can be done through interpersonal events and structures such as rewards, effectance promoting feedback (Deci, 1971; Harackiewicz, 1979), and the absence of demeaning evaluations (Deci & Cascio, 1972). This need must be seen in connection with autonomy, and the presence of both is required to induce increased intrinsic motivation (Ryan, 1982)

Autonomy is the self-determination and choice of actions, and to have an "internal perceived locus of causality" (deCharms, 1968). When people have a large degree of autonomy they feel in power of their own decisions, and not controlled by someone else. The reduction of autonomy, and consequentially of intrinsic motivation, can be seen with the introduction of extrinsic rewards, and particularly when made dependent of task performance (Deci, 1971; Lepper, Greene, & Nisbett, 1973). This is because the reward causes a shift from an internal to external locus of causality, also known as motivation crowding (Frey & Jegen, 2001). The same effect can be seen with competition pressure (Reeve & Deci, 1996), deadlines (Amabile, Dejong, & Lepper, 1976), directives (Koestner, Ryan, Bernieri, & Holt, 1984), and threats (Deci & Cascio, 1972). The effects of these changes to the autonomy are not only affected by the degree of intervention, but also by the characteristics of the certain activity. Autonomy has been shown to be particularly important when the activity is complex or requires conceptual, creative processing (Benware & Deci, 1984; Grolnick & Ryan, 1987).

Relatedness is one of the main factors for internalizing the values of others, so that there is a feeling of belongingness to the people, group, or culture that value the behavior (Ryan, Stiller, & Lynch, 1994). According to Kreps (1997), this also reduces the instincts to act opportunistically, compared with a regular "arms-length", market relationship. A perceived

close relation to the principal can also increase the negative effect of controlling interventions, as it is seen as relatively more pressuring compared to a principal who is just conveying the intervention. Barkema (1995), find that under an impersonal principal-agent relationship the price effect of interventions prevail, and intrinsic motivation is little affected. Under a personalized principal-agent relationship the crowding-effect is expected to be significant, as the agent feel the controlling effort shifts the locus of control and their competence is not acknowledged.

Consumption Model

The consumption model, as outlined by (Menchik & Weisbrod, 1987), assumes that donations of time and money bear direct utility to individuals. This is consistent with the term of "*warm glow*", which is the "good feeling" experienced through the act of giving (Andreoni, 1990). The viewpoint is of donations as an egoistic action, motivated by personally gained utility. In other words an intrinsic motivation as the utility is obtained through the activity itself. This possible reasoning is also supported by Kreps (1997), who suggests that "adherence is desirable per se" and that "this involves making adherence an argument in the individual's utility function". If this is the case the importance of the volunteering's visibility is not as high as if the motivation is extrinsic (consumption goods), because it is performed for personal enjoyment, and not for a better future treatment by others. When this is a main motivational factor the consequences or results of the actions should be highlighted, more than the visibility of the actual performance. The consumption model's counterpart is the investment model (career motives).

Undesirable Intrinsic Motivation

Intrinsic motivation is often portrayed as the better motivation, that can be achieved without economic incentives, and that should always be pursued. Even though intrinsic motivation can represent a very strong drive, and is very important for volunteer organizations, there are situations where intrinsic motivation can work against the success of an organization.

Agents with a high intrinsic motivation are often more difficult to guide and control in a work situation. They are often harder to get along with for the principal and the consequences of negatively affecting their sense of autonomy and competence can be severe. People going down the "wrong path" with a strong intrinsic motivation can be very hard to steer, and they might sabotage work or represent a negative influence on others (Frey B. S., 1997a). This emphasize the importance for volunteer organizations of having employees that

not only have a strong and persisting motivation, but also that the motivation has the right direction according to the organization's strategy and goals.

2.2.4 Egoistic- or Altruistic Motivation

The presence of seemingly altruistic motivation has traditionally been difficult to explain with an economic model for utility-maximizing. Altruism, which is "behaviour actuated by a sense of others, their desires and expectations" (Phelps, 1975), can be seen in its purest form when there is no motive of personal gain behind the behavior. There are also lesser forms, or behavior that is misinterpreted as altruistic, where the actual motive is to get something in return for the behavior at a later time, or to avoid negative reactions such as seen in the case of conscience goods. Altruistic behavior can serve to increase market efficiency when honesty and good conduct is uphold even though it does not provide a direct personal gain, for example by counteracting negative effects of information asymmetry. Altruism can also play an important role when important social contributions are performed and institutional voids are filled by volunteer charity work. Both examples seems purely altruistic, but can also be connected to egoism through enlightened self-interest, for example if the individual's motives are not the other party's well-being but its own long-term interest (McKean, 1975).

Besides impure altruism for extrinsic reasons, such as long-term relationships and reciprocity, we can also experience impure altruism for intrinsic reasons. An action will then be performed for the experience and joy of the activity in itself, as it provides individual utility, and for that reason is not purely altruistic. This has been defined as the "theory of warm-glow giving", where donations and volunteering are intrinsically motivated by the personal satisfaction experienced by the actions of giving (Andreoni, 1990).

2.2.5 Reasons to Quit Volunteering

As well as there are reasons and motivational factors to do volunteer work, there are also some important factors that can break down the motivation, and discourage volunteer work. McKee (2010) lays out seven main reasons, based on general volunteering in America:

1. No flexibility in volunteer opportunities or scheduling
2. Too much wasted time in useless or unproductive meeting
3. Lack of communication
4. Lack of professionalism

5. The feeling that the volunteer is not really making a difference
6. No feedback from leadership about how the volunteer is doing
7. The volunteer leader who doesn't know how to lead

These reasons can be seen in relation with the satisfaction of the three psychological needs supporting intrinsic motivation; competence, autonomy and relatedness. The right factors (motivators) must be present in order to motivate students to volunteer, but there are also some factors (satisfiers) that should be present because their absence demotivates volunteer behavior. This is known under the name "two-factor theory" or "motivation-hygiene factor theory" (Herzberg, Mausner, & Snyderman, 1959). I will not make particular analyses based on the two-factor theory, but I will investigate some of the reasons presented by McKee through my empirical work, (covered in chapter 4.4, satisfaction for volunteering), and see if they also appear to be applicable to student volunteer work.

2.3 Changes in Motivation

Motivation theory is not only useful to explain initial motivation for participation and effort, but also why changes in exogenous factors can cause changes in motivation. For volunteer organizations this is important knowledge for anticipating possible changes in motivation and behavior resulting from environmental changes. It can also be used as a foundation for initiating changes in organizational design to improve workers motivation. Changes can involve a reduction or increase of the motivational level, but also a change of source, between intrinsic and extrinsic.

2.3.1 External Interventions

The optimal distribution of intrinsic and extrinsic motivation is very hard to determine and measure and we cannot conclude that one is good and the other is bad. The optimal distribution can vary depending on culture, organizational characteristics, job design, purpose of the work, and the agent's personality, among others. The optimal motivation may also be hard to obtain even if we know what it is, and the costs to incentivize may not be worth the potential yield.

I will present different relevant external interventions, which can be implemented in a work situation by a principal, and their anticipated effect according to theories and empiric

research. It is highly relevant for volunteer organizations to be aware of the positive and negative motivational consequences of external interventions, and this can serve as important pointers for what measures to implement to affect motivation and its direction, strength and source.

2.3.2 The Crowding Effect

The crowding-out effect is defined by an intervention that undermine intrinsic work motivation. It requires the presence of intrinsic motivation in the first place (an interesting task) together with an extrinsic intervention that is perceived to be controlling or that undermine the competence or values of the agent. This can be observed when a work activity is supported by both types of motivation and the agent get "over motivated". A rational agent will then reduce the motivation under his control and lower intrinsic motivation (Frey B. S., 1997a). This effect is based on the socio-psychological theory known as "hidden costs of reward" (Deci & Ryan, 1985).

According to Aghion and Tirole (1997) this can be seen as a problem of authority distribution between principal and agent. More delegation to the agent will give more autonomy, hence higher intrinsic motivation, but at the same time less control for the principal to steer the direction of effort. This implies that with higher intrinsic motivation, follows higher risk and consequences of a crowding-out effect. For this reason there should be more autonomy and less disciplining of workers with high morale, performing tasks they find interesting, and more control and use of rewards for non-interesting routine tasks (Frey B. S., 1997a).

The effect can also be induces by surveillance, regulations and set prices, as they are perceived as controlling and deprive individual autonomy. Frey (1992) claims that these instruments can cause the agents to feel "overjustified" when regulations intrude the sphere which were previously controlled by the individual's morale, leading to the crowding-out effect of intrinsic motivation. This can also result in *spill-over effects*, for example if specific regulations targeting one area crowds out intrinsic motivation in other areas. If the instruments are interpreted as congruent with own values, and as such an acknowledgment of own intrinsic motivation, the regulations can have a positive effect on intrinsic motivation.

From an economic point of view, this can be explained by a direct reward that will reduce the opportunity costs of working, but at the same time weaken the intrinsic motivation. The

total effect on motivation depends on the strengths of the direct effect and the crowding-out effect (Frey & Götte, 1999). In figure X the traditional price effect can be seen as curve S, where increasing reward from O to R, increases work effort from A to A' (point B on the supply curve). If there is also a crowding-out effect, this will shift the S-curve to the left, illustrated by S'. In our example the increase in reward has now reduced work effort from A to A'' (point C on the supply curve), and we can conclude that the crowding-out effect dominates the direct price effect in our example. For the direct price effect to dominate we would require a larger reward, which would move us further up and to the right on the S'-supply curve. This graph is the result of an experiment which showed that participants receiving a small reward underperformed, and those who received a high reward outperformed compared to those who worked for free (Gneezy & Rustichini, 2000a).

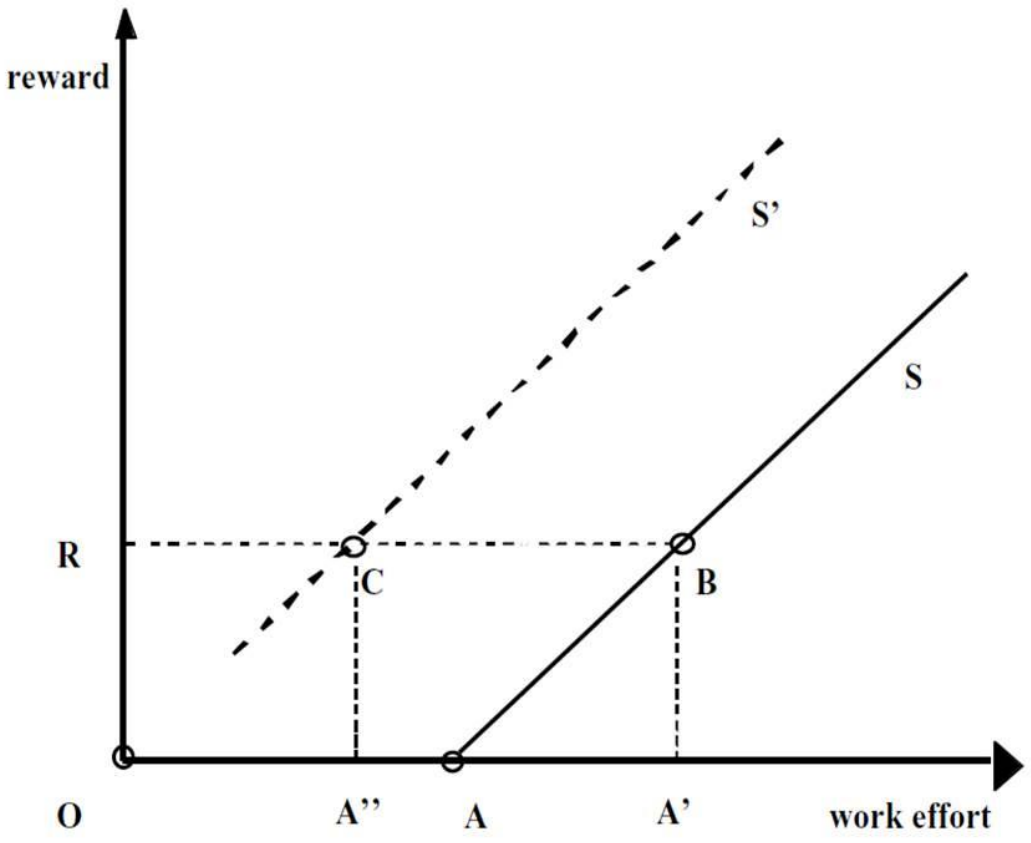


Figure 3: Net-outcome of the price- and the crowding-out effect (Frey & Jegen, 2001, p. 594)

The crowding effect is in its nature very hard to measure, and depends on the characteristics of the extrinsic instrument and the activity, and the personality of the agent. Doubt about the validity of the crowding effect has been made, and Lazear (2000) concludes in his research that "claims by sociologists and others that monetizing incentives may actually reduce output

are unambiguously refuted by the data. Not only do the effects back up economic predictions, but the effects are extremely large and precisely in line with theory". Lazear might very well be right, under certain circumstances. The crowding-effect is likely to have very limited application in simple task environments where intrinsic motivation plays a small role and where the direct price effect will dominate (Frey & Jegen, 2001). The application of this theory must take into consideration the nature of the task at hand, as well as the agent's interpretation of the extrinsic intervention, and cannot be applied uncritically and equally in all situations.

The crowding-in effect is the opposite of the crowding-out effect and can occur when an activity is insufficiently supported by extrinsic stimuli, or when the remuneration is perceived higher than expected for the current performance-level. The agent will then justify its behavior with intrinsic motivation (Frey B. S., 1997a). Another situation is when external intervention is seen as an acknowledgement of high work morale, such as verbal rewards and unexpected rewards that are not contingent on task behavior (Frey & Jegen, 2001). For volunteer organizations this could help explain a change of motivational sourcing. People who initially participated for extrinsic reasons can later obtain a higher intrinsic motivation if the amount of effort required cannot be defended by the existing extrinsic stimuli alone. This can also be seen in connection with cognitive dissonance theory.

Cognitive dissonance can be seen in situations where agents' perceive themselves or an activity they do in in conflict with information they receive. In such cases the information can either be ignored or rejected, or lead to a change in the original beliefs. This theory predicts that the relationship between behavior and beliefs are not unidirectional. Behavior is contingent of beliefs, but we can also observe that beliefs and values can change depending on conducted behavior. This implies that a certain desired long-term behavior need not solely be dependent of motivation beforehand, but as the behavior is conducted the agent builds its own intrinsic motivation to justify and support the action (Akerlof & Dickens, 1982). This is important support for active recruitment to volunteer organizations, as it predicts that people with an initial low motivation will become more engaged with increased participation.

2.3.3 Rewards

Rewards might not be something we naturally would connect to volunteer work, as monetary rewards are usually not in question. Still there are other possible rewards besides monetary, which this theory applies for. In a student union the rewards can be in the form of fringe benefits, prices or acknowledgement, or other forms of gifts and recognition. These rewards can serve as both positive and negative enhancers, depending on their signaling from the principal's side and their interpretation from the agent's side. My focus in this chapter is not primarily on rewards as extrinsic motivation, as they are often seen, but their effect on both intrinsic and extrinsic motivation and the balance between the two types. I will also investigate how different circumstances can change the effect of rewards, and how they can induce the crowding-in or crowding-out effect

External rewards can have both negative and positive effects on intrinsic motivation, and according to Frey (1997a) the effect depends on how the rewards are interpreted by the agent. If rewards are made contingent on performance, they will most likely be interpreted as controlling, and crowd-out intrinsic motivation. On the other hand, if rewards are seen as an informational acknowledgement of competence and high work morale the rewards can bolster intrinsic motivation. In many cases rewards will be experienced as conflicting for intrinsic motivation, as they inhibit both the effects mentioned above (Deci, Koestner, & Ryan, 1999).

Information is often asymmetric in a principal-agent relationship, and in situations where the principal has more information than the agent, rewards can be seen as signals about the agent's competence or the characteristics of the activity. A contingent reward-scheme can signal a boring activity, but also in some cases a challenging activity that presumes competence (Bénabou & Tirole, 2003). This type of crowding-effect is due to a change in the perceived nature of the performed task, the task environment or in the agent's self-perception (Frey & Jegen, 2001).

A contingent reward is a common factor that often reoccurs in the motivation literature, and Deci, Koestner and Ryan (1999) investigates this through a meta-analysis of 128 studies. They find that engagement-, completion- and performance-contingent rewards significantly undermine intrinsic motivation, due to the reduction of free choice and self-reported interest. The same is the case with tangible and expected rewards.

Positive feedback, unlike contingent and tangible rewards, has generally been found to enhance intrinsic motivation. A verbal reward, that is unexpected, provided unconditionally of performance and in an informative matter is usually seen as supportive of competence, not controlling. Feedback can also have a negative impact if it is perceived as controlling or undermining of competence, but this is not the case as often as with tangible rewards (Deci, 1971).

The timing of the reward in relation to the rewarded activity can be of great significance for the mentioned interpretation. A contingent reward which is "promised" or "ex ante", and known in advance of an activity, can signal distrust or a boring activity. On the other hand, if rewards are "discretionary" or "ex post", they are more likely seen as an acknowledgment of competence and not as controlling (Bénabou & Tirole, 2003).

Rewards can have different effects depending on the time span they are seen in connection to, and Condry and Chambers (1978) remarks that "rewards often distract attention from the process of task activity to the product of getting a reward". This changes the main objective from being driven by intrinsic motivation of achieving the goal, to simply obtaining the reward. Even though the reward will have a positive short-term effect if the direct effect is bigger than the negative crowding-out effect, the long term effect is uncertain. In the long-term we can expect a decreased willingness to persist, and impaired long-term performance, because motivation is shifted toward performance rather than progress. This is also supported by Kohn (1993), who concludes that rewards gives a limited impact on engagement (current activity) and a negative impact on re-engagement (persistence). The research was in both cases performed on students doing schoolwork, and I believe the results can be transferable to my case, if motivation turns from intrinsic interest to that of achieving status or rewards.

A fair and justified differentiation between agents is important in order to maintain a high intrinsic motivation. If remunerations are perceived unfair agents, performing above average will not feel that their competence is recognized, and they are expected to adjust their intrinsic motivation down (Frey B. S., 1997a). It is also possible in this situation to see a crowding-in effect among those who are under-performing, assuming they perceive themselves as over-paid. If wage differentiation is perceived to be unfair, it can reduce intrinsic motivation and the conditions for cooperation and team work, especially in non-profit organizations where intrinsic motivation is extra important. In support of this, Leete

(2000) finds that there is less disparity both in wages and working conditions in non-profit organizations than in for-profit organizations, most notably among executives and white-collar workers. The reasons for differentiation should be objective, and not based on gender, race or other criteria irrelevant for performance. For volunteer organizations this can also be related to non-monetary rewards, verbal feedback, and distribution of responsibility.

2.3.4 Identity

Identity can be very effective to induce intrinsic motivation, as it aligns the motives of the agent with that of the principal or organization. By turning "outsiders" into "insiders", who feel an affinity and responsibility toward the organization, the instruments of rewards and punishments are less needed. Agents who identify with a workgroup or organization are more likely to adhere to the productivity norms, which reduces the need for extrinsic stimuli and control (Akerlof & Kranton, 2005). Identifying with an organization also energize people to perform beyond their required job duties, and contribute more than what is demanded of them. This is in accordance with *organizational citizenship behaviors theory*, which involves various forms of cooperation and helpfulness to others that support the organization's social and psychological context (Organ, 1997). This behavior can be directed towards individuals or the organization as a whole.

Identity can also be seen in context with organismic integration theory. As the individual becomes a more integral part of an organization, the organizations values and motives can gradually change from being extrinsic motivators to be internalized. If this process is successful, the individual (agent) can operate with more autonomy and intrinsic motivation, and at the same time for the best of the organization (principal), as their motives become more aligned.

3. Research Methodology

This chapter will explain the research design and methods, and statistical tools applied on the empirical data. My goal is to utilize the research methodology to collect and treat my empirical data in such a way that it can give credible and understandable answers to my research questions.

3.1 Research Design, -Approach and -Method

The research design constitutes the general plan for answering the research questions, and can be classified according to its purpose as exploratory, descriptive or explanatory (Saunders, Lewis, & Thornhill, 2009). An *exploratory design* can be used when the research is being conducted on a new subject with little previous knowledge and existing theory, or to take a new approach towards a known problem or situation. This design is most compatible with qualitative data collection, such as in-depth interviews with experts or focus groups. An exploratory study can be followed by a descriptive or explanatory study once the problem has been more clearly defined. *Descriptive design* is used when the purpose is to describe persons, events, or situations. It is often used in preliminary parts of the study, to create a clear picture of what the research will be conducted on. It can be used to find frequencies and averages, but it does not investigate causality, which is why it can be followed by explanatory studies if causality is also of interest. This design can be used with both qualitative and quantitative data collection. *Explanatory- or causal design* is used to investigate the relationship or causality between different variables, and test if the occurrence of one event might be caused by another. This design is mostly used with quantitative data studies (Saunders, Lewis, & Thornhill, 2009).

In this thesis I will utilized the two latter designs to analyze my data and obtain answers to my research questions. All the empirical data is collected through quantitative questionnaires, which makes the data suitable for my chosen research designs. I will first analyze the data descriptively in chapter 4 to investigate the composition of my response sets, based on the control variables. Secondly I will apply an explanatory design to analyze the motivational-, hindrance-, and satisfaction factors, to see how they differ from each other in each response set, and which of the control variables that can have a causal impact.

Deductive and *inductive* represents the two main research approaches, or methods of reasoning. The deductive logic argues from the general to the particular area of research (top-down), while the inductive goes in the different order (bottom-up) (Cresswell & Clark, 2007). Due to this logic the research processes follows different orders. Inductive processes will start with observations, followed by findings, hypothesis and theory, while the deductive processes will start with the existing theories, then construction of hypothesis, observations and interpretations, and finally hypothesis confirmation/rejection and revision of theory (Bryman & Bell, 2011). Due to the availability of existing theory on the subject of motivation I have chosen a deductive approach. This is reflected in the structure of my thesis, starting with a theory part followed by data collection and empirical analysis of the data. The use of a deductive approach can reduce uncertainty, as the research can be compared with existing theories, which is particularly useful for exploratory research. A possible weakness is the application and comparison of similar research and theory, which might not be valid due to subtle differences between the research areas (Saunders, Lewis, & Thornhill, 2009).

Qualitative and *quantitative* are the two main types of research methods, or techniques for collection and analysis of data, and the choice of optimal method depends on the problem definition and purpose as presented under research design. The approach for qualitative research is to have few, very detailed observations or information sources, and to obtain as much detailed information about the subject as possible. This approach is suitable for exploratory studies, where existing theories and knowledge is not sufficient, and it is more important to obtain a deeper insight rather than generalizable data. The outcome of a qualitative research will often be meanings and thoughts, while the quantitative is more likely to provide numbers and measurable data. Quantitative method takes the approach of gathering more generalizable data, from a larger group, based on more superficial and comparable responses. This makes comparison easier, but it also requires more interpretation and assumptions, as the underlying reasons are not as easily uncovered (Saunders, Lewis, & Thornhill, 2009).

My questionnaires are constructed with a quantitative focus, in order to collect generalizable data that is suitable for statistical analysis, and compatible with a descriptive and explorative research design. The layout and questions have been based on existing theory and previous research, which makes a quantitative approach easier as many relevant variables and factors have already been discovered. I have however also included a small qualitative part, as some

questions come with the opportunity to leave comments. This opens up the chance to uncover new knowledge, by getting direct input from the respondents. A possible weakness is if only those with the strongest opinions, or a similar viewpoint, chose to use the comment option, which can give a biased impression of the respondents' attitudes. I have therefore chosen to focus my main attention towards the quantitative analysis.

3.2 Collection of Data

The collection of primary data has been conducted with three cross-sectional questionnaires, which implies that all responses for each questionnaire was retrieved at approximately the same time, and as of such does not describe time-dependent changes for respondents. The collection of secondary data involves similar research performed by others, and is interpreted and presented based on their final report, not on raw data. This makes the secondary data a bit less reliable, and I am unable to perform direct analysis of the data.

3.2.1 Questionnaires

All the empirical data was collected using electronic questionnaires, through Qualtrics, which is an online survey technology provider (Qualtrics, 2014). A total of three questionnaires were distributed, to different target groups and through different channels, which consequently gave different response rates. The three different populations are named "NHH 1st Year", "NHH Active", and "TEC Active", and there was no use of prices or payments for any of the questionnaires. The electronic distribution makes the collection and handling of data easier, but can also result in a lower response rate, as the method is quite impersonal (Freeman, 1997). The actual distribution is described under chapter 4.1.1 together with the response rate analysis.

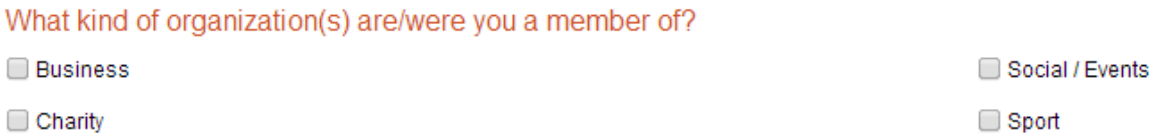
The three different questionnaires, two in Norwegian and one in English, had a slightly different layout and content in addition to the different language, but the main content with introduction, control variables and motivational factors were similar. They all started with a short introduction explaining the purpose and background for the questionnaire and thesis, a statement saying that the results would be shared with the participating groups, information of the estimated time required for answering (4-5 minutes), and a promise of anonymity. The 1st year questionnaire differed from the two others by only having two control questions in the beginning, gender and age, and the rest at the end. All of the control questions were

single-answer questions. After the control questions came the main part which began by mapping participation in student groups followed by the motivation and hindrance for participation. The 1st year set did not include the bulk on satisfaction as it would not be very relevant for students that were new to school. All respondents had the option to make a comment at the end of the questionnaire, and the older students (not 1st year NHH) had questions on their agreement to the organization being optimally organized to motivate, and if participation gave advantages for job applications, also with the option to add comments. As all TEC-respondents were from Mexico, none were paid to participate, and all respondents were members, these questions have been removed from the analysis. Some response alternatives, such as part-time job above 10 hours a week and living between 1-5 years in the city before enrolment, were merged due to a low number of respondents. An overview of the TEC-questionnaire with all questions can be found in the appendix.

The questionnaires were distributed at different times of the year for practical reasons, which should not have any large effects on results, other than that the 1st year NHH students may be less influenced by the rest of the students as they are very new to school. "1st year NHH" was distributed in September and October 2013, "NHH Active" in March 2014 and "TEC Active" in April 2014.

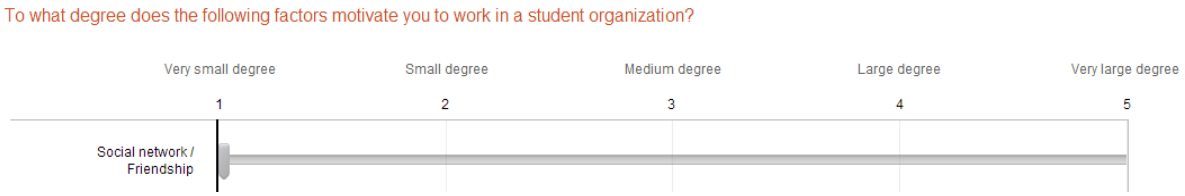
The control variables had response options marked with a hollow circle, and were single-answer options. The marking is also reflected in front of each question in the appendix.

The membership questions had response options marked with black squares, and were multiple-answer options. This is because many respondents are member of more than one group. For NHH respondents I grouped into categories based on group membership, while TEC respondents responded directly to group categories themselves.



Some questions had the option to enter text as a response to the question. These are marked with "(text entry area)" in the appendix, and like this (see below) in the questionnaire.

The factors for motivation, hindrance and satisfaction was measured with the help of a slider, and a Likert-scale from 1-5 (very small degree to very large degree). For "1st year NHH" there was an option with value of 0 for "Do not know", and those data entries have been removed from the analysis, to allow comparison across response sets, and to not manipulate the mean value. The scale of only 5 points is made to make it easier to compare groups with fewer respondents, and an odd scale does not force an opinion from indifferent respondents. It also brings the data closer to that of an interval scale, for later analysis purposes.



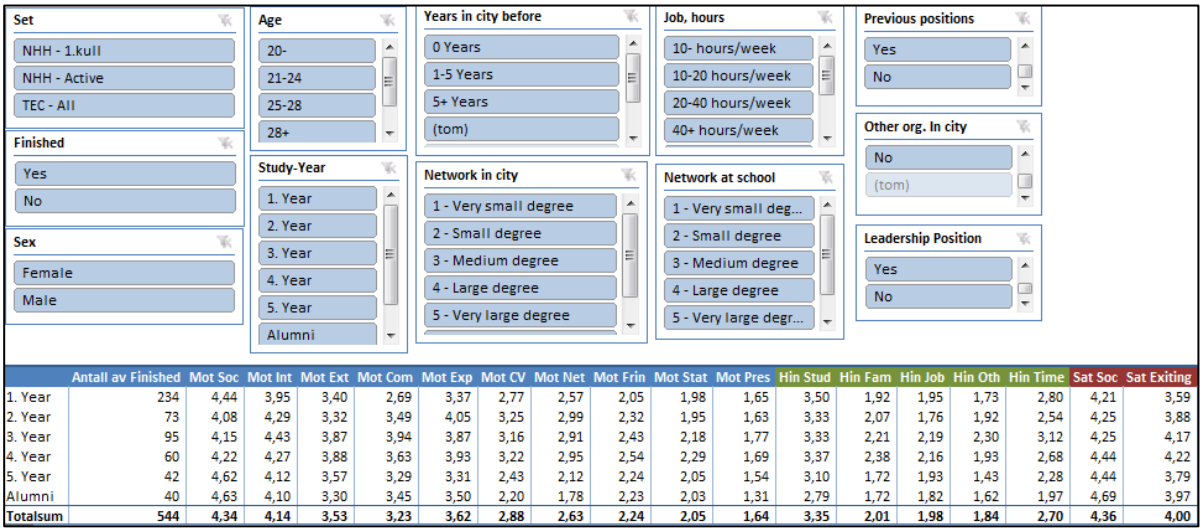
To improve the quality of my responses I added a validation request for the control variables for gender, age and cohort, and the response variables for motivation, hindrance and satisfaction, which I considered most important. This means that respondents trying to move on in the questionnaire without answering those questions would get a request to respond before they could move on. I also added some filter questions that would spare the respondents for irrelevant questions, for example someone who is a member of an organization will not be confronted with reasons for not being a member. The questionnaires were also pilot tested by a few people before distributed to help avoid errors and lack of clarity.

3.3 Analysis of Data

After the data is collected it must be analysed in order to draw any conclusions in regards to the research questions. As all the raw data was collected electronically it made it fairly easy to move the data to other programs for analysis.

Excel was used for most of the initial treatment, analysis and presentation of data. The data was imported from Qualtrics, and then it had to be prepared and organized before the analyses could be performed. The data from the different sets where put in the same excel-sheet, some variables with few respondents were consolidated, and the group memberships were aggregated into categories. Incomplete respondents were removed, and the numbering of some variables was changed to make more sense in the analysis. With the organized data I

could use a pivot-table to extract the information I wanted, and put them in tables and graphs as seen in chapter 4.



	Antall av Finished	Mot Soc	Mot Int	Mot Ext	Mot Com	Mot Exp	Mot CV	Mot Net	Mot Frin	Mot Stat	Mot Pres	Hin Stud	Hin Fam	Hin Job	Hin Oth	Hin Time	Sat Soc	Sat Exiting
1. Year	234	4,44	3,95	3,40	2,69	3,37	2,77	2,57	2,05	1,98	1,65	3,50	1,92	1,95	1,73	2,80	4,21	3,59
2. Year	73	4,08	4,29	3,32	3,49	4,05	3,25	2,99	2,32	1,95	1,63	3,33	2,07	1,76	1,92	2,54	4,25	3,88
3. Year	95	4,15	4,43	3,87	3,94	3,87	3,16	2,91	2,43	2,18	1,77	3,33	2,21	2,19	2,30	3,12	4,25	4,17
4. Year	60	4,22	4,27	3,88	3,63	3,93	3,22	2,95	2,54	2,29	1,69	3,37	2,38	2,16	1,93	2,68	4,44	4,22
5. Year	42	4,62	4,12	3,57	3,29	3,31	2,43	2,12	2,24	2,05	1,54	3,10	1,72	1,93	1,43	2,28	4,44	3,79
Alumni	40	4,63	4,10	3,30	3,45	3,50	2,20	1,78	2,23	2,03	1,31	2,79	1,72	1,82	1,62	1,97	4,69	3,97
Totalsum	**544**	**4,34**	**4,14**	**3,53**	**3,23**	**3,62**	**2,88**	**2,63**	**2,24**	**2,05**	**1,64**	**3,35**	**2,01**	**1,98**	**1,84**	**2,70**	**4,36**	**4,00**

Figure 4: Excel-analysis of raw-data

In addition to having one excel sheet with text variables for analysis in excel, a copy was made with numeric variables (yes/no → 1/0), for use in statistical analysis in Minitab. I also split the "1st year NHH" response set in two, depending if the respondent was member of a student group or not.

3.3.1 Descriptive Analysis

The descriptive analysis was performed in excel by extracting data from the different sets and organizing them in tables and graphs for comparison. In this way we can learn about the different composition of the data sets, based on the information provided in the control variables. This can later be used to help interpret the differences found in the explanatory part, and understand why the differences in a sets composition leads to different scores for the motivation-, hindrance-, and satisfaction factors.

3.3.2 Explanatory Analysis

For the second part of the analysis I move from a descriptive to an explanatory approach. I investigate the differences between the motivation-, hindrance-, and satisfaction factors of the different response sets, and I try to find the control variables that can help explain the variance within each set. This is done partly through analysis of the response distribution by visual histograms, and values for mean (average), standard deviation, median, range,

skewness and kurtosis. The *mean* is the average sum of response-values, and the *standard deviation* of the mean is an estimate of the dispersion in the distribution of means with repeated samples from the same distribution. The *median* is the midpoint of the data set, and is found by ranking the data and finding the middle observation. This way of measuring is more reliable for ordinal data than using the mean. The *range* shows the difference between the lowest value (min) and the highest value (max), or how much of the scale has been used. If the range is less than 4 the respondents have not used the whole scale, which implies a skewed distribution. *Skewness* refers to a lack of symmetry around the center value, and values far from 0 indicate a distribution which is more concentrated to one side of the scale. *Kurtosis* defines how peaked the distribution is, and a positive value signals a peaked distribution, while a negative value signals a flat distribution (Minitab 17 Statistical Software, 2010). In addition I used variance analysis or regression analysis. These analyses show the relationship between a response variable and predictor variables, to measure how much of the variation in the response data or dependable variables (motivational factors) can be explained by the predictors (control variables) (Keller, 2009).

Most of my data is ordinal, non-parametric and distribution free, which means that the structure of my data is not following a set interval of values with an equal distance in between, and there are no set distribution of the data, such as a normal distribution (Schlag, 2006). Even though my Likert-scale is made up of numbers from 1 to 5, we cannot claim that the "distance" between "very small degree" and "small degree" is absolutely equal to that of "small degree" and "medium degree". If the numbers are to be seen as categories it is the ranking of respondents that should be considered, and it is recommended to only use nonparametric statistics (Jamieson, 2004; Keller, 2009). There are however support for using parametric tests on Likert-scales if the distance between the categories is seen as equal. This use is supported when the response alternatives clearly implies a symmetric distance from the middle category (very small, small, medium, large, very large) and used with a visual scale with equal spacing between the alternatives.

The part of my questionnaire on motivation, hindrance and satisfaction used the visual Likert-scale with equal spaces and is symmetric from the middle; it can therefore be seen as something in between ordinal- and interval data. For this reason I will use the mean-value of responses actively, and also some parametric tests based on the mean, however I will be extra cautious with p-values that are close to the α-level (0,05). If the data would be treated as strictly ordinal it is advisable to use the ranking (median) of the responses instead of the

mean, and I will therefore also use non-parametric tests to support the parametric. The reason for this is to not loose important information from the data sets that can be analyzed, but at the same time not draw unsupported conclusions.

Statistical Significance

With my questionnaires I have asked a sample of a population, and I will use this sample to make assumptions regarding the whole population. This is called statistical inference, and although it allows us to collect less data it also lowers the reliability of the research as wrong conclusions might be drawn if the sample is not representative of the population (Keller, 2009). To reduce the risk of making wrong conclusions we can measure the statistical significance, and set a certain minimum level to accept the conclusion, known as the "P-value". Another way to measure is by using a confidence interval, which is the opposite of the significance level. If the P-value is 0,05 the confidence interval is 95 %.

I have chosen to use a minimum P-value, or significance level, of 0,05, which means that the conclusion is expected to be wrong in 5 % of the tests. This is a level that provides a decent amount of security for not making wrong conclusions without taking away too much predictability from the data. With this level I am expected to reject the null hypothesis even though it is correct in 1 out of 20 tests. This is known as a type 1 error, and involves accepting conclusions that are not correct. The null hypothesis states that the control variable has no effect on the measured factor (response variable) while the alternative hypothesis states that it has an effect. A type 2 error involves rejecting the alternative hypothesis, and sticking to the null hypothesis even though the variable has an effect. If the consequences of accepting wrong alternative hypotheses (type 1 errors) are higher, the significance level should be lower leading to fewer accepted alternative hypotheses, but with a more reliable effect (Keller, 2009).

Statistical Tests

To perform explanatory research on my data and to check for variance and causality between the variables I used the Tukey Test for differences between means, Kruskal-Wallis Test for differences between medians, Spearman correlation analysis, and OLS-regression. All tests were performed using the statistical program Minitab.

The Tukey Test compares the means for a factor among different groups (factor levels) divided by a chosen control variable. It then groups the factor levels by letters, and those

with equal letters do not have a significantly different mean. The Tukey Test is particularly useful when comparing multiple factor levels, as it uses a simultaneous confidence level, which is always lower than the individual confidence level and gives a more robust conclusion when testing more than two groups (Minitab 17 Statistical Software, 2010). As I need the test for four factor levels this test is more suitable than for example the Fisher Method which only uses the individual error rate. The Tukey test can only be used to model the relationship between one response variable and one predictor variable at a time, unlike the regressions which can model the effect of several predictors at the same time.

The Kruskal-Wallis Test is similar to the Tukey Test, but is non-parametric. It tests for significant differences between groups by using the median, and ranking the data. Both these tests have been used to measure the differences to the motivation-, hindrance- and satisfaction factors between the four different response sets ("1st year NHH" was split in two, for members and non-members). As mentioned before the P-value to keep the null hypothesis and reject any difference between the response sets is 0,05 and for any value above this the null hypothesis will be kept.

Correlation analysis measures the extent to which two variables tend to change together. For my purpose I have used the Spearman rank-order correlation (Spearman's rho), which is suitable for ordinal variables as it is based on the ranked values for each variable (Minitab 17 Statistical Software, 2010). Correlation does not necessarily imply causation, and it will only be used to find variables that are changing together.

Ordinary least squares regression (OLS) can help us determine the relationship between a response variable and predictor variables, and how the score of the response variable can be predicted by the sum of a constant and the predictor variables. This is done by determining an equation that minimizes the sum of the squared distances between the sample's data points and the values predicted by the equation (Minitab 17 Statistical Software, 2010). I have used this method to assess the relationships between control variables and the motivational- and hindrance factors, between the motivation- and hindrance factors and the satisfaction factors, and between the group memberships and the satisfaction factors (For more on the practical application see chapter 4.2).

3.4 Validity and Reliability

Validity defines how well the collected data, and conclusions made based on them, reflects reality in an accurate manner, and that the tests measure what you want to measure. *Internal validity* is a measure for how well causal relationships can be established within a statistical analysis of a population, and *external validity* is how well these causal relationships can be generalized and applied in different setting (Saunders, Lewis, & Thornhill, 2009). The research has a good internal validity if a similar test on all other parts of the same population gives the same results, and it has a good external validity if a similar test on other populations gives the same results.

The Internal validity of my research is dependent on truthful answers from the respondents, which is why the reassurance of anonymity in the questionnaires is so important. There is also little to gain for the respondents by answering positive or negative, other than maybe manipulating the results to improve the image of their school or student group. Another possible factor that might affect internal validity is selection bias, which can be caused by the researcher willingly or unwillingly not reaching a representative sample, or because some parts of the population decides not to answer the questionnaire. A general selection bias can be counteracted by ensuring you reach out to a representative part of the population, and against a self-selection bias you should ensure a high response rate. This is covered more thoroughly under the descriptive analysis but in my case the "1st year NHH" has the highest internal validity, as this reached out to the whole population, and had a 50 % response rate. The TEC survey is weakest as it only reached out to the most active students in leadership positions, and only had a 10 % response rate. Therefore it might be subject to a selection bias.

The external validity of my test can be strengthened by the fact that I compare samples from two different schools, from different parts of the world. This gives me the opportunity to source which results come from specific local or national reasons, and it will be easier to see which conclusions can be generalized across both schools. The external validity can be weakened if the internal validity is week, meaning that if my TEC sample is not representative I might be wrong to use those conclusions to determine the external validity. This must be taken into consideration when analyzing and concluding based on the TEC data.

Reliability is a definition for the consistency of a measure, and to what degree equal independent studies would give the same results. A reliable test is a requirement for validity, but it is not a guarantee, if it measures the wrong thing. According to Saunders, Lewis and Thornhill (2009) qualitative data is reliable when the study can be reproduced, does not contain personal opinions, and is not affected of time and place.

To secure reliability the analysis has been performed in a methodological consistent way in Minitab, and the questionnaire has been constructed so that the questions should be clear and neutral. All the questionnaires were tested by a small selection of insiders with knowledge of the student organizations, to make sure the questions were clear and understandable. Because the questionnaires were sent out electronically there was no way to control for personal inconsistency factors, such as the environment under which the test was performed.

4. Empirical Data and Analysis

In this chapter I will present my empirical data, which has been collected from students at the Norwegian School of Economics in Bergen, Norway, and Tecnológico de Monterrey in Monterrey, Mexico. The data will be analyzed in context of the theoretical framework previously presented and the organizational framework under which the volunteer work takes place.

The three electronic questionnaires targeted different student-groups, through different channels, which affected the composition of the response sets. I will therefore first present a descriptive analysis of the three different response sets "NHH 1st Year", "NHH Active", and "TEC Active". "NHH 1st Year" is split into two groups: "Not-members" and "Members", depending if the respondent is member of a student group or not. I will also present the group membership composition of each school. Afterwards I will continue with an analysis of motivation-, hindrances- and satisfaction for volunteer work. These factors, and their relationship with the different control variables and group memberships, will be analyzed to determine correlation and assess probable causalities. The most likely causality is that control variables affect the motivational factors which in turn affect the desired group memberships. It is also likely that membership of a group can in turn affect the motivation, depending on the group characteristics and the individuals' positive or negative experiences. More graphical presentations can be found in the appendix.

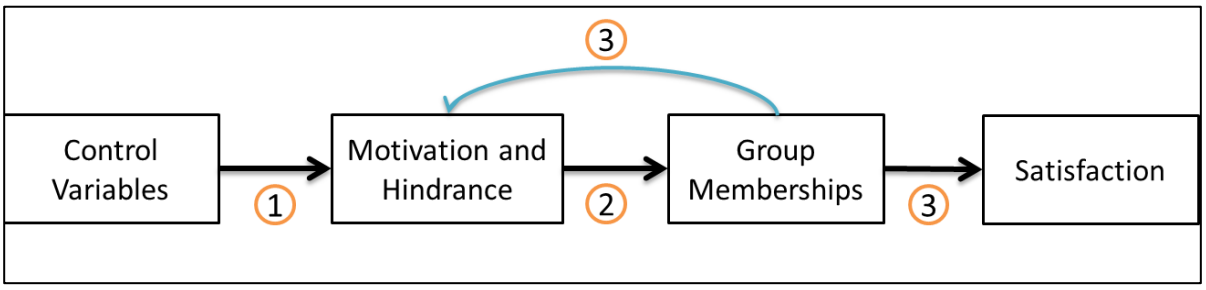


Figure 5: Causality of variables

A more thorough explanation of the analysis process for each factor can be found in the introduction of chapter 4.2.

4.1 Descriptive Analysis

The descriptive analysis is presented through five tables. The first two are divided in the four response sets (in columns) and shows the distribution percentage for the control variables (in rows) presented. The next two differ from the first two by being divided by years lived in the city, and the first of those two figures is for the NHH sets and the second for TEC. The last table shows group membership based on categories, and is divided by school. Some interesting variables have also been presented in figures to better illustrate the differences. For these figures the distribution percentage is shown on the y-axis and the response alternatives to the control variable on the x-axis. The sets presented are listed in the top right corner, with number of respondents in brackets. Figures for the remaining variables can be found in the appendix.

Descriptive Analysis, Part 1 - By Response Set				
Control Variables	NHH - 1. Year, Not-Member	NHH - 1. Year, Member	NHH - Active	TEC - Active
Total Respondents	**45**	**158**	**201**	**140**
Response Rate	47 %		29 %	13 %
Gender				
Female	44 %	42 %	50 %	49 %
Male	56 %	58 %	50 %	51 %
Age				
20 or less	60 %	63 %	10 %	43 %
21-24	36 %	35 %	58 %	55 %
25 or more	4 %	2 %	31 %	2 %
Gender / Age				
Female, 20-	60 %	78 %	13 %	49 %
Female, 20-24	40 %	22 %	59 %	50 %
Female, 25+	-	-	28 %	1 %
Male, 20-	60 %	52 %	8 %	38 %
Male, 20-24	32 %	45 %	57 %	60 %
Male, 25+	8 %	3 %	35 %	3 %
Cohort (Study Year)				
1st	100 %		9 %	9 %
2nd	-		17 %	27 %
3rd	-		20 %	39 %
4th	-		16 %	20 %
5th	-		17 %	5 %
Alumni	-		20 %	-

Table 1: Descriptive analysis, part 1

"NHH 1st Year" was distributed to all 432 1st year students enrolled in an obligatory class at NHH during the fall semester 2013. It was sent out by email through It's Learning, which is an online learning management system used to facilitate communication and distribution of academic resources between lecturers and students (itslearning inc., 2014). This set had a response rate of 47 %. The students were informed and encouraged to respond on two occasions by their lecturer in class, first at the end of September and then at the end of October. This timing should have given the students ample opportunity to familiarize themselves with the participation possibilities in the student union, since they enrolled in the beginning of August. Each reminder yielded approximately 100 responses. As this questionnaire went out to *all* 1st year students at NHH not everyone were active in the student union, but 78 % reported membership of a student group. The response set "NHH 1st Year" contained 14 % more males than females, which is roughly consistent with the gender distribution at NHH (Whittaker, 2014). It should also be noted that female students are younger than the males on average, with respectively 74 % and 53 % under 21 years. The age/gender difference is also valid for the two other response sets, although not as prominent.

"NHH Active" targeted active or previously active members (alumni) of student groups at NHH, and the questionnaire was mainly distributed directly to each student subcommittee through their private Facebook groups, but also through some email lists. The questionnaire link was communication with the help of a contact person in each group, and was seen by approximately 700 students, which gives an estimated response rate of 29 %. Because some views might be from the same respondent due to membership of more than one group, the response rate estimate might be a bit lower than the actual response rate. In contrast to "NHH 1st year" there were no reminders made after the initial communication, which might be a reason for the lower response rate. Both this and the "TEC Active" response set has an equal amount of female and male respondents

"TEC Active" was distributed via the coordinator of student groups at Tecnológico de Monterrey. It went out via email and a Facebook group, mainly to students in leadership positions in student groups connected to the university. The communication was extended to around 1100 students, and had a response rate of 13 %. The low response rate can be due to the impersonal way of distribution (Freeman, 1997), low interest in the subject, the absence of reminders, and language barriers as the questionnaire was in English and the respondents were Mexicans.

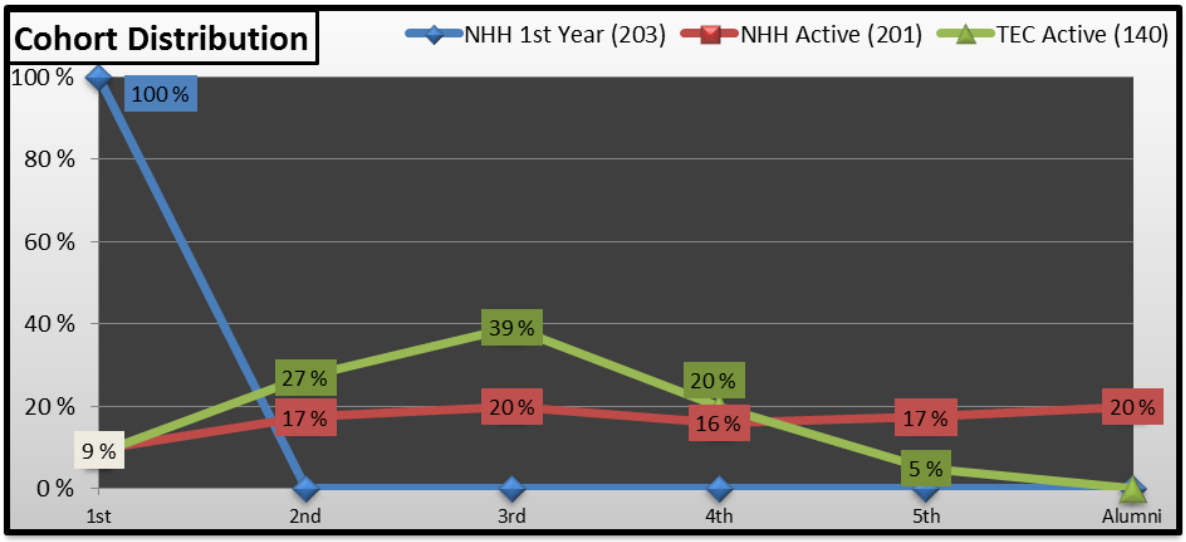


Figure 6: Descriptive analysis – Cohort distribution

The "NHH 1st Year" set has the youngest age distribution of the sets, which is not surprising as it only reached 1st year students. The "NHH Active" has the highest age average, with only 10 % below 21 years, and 31 % above 25 years. The high age can be seen in connection to the cohort of the students which is relatively evenly spread out among all years except 1st year, and it also includes alumni. For "TEC Active" nearly all are under 25 years, equal to the "NHH 1st year" population, although they have a higher representation of 21-25 years. This can also be seen in connection to the cohort distribution, which is in the form of a normal distribution, with 39 % of the respondents in the 3rd year.

Descriptive Analysis, Part 2 - By Response Set				
Control Variables	NHH - 1. Year, Not-Member	NHH - 1. Year, Member	NHH - Active	TEC - Active
Years living in the city before enrolment				
0 years	62 %	73 %	79 %	32 %
1-5 years	13 %	9 %	11 %	7 %
5 years or more	22 %	18 %	10 %	61 %
Network in the city, outside of school				
Very small degree	13 %	17 %	26 %	16 %
Small degree	18 %	18 %	28 %	12 %
Medium degree	20 %	25 %	24 %	22 %
Large degree	18 %	20 %	12 %	26 %
Very large degree	31 %	20 %	10 %	24 %
Network in school at time of enrolment				
Very small degree	64 %	46 %	53 %	23 %
Small degree	16 %	29 %	30 %	11 %
Medium degree	18 %	18 %	13 %	26 %
Large degree	-	4 %	2 %	21 %
Very large degree	2 %	4 %	-	19 %
Previous volunteering				
Yes	47 %	63 %	76 %	
Other volunteer positions in the city				
Yes	29 %	20 %	22 %	53 %
Leadership position				
Yes			70 %	95 %
Job (hours/week)				
No	64 %	72 %	40 %	66 %
Less than 10 hours	22 %	18 %	36 %	13 %
More than 10 hours	13 %	9 %	18 %	21 %

Table 2: Descriptive analysis, part 2

The geographical background is one of the most relevant factors in my study, and is measured by how many years the student has lived in the city of studies before he/she was enrolled. This is likely to affect their motivation to participate in a student group, which will be analyzed later. The questionnaires show that among NHH respondents 62 % of non-member 1st years, 73 % of member 1st years, and 79 % of active NHH respondents were new to the city when they began their studies. These results are supported by NHH Paraplyen (2012), showing that only 37 % of the students who were admitted in 2012 came from the same part of the country as NHH is located. The different results dependent on geographical background might be caused by a higher motivation to participate amongst non-locals, which would lead to a higher concentration of students from outside the city in the active group. The results from TEC were quite different, with only 32 % of students being new to the city.

The students' social network in the city outside of school is reported to be lowest among the active NHH students, which can indicate that they have more of their social network within the school (see figure 7). For the non-members the situation is the opposite, with a higher proportion reporting to have a large- or very large social network in the city. The results change quite a lot when we split up the social network in the city depending on amount of years lived in the city (see Table 3: Descriptive analysis, part 3 – By years living in the city). We can see a clear correlation, and for the NHH sets 94 % of local students report a large- or very large social network in the city, compared to 17 % among non-local students. The prevalence of a social network in the city can be expected to reduce the motivation for participation based on social needs.

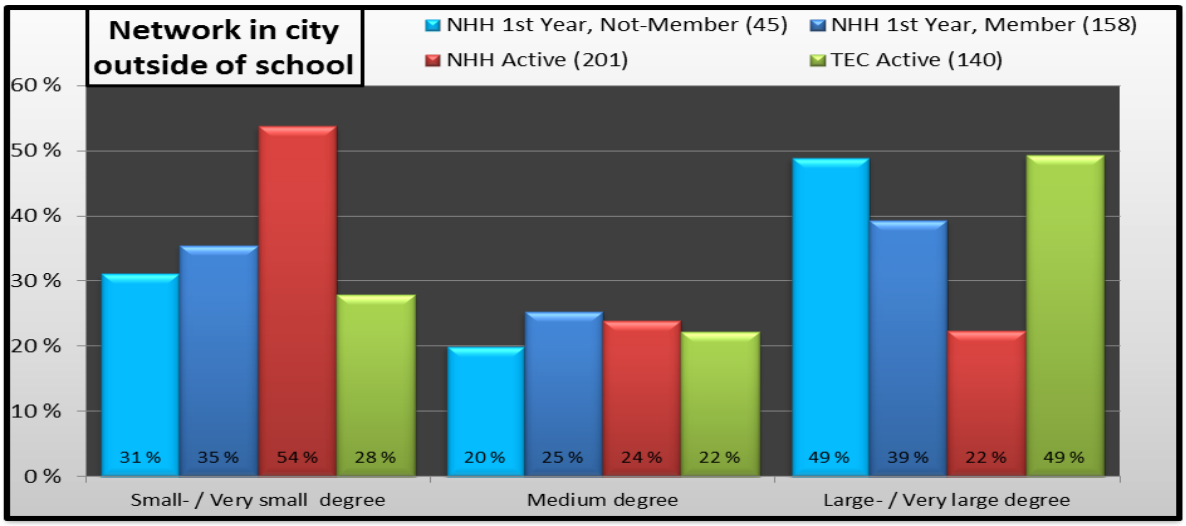


Figure 7: Descriptive analysis – Network in city outside of school

When comparing the students' social network in school at the time of enrolment we can see a clear difference between NHH- and TEC students. 75-83 % of NHH students report to have had a small or very small network, while the number for TEC students is 34 % (see figure 8). We can also here split up depending on amount of years lived in the city, to get some interesting results. This shows us that the situation is quite similar for NHH students, regardless of whether they are local or not, which might not be very surprising taking into consideration the share of students coming from outside the city. In contrast, when we investigate the TEC students we can see a clear connection between years lived in the city and social network in school, which makes more sense, as more of the school's students come from the same city. The difference between local and non-local NHH students with a large or very large social network in school at time of enrolment is as low as 3 %, while the corresponding number among TEC students is 41 %. This factor, and the large difference in

existing social network, can be linked to the motivational factor of social network which we will see later.

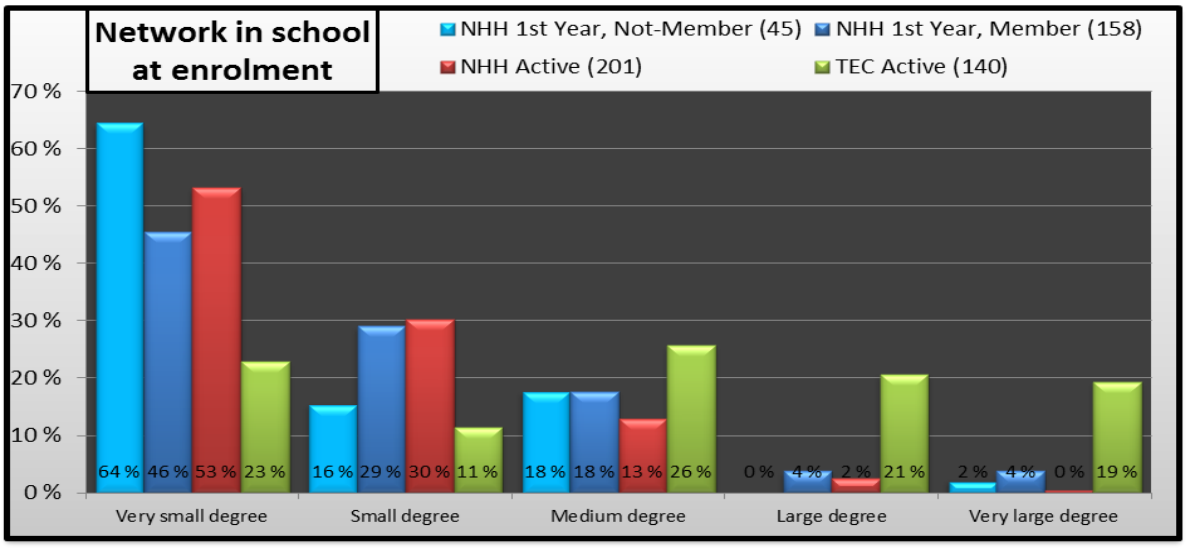


Figure 8: Descriptive analysis – Network in school at enrolment

The results show that about one fifth of active NHH respondents and half of all TEC respondents are members of other volunteer organizations in the city outside of school. Membership of other groups could be expected to reduce the motivation to participate in a student organization due to a higher alternative cost of time, and a lower marginal utility from a social group membership. The prevalence of being member of another organization outside of school is 2.8 times higher among local NHH students, and 1.5 times higher among local TEC students, compared to non-locals from the same school. The data also shows that the difference between 1st year students and the average of older NHH students is only 4.4 %, meaning there is little change as the students spends more time in the city.

The NHH students were asked if they had previously held volunteer positions in organizations or groups, which was the case for 75 % of the active NHH students, 60 % of the 1st year students, and only 47 % for the non-members.

The 1st year students are assumed to not hold leadership positions, as this would be highly unlikely after only a couple of months in school. The proportion of general NHH students reporting to have or have had positions with leadership responsibilities is 70 %, while the number at TEC is as high as 95 %, which is likely due to the targeted population of the questionnaire, as mentioned before.

A part-time job beside studies can affect the possibilities and motivation when it comes to volunteer participation. 27-35 % of 1st year NHH students and TEC students have a job beside their studies, and the number among active NHH students is considerably higher at 54 %. The low figure among the 1st year NHH students can be due to their recent enrolment, and the fact that they have not had time to find a part-time job yet. The difference between TEC and NHH in general can be due to structural and cultural differences when it comes to part-time work beside studies.

Descriptive Analysis, Part 3 - By years living in the city **(NHH)**			
Control Variable	0 Years	1-5 Years	5+ Years
Total Respondents	**301**	**43**	**59**
Network in the city, outside of school			
Very small degree	27 %	12 %	-
Small degree	29 %	14 %	-
Medium degree	28 %	19 %	7 %
Large degree	13 %	40 %	14 %
Very large degree	4 %	16 %	80 %
Network in school at time of enrolment			
Very small degree	56 %	28 %	42 %
Small degree	28 %	35 %	27 %
Medium degree	12 %	28 %	24 %
Large degree	1 %	7 %	7 %
Very large degree	3 %	-	-
Other volunteer positions in the city			
Yes	17 %	23 %	47 %

Table 3: Descriptive analysis, part 3 – By years living in the city (NHH)

Descriptive Analysis, Part 3 - By years living in the city **(TEC)**			
Control Variable	0 Years	1-5 Years	5+ Years
Total Respondents	**45**	**10**	**85**
Network in the city, outside of school			
Very small degree	38 %	10 %	5 %
Small degree	22 %	10 %	7 %
Medium degree	20 %	40 %	21 %
Large degree	13 %	20 %	33 %
Very large degree	7 %	10 %	34 %
Network in school at time of enrolment			
Very small degree	44 %	-	14 %
Small degree	20 %	-	8 %
Medium degree	22 %	60 %	24 %
Large degree	11 %	20 %	26 %
Very large degree	2 %	20 %	28 %
Other volunteer positions in the city			
Yes	40 %	40 %	61 %

Table 4: Descriptive analysis, part 3 – By years living in the city (TEC)

4.1.1 Group Membership

Descriptive Analysis, Part 4 - Group Membership				
Group Membership	NHH		TEC	
Group: Business	42	10 %	18	13 %
Group: Charity	48	12 %	38	27 %
Group: Management/Adm	35	9 %	22	16 %
Group: Media (back)	19	5 %		
Group: Media (front)	21	5 %	10	7 %
Group: Music/Dance	57	14 %	11	8 %
Group: Politics	35	9 %	17	12 %
Group: Social/Events	203	50 %	72	51 %
Group: Sport	183	45 %	30	21 %
Group: Technical	27	7 %	8	6 %
Group: Religious			17	12 %
Group: Career			90	64 %
Group: Region/City			18	13 %
Group: Culture	74	18 %	26	19 %
Not member	45	11 %		
Respondents / Memberships	**404**	**207 %**	**140**	**269 %**

Table 5: Descriptive analysis, part 4 – Group membership

The list of group memberships shows the responses of all 404 NHH students and 140 TEC students. The questionnaire was organized in a way that can create some inequalities when comparing the numbers, as the NHH students responded to membership of 31 possible student groups, which I later aggregated into 11 group categories (for a complete list of groups see appendix). Because the questionnaire opened for membership of more than one group we can see that the sum of memberships (45 non-members not included) is more than a 100 percent for both schools. At NHH the number of 2,07 memberships per student is understated as members of more than one group within the same category is only counted once. The TEC students responded directly based on group category, depending on their own judgment of category. This opens up the opportunity to mark more group categories due to multiple memberships, but also from the interpretation that your group falls under more than one category. For this reason the total of 2,69 memberships per student might be overstated.

We can also see that some groups have a very low number of respondents, making it hard to detect statistically significant differences between the group and the rest of the school. Despite of this I have chosen not to merge any of the TEC categories, due to a lack of

knowledge of the student union, and the fact that students have already chosen the category they deemed most correct. This reduces the chance of detecting significant effects, but I reduce the risk of drawing wrong conclusions based on manipulated and incorrect data.

4.1.2 Differences Between Non-members and Members at NHH

Through the descriptive analysis we can see some interesting differences between 1st Year non-members and members, and general active members. Three factors that are more prominent among members is the likelihood of being new to the city at enrolment, the presence of a network in school at enrolment, and a higher occurrence of previous volunteering. The first point has already been discussed. The second point regarding network in school can indicate that people who already knew people at school were more motivated to participate, or to a higher degree were encouraged and convinced to participate by their network in school (Freeman, 1997). It can also indicate that the network has a value in the recruitment process, and that among those who apply for positions, it is easier to succeed if they have a network. The third point is previous volunteer positions, and can be due to personal preferences or liking for volunteering. It can also be that previous positions signal experience which makes the individual more attractive for the volunteer group, and helps through the recruitment process, similar to the network.

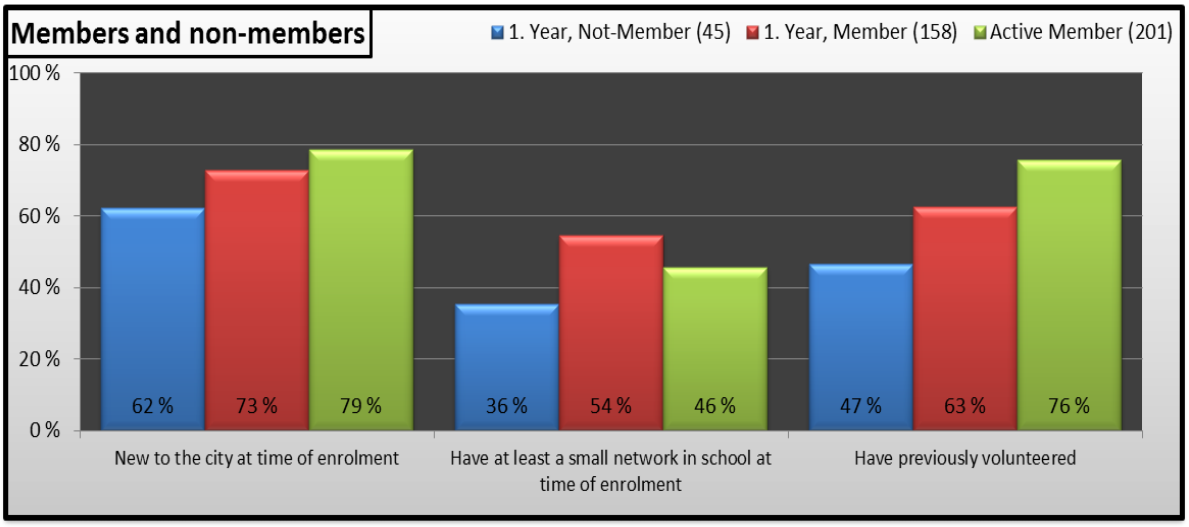


Figure 9: Descriptive analysis – Difference between members and non-members, part 1

Figure 10 below shows three factors that are more prominent among non-members, and include a larger network in the city, other volunteer positions in the city and having a part-time job. These can all be seen in context with the fact that more non-members are locals,

and the factors represent a higher alternative cost of time as the non-members already have more activities beside school.

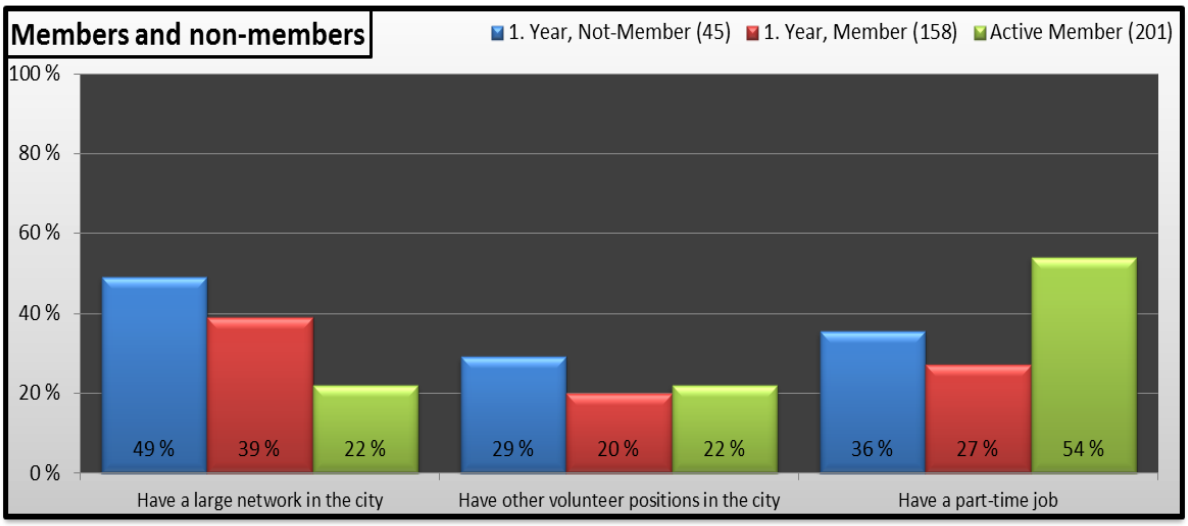


Figure 10: Descriptive analysis – Difference between members and non-members, part 2

4.1.3 Differences Between Applicants and Non-applicants at NHH

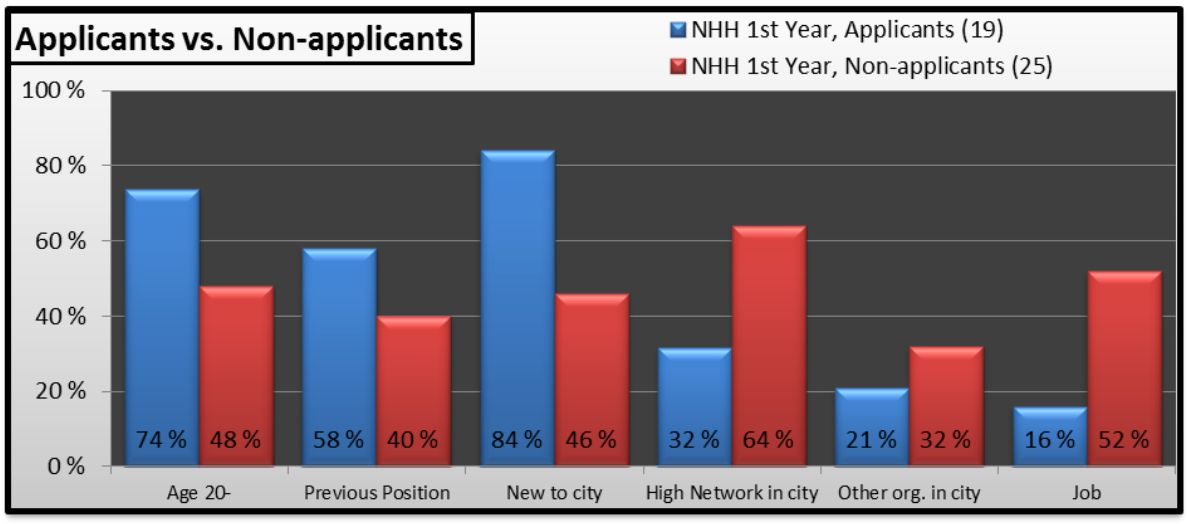


Figure 11: Descriptive analysis – Difference between applicants and non-applicants

Among the non-members we can also make a distinction between those who have applied and been rejected, and those who have chosen not to apply. This graph shows us that those who apply are younger, have to a larger degree held previous volunteer positions and as much as 86 % are new to the city versus 46 % of the non-applicants. On the other hand, those who have not applied have a higher network in the city, and are more likely to be members of other organizations or having a job beside their studies. The reasons reported by

the non-applicants are lack of time, motivation and knowledge about the opportunities. It seems that this is highly connected to having other activities in the city, due to a local origin.

4.2 Motivation

This part contains the results for the ten different motivational factors that were investigated through the questionnaires. I will begin by presenting a descriptive overview of the factors and responses, for the different response sets before going into deeper analysis of each individual factor. The factor analyses follow the same procedure for each factor through the thesis, and starts with an analysis of the response-distribution for each of the four sets, accompanied by a graphical figure. This is followed by regression analyses (see chapter 3.3.2 for explanation), with the factor as response variable (left side) and the control variables as predictor variables (right side). Again this is performed individually for each of the four sets, to assess possible causalities between the control variables and motivation/hindrance. The control variables are already presented in the descriptive analysis, and the different factors will be presented one by one throughout chapter 4.2, 4.3 and 4.4. There are a total of 10 motivational factors, 5 hindrance factors and 12 satisfaction factors, of which the respondents were asked to grade on a scale from 1 (very small degree) to 5 (very large degree), depending on their importance for motivation, hindrance or satisfaction. The questionnaires are explained in chapter 3.2.1, and the layout of the questions can be found under "Questionnaire – TEC" in the appendix. For the satisfaction factors (chapter 4.4) the control variables have been exchanged for motivation- and hindrance factors as predictor variables (left side), as this is in accordance with the most probable causality (see figure 5 in the introduction to chapter 4).

The regressions mentioned are presented in tables, with one table for each factor. This means that each table can contain up to four regressions, depending if the factor had enough significant predictor variables for each of the four sets ("NHH, 1st-NM", "NHH, 1st-M", "NHH-Active" and "TEC-Active"). The predictor variable is shown on the top of the table, and is the same as the factor being analyzed. The response set being analyzed is listed to the left, followed by a model summary showing number of respondents (N) as well as the total variance explained by the model (R-sq). In the middle is the constant together with a list of the significant predictor variables included in the model, with coefficient, standard deviation of the coefficient and p-value. I have chosen to use a p-value of 0,05, with a few exceptions,

and in my models I have therefore excluded variables with higher p-values. The p-value is indicated with "***" for $p < 0{,}001$, "**" for $p < 0{,}01$ and "*" for $p < 0{,}05$. In the few exceptions, in the analyses of the averages, I have included variables with $p < 0{,}1$, and these are marked with a "-". For models with more than one predictor variable, the contribution of each variable has also been included, to show their importance for the model.

The code in front of the predictor variable indicates if it is a control variable (C), an aggregated control variable (A), a group membership (Group), a motivation factor (M) or a hindrance factor (H). The variables for network in school and network in the city have been aggregated from five to three values, as very small and small, and very large and large has been combined, to increase the explanatory power of the models. The control variable for cohort has six levels for the set "NHH-active", five levels for "TEC-active", and zero for "NHH 1st year". The factor variables for motivation and hindrance have five levels (from the Likert-scale), the aggregated variables and control variables for age, years lived in the city and job have three levels. The rest of the control variables and the group membership variables are binary. The coefficients explain the change in the response variable as a reaction to an increase for each level of a predictor variable (for gender when the subject is male). This means that for group memberships (binary variable) it explains the whole difference between a member and a non-member of the group, while for variables with more levels it only explains the predicted change from the increase of one level, for example from cohort 1 to cohort 2. If you add the constant with the control variables you get the regression equation as seen in figure 15.

In addition to the analyses of response-distribution and regressions as mentioned above, I have looked into the connection between the factors and group memberships. This can show us if certain motivational- and hindrance factors are higher or lower for groups (see appendix for groups' motivations), and in turn if these groups can be connected to the students' satisfaction. For the group memberships at NHH I have combined the sets, as this gives a more robust basis for drawing conclusions.

Some of the regression tables can be found within the text, while the remainders are located in the appendix.

MOTIVATION									
Motivational Analysis - By Response Set									
School →		NHH						TEC	
Respondents →		45		158		201		140	
Motivational Factors	AVG.	1. Year, Not-Member	Diff. from avg.	1. Year, Member	Diff. from avg.	Active	Diff. from avg.	Active	Diff. from avg.
Social Network	4,34	4,25	-2 %	4,50	4 %	4,59	6 %	3,85	-11 %
Interests	4,14	3,52	-15 %	4,06	-2 %	4,16	1 %	4,39	6 %
Extra Activity	3,53	2,86	-19 %	3,49	-1 %	3,69	4 %	3,55	1 %
Contribution to Society	3,23	2,64	-18 %	2,59	-20 %	3,21	0 %	4,13	28 %
Experience	3,62	3,38	-7 %	3,27	-10 %	3,47	-4 %	4,29	19 %
CV	2,88	3,07	7 %	2,63	-9 %	2,53	-12 %	3,63	26 %
Professional Network	2,63	3,22	22 %	2,34	-11 %	2,17	-18 %	3,47	32 %
Fringe Benefits	2,24	1,95	-13 %	1,93	-14 %	2,44	9 %	2,38	6 %
Status	2,05	1,76	-14 %	1,91	-7 %	1,95	-5 %	2,46	20 %
Pressure	1,64	1,74	6 %	1,56	-5 %	1,60	-2 %	1,75	7 %
Average	3,03	2,84	-6 %	2,83	-7 %	2,98	-2 %	3,39	12 %

Table 6: Motivation – Descriptive presentation of scores

The table above shows the factor-score for each factor (including average) for each set, and compares it with the average score of all respondents. The factors have from 508 ("Pressure") to 558 ("Social Network") respondents, as some dropout was experienced through the questionnaires. A complete list of total respondents can be found in the appendix under "Motivation, Hindrance, and Satisfaction – Descriptive Analysis, Tables". The colors signals deviation from the total average where red is negative and green is positive. More than 10 % deviation has a dark color, and between 5-10 % deviation has a light color. This color-system is the same for the hindrance- and satisfaction overview tables. The table shows us some considerable differences between the sets, as the TEC respondents report a total motivation 12 % above average, and the 1st year NHH students are 6-7 % below average. The factors are also grouped according to the most probable motivational source, with the first four being "intrinsic motivation", the next three "long-term extrinsic" and the last three "short-term extrinsic" (see chapter 2.2.2 and 2.2.3 for definitions). We can see that those who are not members score significantly lower on the intrinsic motivational factors, and higher on the job-related long-term extrinsic factors, while the NHH *members* score clearly below average on job-related factors, and more so if they are not new members. The TEC members, even though in general well above average, are particularly high on long-term extrinsic factors and community contribution.

MOTIVATION DISTRIBUTION											
Response Distribution - By Response Set											
School →		NHH								TEC	
Respondents →		45		158		201		141		140	
Score	AVG.	1. Year, Not-Member	Diff. from avg.	1. Year, Member	Diff. from avg.	Active	Diff. from avg.	Active - Leaders	Diff. from avg.	Active	Diff. from avg.
1	18 %	20 %	2 %	22 %	4 %	19 %	1 %	17 %	-1 %	11 %	-7 %
2	19 %	19 %	0 %	19 %	0 %	20 %	1 %	21 %	3 %	17 %	-2 %
3	23 %	27 %	4 %	24 %	0 %	22 %	-1 %	22 %	-1 %	20 %	-3 %
4	23 %	22 %	-1 %	22 %	-1 %	23 %	0 %	22 %	-1 %	25 %	2 %
5	17 %	12 %	-5 %	13 %	-4 %	16 %	-1 %	17 %	0 %	27 %	10 %

Table 7: Motivation – Descriptive presentation of response distribution

As mentioned the TEC respondents have a higher average score, which should be considered when interpreting the results further down. The table above shows the distribution of responses given on the Likert-scale from one (very low degree) to five (very high degree), for the four sets (included Active-Leaders), and how much the sets differ from the average. The numbers are based on responses on all ten motivational factors. The table shows a significant higher proportion of TEC students answering "5" and a lower proportion answering "1". It might be that the sample of TEC respondents has a higher motivation than the general population, due to selection bias. This is not unlikely, as the questionnaire only went out to the most active students, and the sample had a fairly low response rate of only ten percent. A factor supporting this is that as much as 95 percent of respondents reported to have a leadership position in their respective student group. To investigate the theory we can compare with those having a leadership position at NHH, which is about 70 percent of the active set. As we can see from the table above this only accounts for a small part of the difference ("NHH Active – Leaders" versus "TEC – Active"). Another possible explanation can be that the English questionnaire was understood in a different way than the Norwegian one, although I do not see this as very likely as the questions were translated directly. A third possible explanation is that Mexicans, maybe due to cultural reasons, simply are more prone to use the higher part of the Likert-scale than their Norwegian counter-parts. If the two groups interpret, and use the scale differently, it makes it harder to compare them directly. For this reason it can be more valuable to compare the rating of factors within each set, and the shape of the response distributions rather than only measure the means against each other.

Another interesting comparison we can make is among the non-members, by using the Tukey-Test to see if there are any differences between those who have applied for a group and not been admitted, and those who have chosen not to apply.

Respondents →	19	25	Tukey-Test	
Motivational Factors	1. Year, Applied	1. Year, Not applied	Dif. Of Means	P-Value
Social Network	4,37	4,17	0,20	0,37
Interests	3,32	3,63	-0,31	0,29
Extra activity	3,37	2,50	0,87	0,03
Community Contribution	2,84	2,46	0,39	0,28
Experience	3,63	3,09	0,54	0,10
CV	3,21	3,00	0,21	0,56
Network	3,28	3,18	0,10	0,79
Fringe benefits	2,53	1,50	1,03	0,00
Status	2,00	1,43	0,57	0,03
Pressure	1,95	1,58	0,37	0,23
Average	3,04	2,72	0,32	0,10

Table 9: Motivation – Non-members

Respondents →	158	19	Tukey-Test	
Motivational Factors	1. Year, Accepted	1. Year, Not Accepted	Dif. Of Means	P-Value
Social Network	4,49	4,37	-0,13	0,72
Interests	4,06	3,32	-0,75	0,00
Extra activity	3,47	3,37	-0,10	0,93
Community Contribution	2,59	2,84	0,25	0,61
Experience	3,28	3,63	0,35	0,37
CV	2,62	3,21	0,59	0,08
Network	2,34	3,28	0,94	0,00
Fringe benefits	1,92	2,53	0,60	0,03
Status	1,92	2,00	0,08	0,94
Pressure	1,56	1,95	0,39	0,18
Average	2,86	3,04	0,18	0,34

Table 9: Motivation – Not accepted

This comparison shows us that those who have applied are more motivated to participate than those who have not, and the main differences are among "extra activities", "fringe benefits" and "status", where the applicants' scores are notably higher. However applicants appear to be less motivated by an interest in the activities they would perform, at almost 20 % below the total average of all sets. They might be demotivated by the rejections, but it can also be a reason for their rejection in the first place, if they are not genuinely interested, but rather driven by extrinsic factors. This comparison has a low number of respondents, and therefore few statistically significant results, but they can still provide indications of possible interesting differences.

If we compare the scores for the rejected applicants to the accepted applicants (1st year members), we see that those not accepted score lower for most intrinsic factors, and particularly for interests. If we move further down the table we see that the rejected applicants score higher for long-term extrinsic factors with the biggest difference for professional network and CV (although p-value 0,08), and short-term extrinsic factors for fringe benefits. This indicates that those accepted are more intrinsically driven, while those rejected are more extrinsically driven. We cannot claim that this is all based on initial preferences, and not subject to change based on the rejection or acceptance, as we have not measured before the application process. However, it seems unlikely that the process alone

should cause such significant differences, and these results can lead us to conclude that there are significant motivational differences between those students who are accepted and those who are not. This is strengthened by the short time period between the questionnaire and the application process.

MOTIVATION RANKING								
Motivational Analysis - By Response Set								
School	NHH						TEC	
Ranking	1. Year, Not-Member	Score	1. Year, Member	Score	Active	Score	Active	Score
1	Social	4,25	Social	4,50	Social	4,59	Interests	4,39
2	Interests	3,52	Interests	4,06	Interests	4,16	Experience	4,29
3	Experience	3,38	Extra activity	3,49	Extra activity	3,69	Contributing	4,13
4	Network	3,22	Experience	3,27	Experience	3,47	Social	3,85
5	CV	3,07	Contributing	2,59	Contributing	3,21	CV	3,63
6	Extra activity	2,86	CV	2,63	CV	2,53	Extra activity	3,55
7	Contributing	2,64	Network	2,34	Fringe benefits	2,44	Network	3,47
8	Fringe benefits	1,95	Fringe benefits	1,93	Network	2,17	Status	2,46
9	Status	1,76	Status	1,91	Status	1,95	Fringe benefits	2,38
10	Pressure	1,74	Pressure	1,56	Pressure	1,60	Pressure	1,75

Table 10: Motivation – Ranking of factors

MOTIVATION RANKING - Factor Grouping								
Motivational Analysis - By Response Set								
School	NHH						TEC	
Ranking	1. Year, Not-Member	Score	1. Year, Member	Score	Active	Score	Active	Score
1	Intrinsic	3,32	Intrinsic	3,66	Intrinsic	3,91	Intrinsic	3,98
2	Extrinsic, Long-term	3,22	Extrinsic, Long-term	2,75	Extrinsic, Long-term	2,72	Extrinsic, Long-term	3,80
3	Extrinsic, Short-term	1,82	Extrinsic, Short-term	1,80	Extrinsic, Short-term	2,00	Extrinsic, Short-term	2,20
4	Avgerage	2,84	Avgerage	2,83	Avgerage	2,98	Avgerage	3,39

Table 11: Motivation – Ranking of factor-groups

The Rankings above show the importance of the different motivational factors for each response set. The color codes of the different categories are as shown in table 11, and the "traffic lights" are black from 1-2, red from 2-3, yellow from 3-4 and green from 4-5. This system is the same for the ranking-tables for "Hindrance" and "Satisfaction" in chapter 4.3 and 4.4. Among the NHH students the members have an almost identical ranking of factors, only set apart by fringe benefits being more important for older members and professional

network being more important for new members. It might be that the new members are not yet familiar with the fringe benefits or that they are not yet in positions where these benefits are present (see “Fringe Benefits” in chapter 4.2.3, for further discussion). The non-member NHH students stand out most notably by having the long-term extrinsic factors high up on the list, and extra-activity and contribution low. For TEC-respondents the major differences are a lower social factor, and higher experience- and contribution factor.

4.2.1 Intrinsic Factors

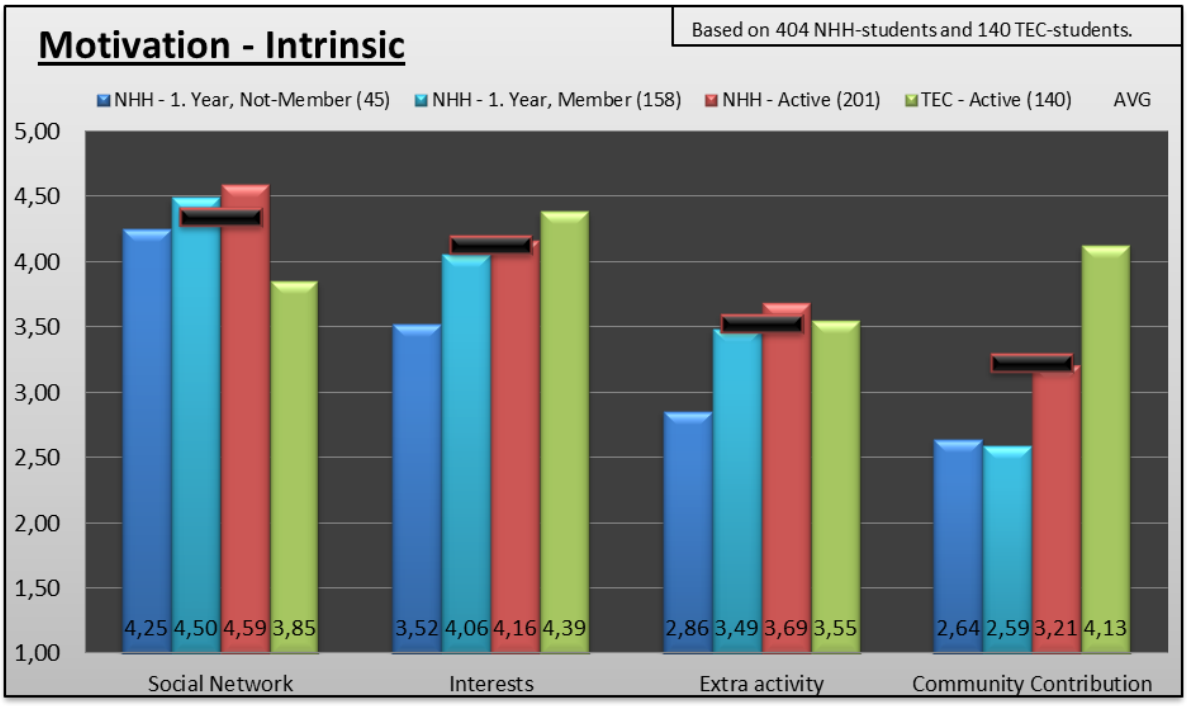


Figure 12: Motivation analysis – Intrinsic factors for volunteering

As mentioned before the factors are grouped based on their motivational source and the first group consist of four intrinsic factors. The graph above shows a comparison of the four different response sets for each factor. The responses follow the Likert-scale from 1-5, and is used on the y-axis to show the average response for each group. The number of respondents is noted in brackets after each response set, and the actual score is at the bottom of each column. The black rectangle illustrates the total average of all respondents for each factor. As before, this will be the same for similar graphs later in the thesis. A thorough analysis of each factor follows below.

The factor-analysis uses the following figures and color coding, as shown in figure 13 below. The bars show that the whole range of responses is not used (minimum two respondents to

count as “used”). The colors of the figures are based on the average-score (mean), from less than two (red) to more than four (green), and the figures’ form depends on the distributions’ skewness and kurtosis (explained in chapter 3.3.2) When the skewness is negative (mean above 3) the arrowhead is pointed to the right, and when it is positive (mean below 3) towards the left. A skewness higher than |0,70| (absolute value) indicates a steep graph with a top point far to one side of the scale, and has a straight arrow. A skewness between |0,35| and |0,69| indicates a distribution to either side of the center, often with a top point of two or four, and has an arrow with a dipping arrowhead. A skewness below |0,34| indicates a distribution that is relatively equal on each side of the center, which is a requirement for the normal distribution, shown with a downward curving arrow. If the kurtosis is less than -0,80 it means that the distribution is very “flat”, and evenly distributed along the scale, marked by a cornered arrow with no dip.

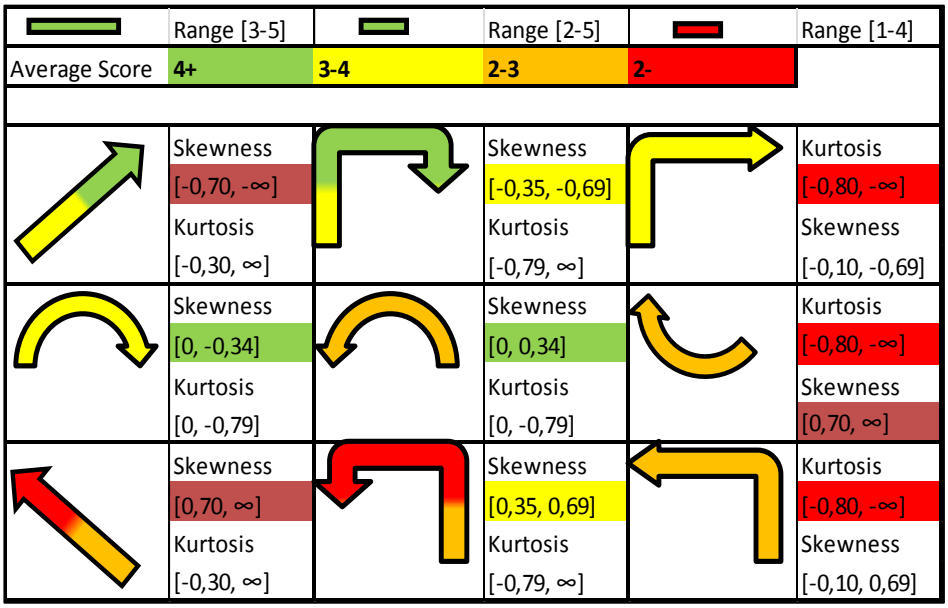
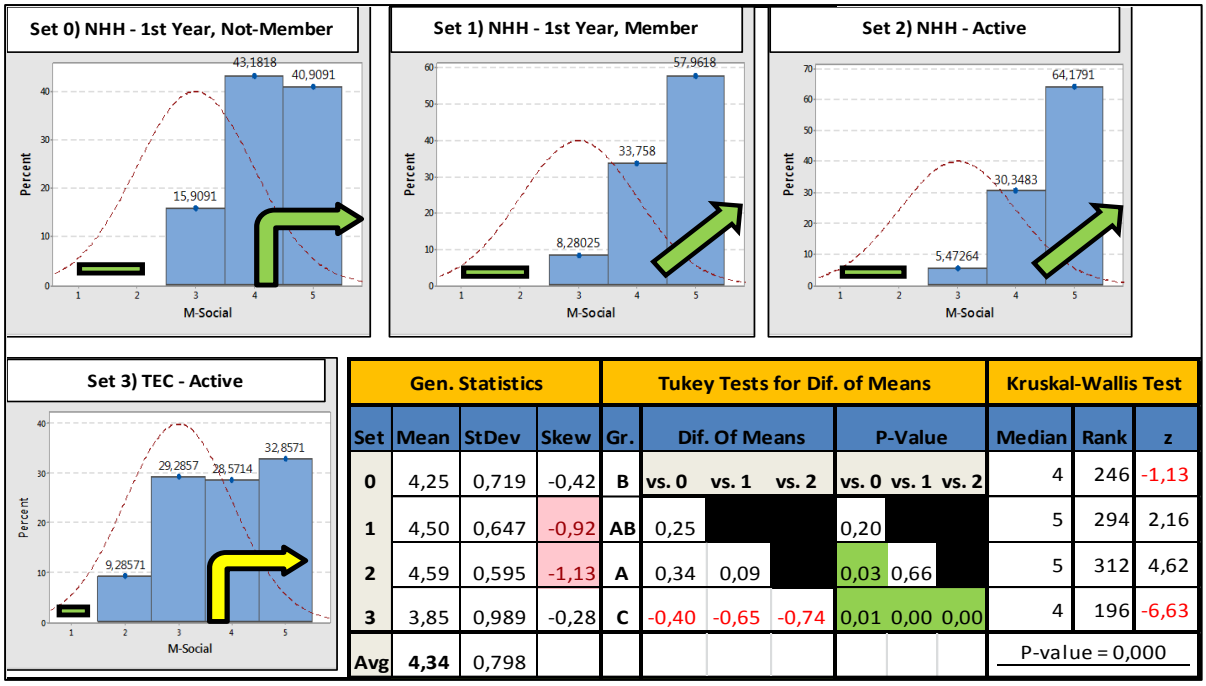


Figure 13: Factor analysis – Explanation of elements

The graphs below show the response-distribution in percentage along the Likert-scale for each response set for each factor, marked with arrows depending on their distribution as explained above. The tables show mean, standard deviation and skewness for each set (more than |0,70| in red and less than |0,34| in green). It is followed by the Tukey Test for difference between means, which gives the difference of means between each set with corresponding p-value (below 0,05 in green). Finally the Kruskal-Wallis Test is presented to compare the median of each set, and to provide support for the Tukey Tests’ conclusions, as this test is more robust for ordinal data.

Social Network / Friendship



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	4,25	0,719	-0,42	B							4	246	-1,13
1	4,50	0,647	-0,92	AB	0,25			0,20			5	294	2,16
2	4,59	0,595	-1,13	A	0,34	0,09		0,03	0,66		5	312	4,62
3	3,85	0,989	-0,28	C	-0,40	-0,65	-0,74	0,01	0,00	0,00	4	196	-6,63
Avg	4,34	0,798									P-value = 0,000		

Figure 14: Motivation analysis – Social network

By looking at the histograms we can see a clear similarity among new (set 1) and old (set 2) NHH members, which is also reflected in similar statistical values, and a high P-value for the Tukey Test. For the 1st year non-members (set 0) we have a different distribution with less skewness and a low kurtosis, and the mean is not significantly different from set 1. All three NHH sets have a range from 3-5 showing that no respondents answered 1 or 2 (very small- or small degree of motivation). The social factor has already been shown to have the highest importance among all NHH sets from the ranking in table 10, and we can read from the range that absolutely none of the respondents thought this factor to be unimportant. This is likely to be connected to the proportion of students who are new to the city when they enroll, meaning they have a small social network, and the student groups are suitable for meeting new friends. This hypothesis seems to be supported by the descriptive data showing that the groups with more students new to the city and with a smaller network in the city have a higher mean score for social network. However there is no statistically significant causality found within these sets to support the theory. The higher social motivation is not necessarily solely based on initial preferences, as the increasing score we observe between non-members and older members can be caused by increased knowledge obtained during the volunteering. The fact that many members are part of several groups also support that there is a difference between "insiders" and "outsiders", and can be due to different initial preferences, changes

in preferences or opportunities after becoming a member, or both. Among the 1st year NHH students the social motivation is higher among females.

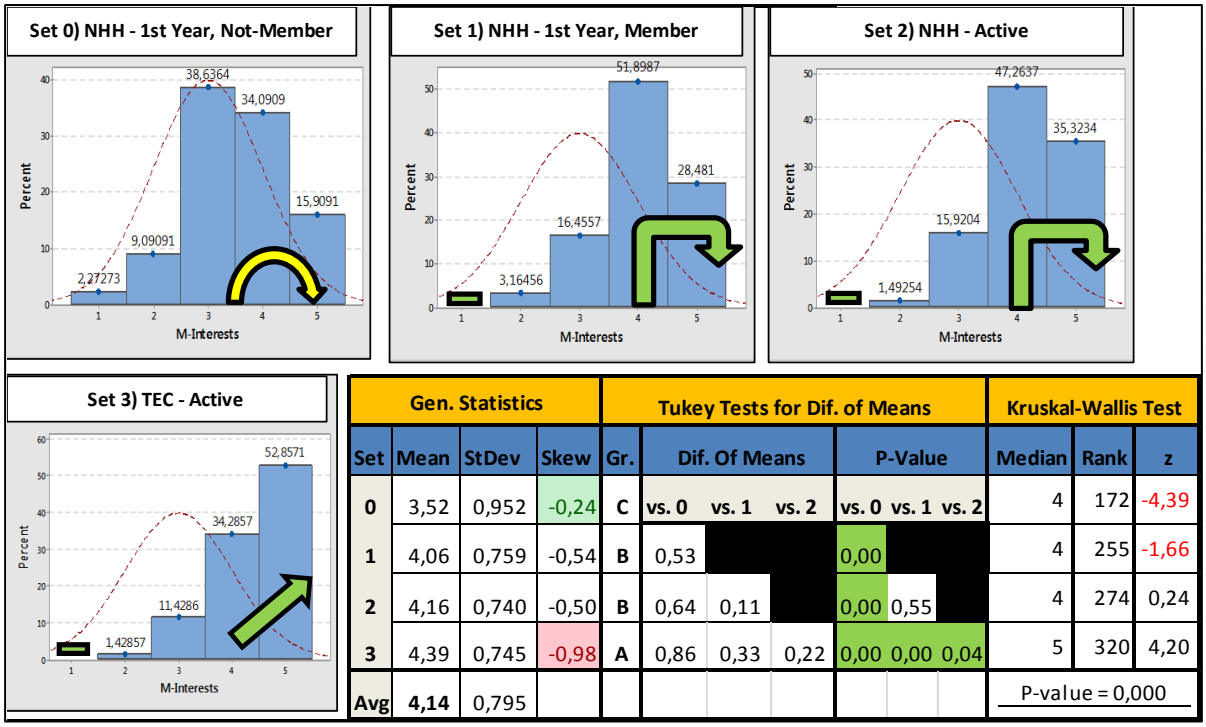
The TEC set has a significantly lower score than the NHH sets, and this factor is only ranked as the 4th of all the motivational factors. It could sound logical that because a much larger part of the students are from the city, and already have a social network in school outside of the student groups, they would be less motivated by meeting new people. It seems however that the important factor is social network in the city in general, and not particularly in school. From the regression analysis we can see that more years in the city gives a higher score, meaning that local students have a higher motivation for social reasons, probably because they already know people in the student groups. This probably means that the social motivation is not necessarily only to make new friends, but as an arena to be with existing friends. The higher standard deviation and a high kurtosis indicate a larger spread of responses compared to the NHH sets.

Response Variable: Motivation - Social Network / Friendship						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-NM	42	10,42 %	Constant	3,64	0,29	
			A: Network at school	0,48	0,22	*
M-social (NHH, 1st-NM) = 3,64 + 0,48 * "A: Network at school"						
NHH, 1st-M	155	6,73 %	Constant	5,03	0,19	
			C: Gender (male)	-0,34	0,10	**
M-social (NHH, 1st-M) = 5,03 - 0,34 * "C: Gender (male)"						
TEC - Active	138	3,59 %	Constant	3,24	0,23	
			C: Years in city before	0,20	0,09	*
M-social (TEC-Active) = 3,24 + 0,20 * "C: Years in city before"						
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001						

Figure 15: Motivation analysis – Regressions for social network and control variables

For both schools the members of social/events groups have a higher social motivation, and NHH members of a business group have a lower social motivation. This might be because the first group sees their participation from a consumption perspective (as presented under "consumption model" in chapter 2.2.3), while the second group sees it as an investment. This theory will be strengthened if the opposite trend is observed for the extrinsic long-term factors. Music-, dance-, and sport groups also have high scores at NHH, which is not surprising as these groups are more to be seen as unprofessional social arenas than professional practitioners. See the appendix for motivational scores for each group.

Interest for the Group Activity



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	3,52	0,952	-0,24	C							4	172	-4,39
1	4,06	0,759	-0,54	B	0,53			0,00			4	255	-1,66
2	4,16	0,740	-0,50	B	0,64	0,11		0,00	0,55		4	274	0,24
3	4,39	0,745	-0,98	A	0,86	0,33	0,22	0,00	0,00	0,04	5	320	4,20
Avg	**4,14**	0,795									P-value = 0,000		

Figure 16: Motivation analysis – Interest for the group activity

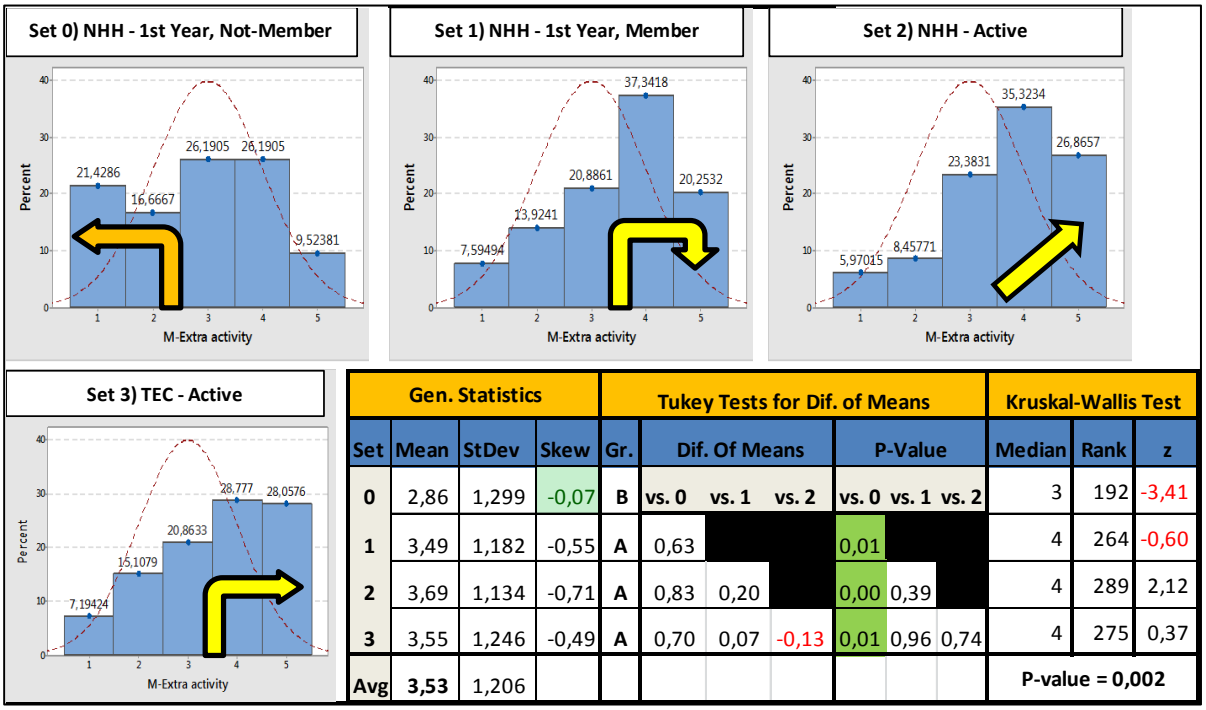
For interest, as with social network, we can see a clear similarity between the members at NHH regardless if they are new to the school or not, both sets have a top-point of "4", and no responders have reported a "very low degree" of motivation.

The non-members have a significantly lower score, which might be why they are not members. This can be because they do not have the interest to join any of the groups in the first place, or because their lack of interest makes them less attractive to recruit. As shown in table 8 those non-members who have applied have an even lower score for interest (3,32) than those who have not applied, which indicates that interest in this case is not an important differentiating factor for applying. Although the difference is not statistically significant, it is the only factor where the applicants have a lower motivation than the non-applicants. This can support the second theory that a lack of interest makes the applicants less attractive. Another possibility is that interest was lower initially also among members, but increased after participating in the student union. This theory is supported by the data, as the variable "previous positions" leads to a higher motivational score for interest. According to deGuzman (2007) the motivation for volunteering must be "made available" to students, and my results show that the experience through previous positions has a positive effect on motivation. For all NHH sets "interest" is the 2nd most important factor.

For TEC the distribution is similar to the NHH members for "social network", with a high skewness, and barely any respondents rating it to a very low or low degree of importance. This is in accordance with the ranking in table 10, where we can see that this is the most important factor for TEC students. The only variable that seems to make a significant difference is gender, as females have an average score 0,29 points higher than males.

At NHH the media-, music-, dance-, sport-, and political groups have a higher score, indicating that members of these groups are particularly driven by interest for the activity.

Extra Activity Beside School



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	2,86	1,299	-0,07	B							3	192	-3,41
1	3,49	1,182	-0,55	A	0,63			0,01			4	264	-0,60
2	3,69	1,134	-0,71	A	0,83	0,20		0,00	0,39		4	289	2,12
3	3,55	1,246	-0,49	A	0,70	0,07	-0,13	0,01	0,96	0,74	4	275	0,37
Avg	3,53	1,206									P-value = 0,002		

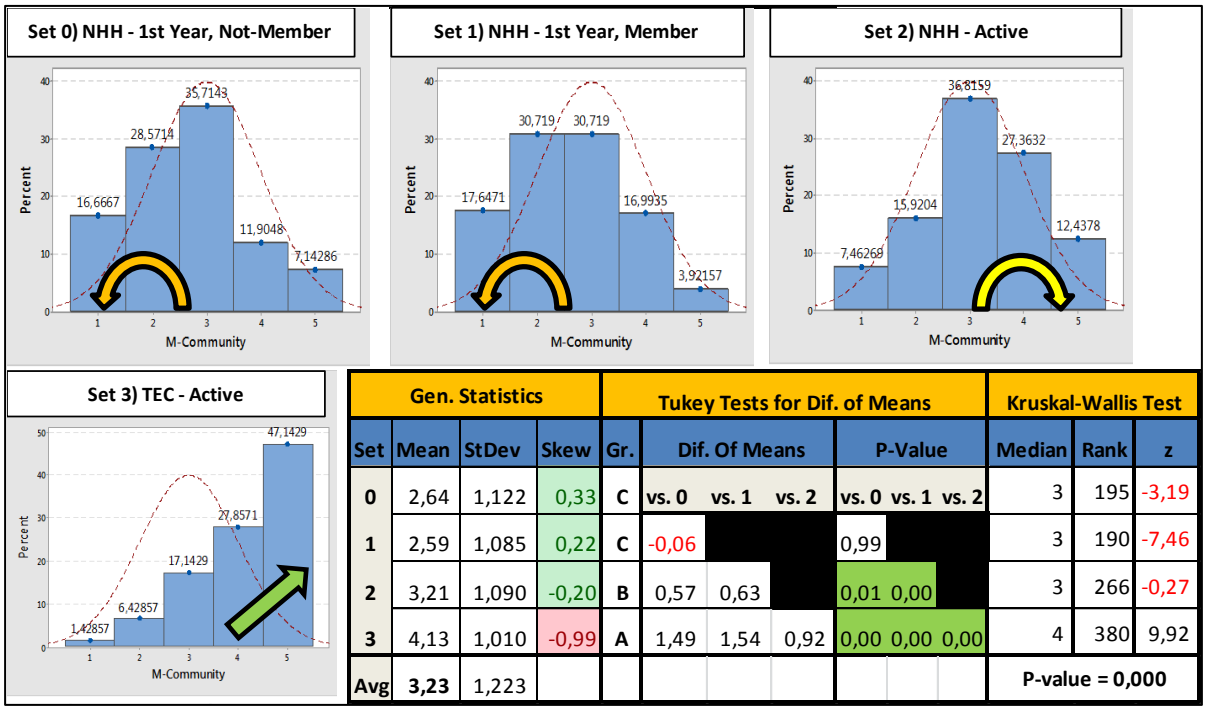
Figure 17: Motivation analysis – Extra activity beside school

The motivational factor of having an extra activity is similar among members regardless of school, and we could see in table 8 that there is a large difference between applicants who want to become members (3,37) and non-applicants (2,50).

To find the reasons why non-members' score is so low, and what characterizes respondents with a lower score, we use the regression analysis. It shows us that the main reasons affecting this factor negatively is a large network in the city, membership in other organization in the city, and having a job. In other words, having other activities in the city reduces the motivation for having an extra activity, and seems to be closely linked to being from the city and having a large network in the city. Being member of music/dance- or

social/event groups is positively correlated with this factor, which might imply that these groups are particularly attractive for those without other activities and that are looking for an extra activity. This might be because these activities do not demand a large commitment. For TEC there are no significant variables.

Contribution to Society



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	2,64	1,122	0,33	C							3	195	-3,19
1	2,59	1,085	0,22	C	-0,06			0,99			3	190	-7,46
2	3,21	1,090	-0,20	B	0,57	0,63		0,01	0,00		3	266	-0,27
3	4,13	1,010	-0,99	A	1,49	1,54	0,92	0,00	0,00	0,00	4	380	9,92
Avg	3,23	1,223									P-value = 0,000		

Figure 18: Motivation analysis – Contribution to society

For contribution to society at NHH there seems to be little difference between set 0 and set 1, while set 2 has a notably higher score. Firstly we should consider the interpretation of the question, as it unfortunately is a bit unclear if it refers to society in general or at NHH in particular. From the regressions we can see that among non-members a large network in school gives a higher score, and a large network in the city gives a lower score. This supports the second assumption, that the contribution is seen towards the school-society. It also seems reasonable that older students, who have a stronger connection with the student groups, are more motivated to contribute. Music/dance- and social/events groups have a higher score here, which can be linked to their purpose. They arrange many events for the rest of the schools' students, and as of such suitable for those motivated by contributing to the society. The politics- and management/adm. groups also score high, but these groups contribute in a more organizational way, as a lot of their work goes towards improving the situation for other students.

For TEC the distribution is quite different, with a much higher mean and clear skewness towards the right, and the factor is ranked as 3rd compared to 5th and 7th for the NHH sets. It might be that these students interpret the question in a larger context, or that the activity of the organizations at TEC is more aimed at social contribution, while the NHH organizations are more oriented "inwards". The regressions also show females as more motivated by this factor (same as with set 1), and members of other organizations in the city (same as with set 2). At TEC the media- and charity groups have a higher score, which can indicate that these groups have more altruistically motivated members, although this cannot be confirmed based on the data.

4.2.2 Extrinsic Factors, Long-Term

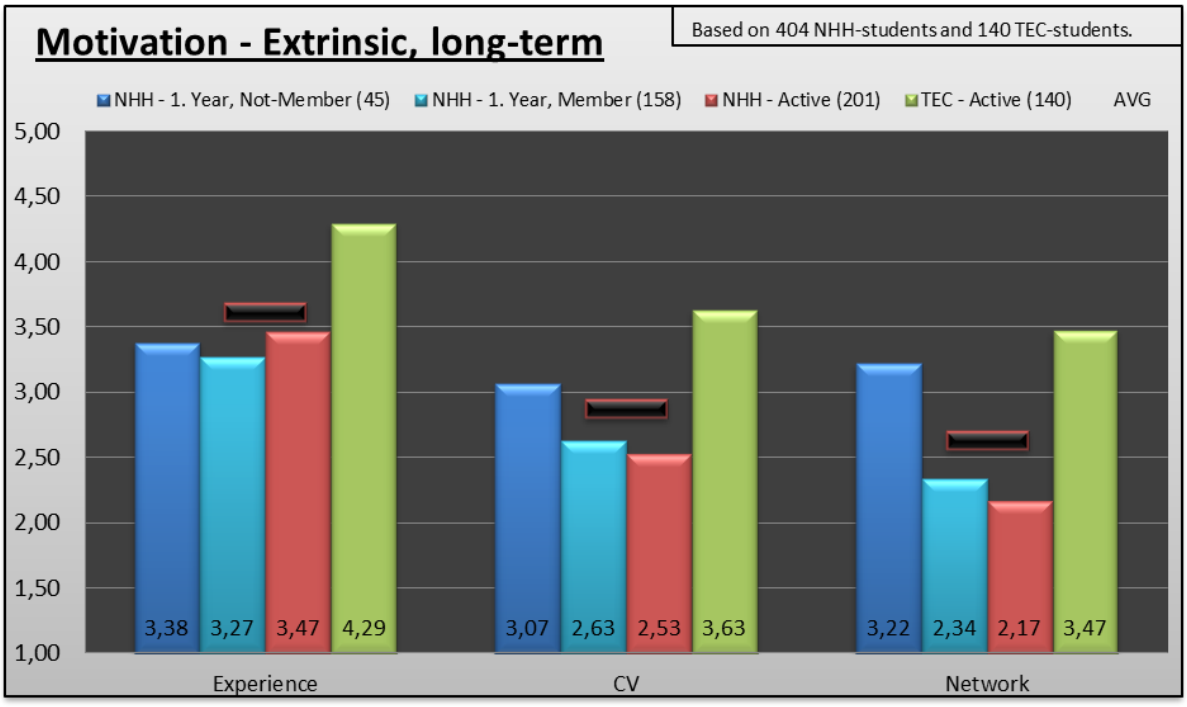


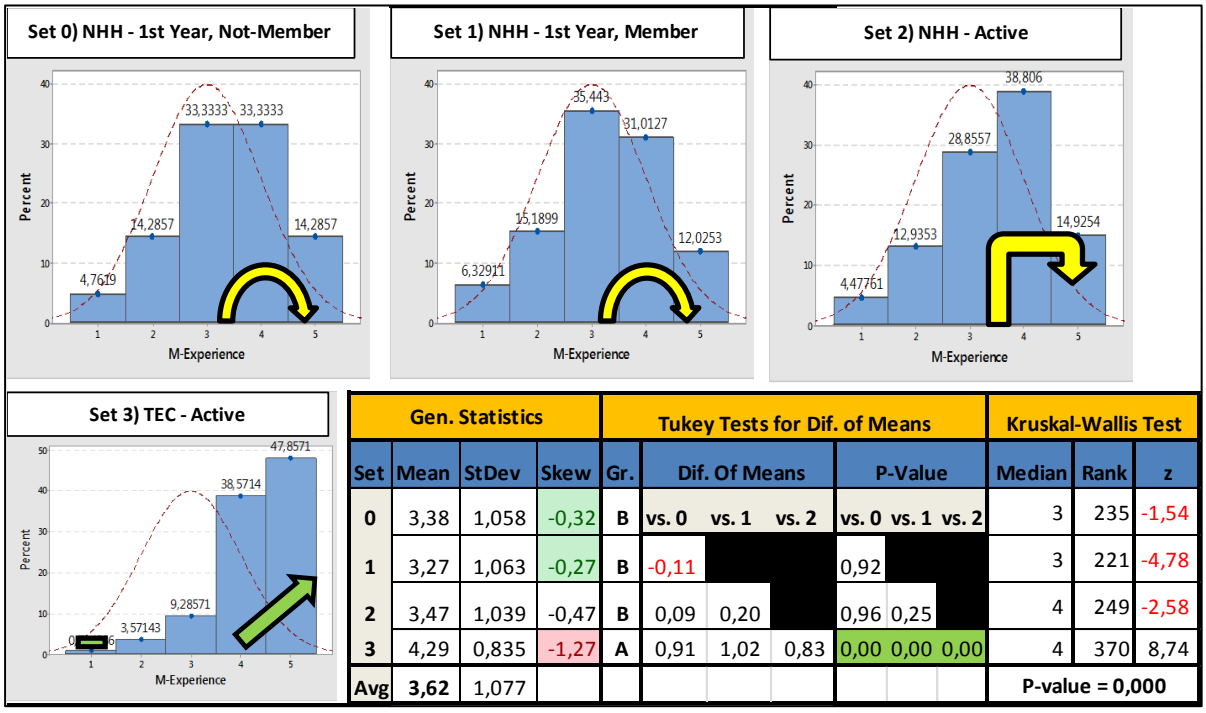
Figure 19: Motivation analysis – Extrinsic long-term factors for volunteering

For the long-term extrinsic factors we can see two clear indications. The first one is that TEC has a higher score on all three factors, and the difference is significant against all NHH set except for 1st year non-members for "professional network".

The second indication is that NHH 1st year non-members score higher than the NHH members for both "CV" and "professional network", significantly for all except 1st years on CV. This is particularly noteworthy as the average score for all non-member factors are 7 % below average. Another way of seeing this is through the ranking of factors, where

experience, cv and network is ranked 3rd, 5th and 4th for non-members, and 4th, 6th and 7th/8th for members. The ranking for TEC is 2nd, 5th and 7th.

Experience



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	3,38	1,058	-0,32	B							3	235	-1,54
1	3,27	1,063	-0,27	B	-0,11			0,92			3	221	-4,78
2	3,47	1,039	-0,47	B	0,09	0,20		0,96	0,25		4	249	-2,58
3	4,29	0,835	-1,27	A	0,91	1,02	0,83	0,00	0,00	0,00	4	370	8,74
Avg	3,62	1,077									P-value = 0,000		

Figure 20: Motivation analysis – Experience

For experience there is no significant difference between the means of the NHH sets, and the distribution is quite similar with a majority responding "3" or "4". It seems that older students are less motivated by the prospect of gaining experience, which might be because they have already progressed through the learning curve of their group, and no longer see much potential for further gains. For TEC the distribution is quite different, with a clear majority responding "4" and "5", and a range from 2 to 5, making the distribution very skewed. The factor is ranked as the 2nd most important, and a fairly low standard deviation supports "agreement" among students.

Among the active NHH members we see that business group members are more motivated by experience. Under "social network" it was observed that business groups scored low, which was placed in connection with career motives and the investment model (chapter 2.2.2). As predicted by the model, we can observe that these groups are on the other side of the scale for all three long-term extrinsic factors experience, CV and professional network. It should be noted that the average score for this group is high in general, which might also contribute to the results. The figure under shows these results, but the effect is reduced as it

compares the score for the business group with the total average included the business group. In these results I find support to claim that the investment model, as presented by Menchik & Weisbrod (1987), is very relevant for this group of students. It also supports that age and activities closely related to future career are important factors, which might explain why the survey conducted by Proteau and Wolff (2006) could not connect volunteering with career motives (see chapter 2.2.2).

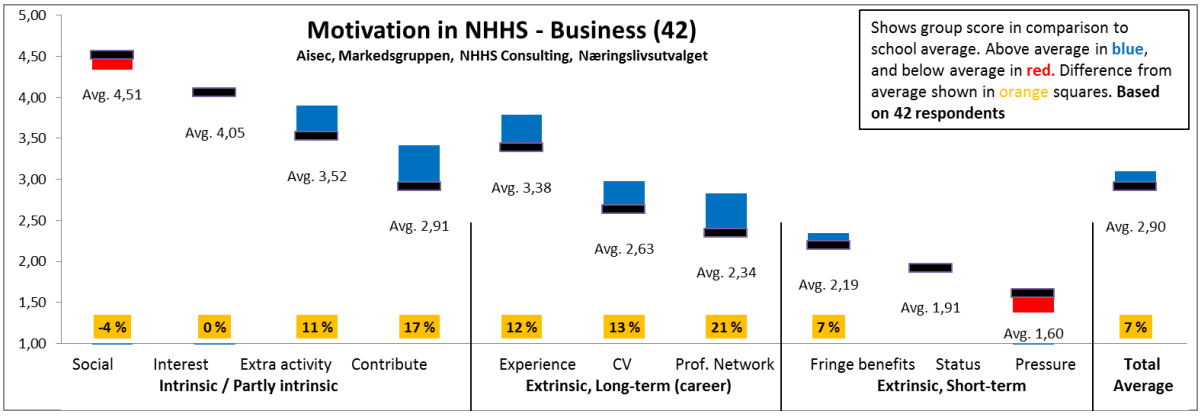
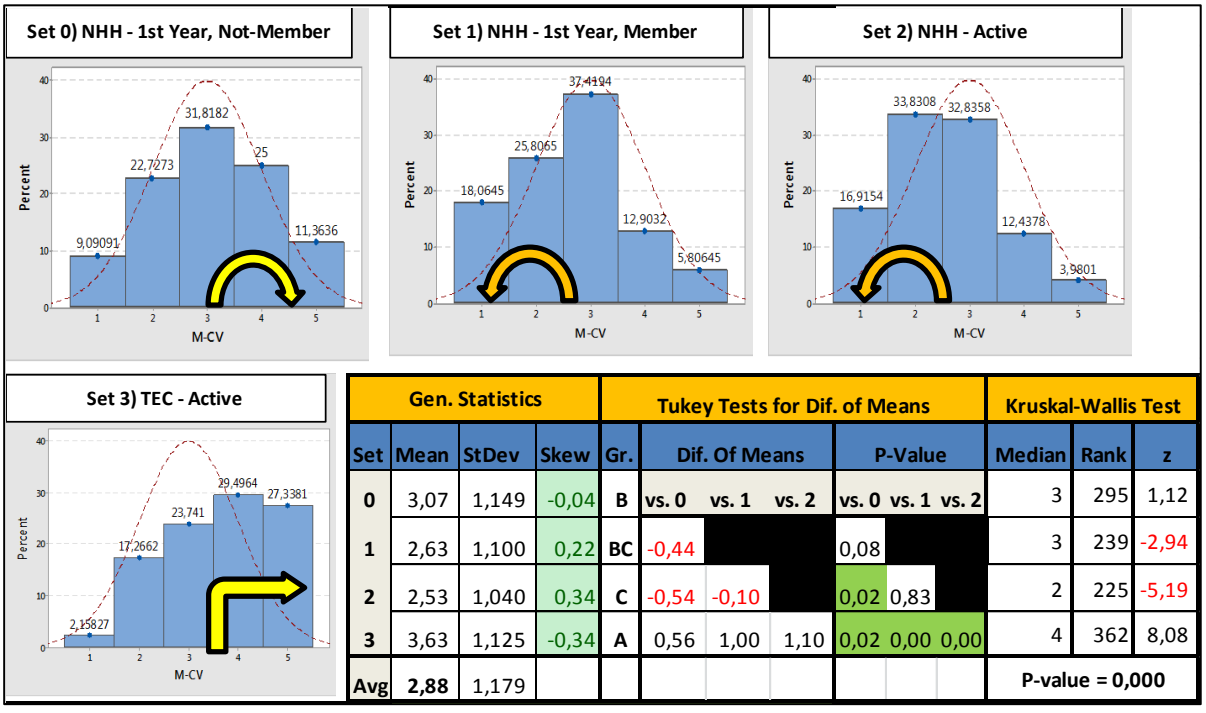


Figure 21: Motivation analysis – Business groups at NHH

To Build CV



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	3,07	1,149	-0,04	B							3	295	1,12
1	2,63	1,100	0,22	BC	-0,44			0,08			3	239	-2,94
2	2,53	1,040	0,34	C	-0,54	-0,10		0,02	0,83		2	225	-5,19
3	3,63	1,125	-0,34	A	0,56	1,00	1,10	0,02	0,00	0,00	4	362	8,08
Avg	2,88	1,179									P-value = 0,000		

Figure 22: Motivation analysis – CV

For CV set 1 and 2 are very similar, as they are a bit skewed to the left, and have no significantly different mean. Set 0 has a higher score, although not significant versus set 1,

and is centered on the scale. In set 0 we find that gender constitutes as much as 21 percent of the factor-variance, as females have an average score of "3,6" compared to males at "2,6". Although based on a small sample (N=45) this difference is quite significant. The tendency is similar for set 1 and 3, but not significant, and for set 2 the mean is equal for both genders. This makes it hard to draw conclusions, but it can be interesting for further research. Among non-members this factor is more important for those with a higher network in school, and who are new to the city. It also increases with age.

In addition to the earlier mentioned higher score of business groups, we observe a lower score for music/dance- and social/events groups. This is likely because the activities of these groups are not closely related to future professions, and therefore have little value on a CV. The Management/Adm. groups also scores significantly lower, but these positions are highly relevant for future careers, and have a high CV-value. A possible explanation can be found in conjunction with the high score for contribution. Even though the nature of these positions relates to a high CV-value and networking opportunities, they are not main motivational factors. The intrinsic factors seem more important for this group and in particular the contribution to society. Fringe benefits and status also have high scores. These conclusions naturally presuppose a high internal validity, and answers reflecting true motivation, as discussed in chapter 3.4.

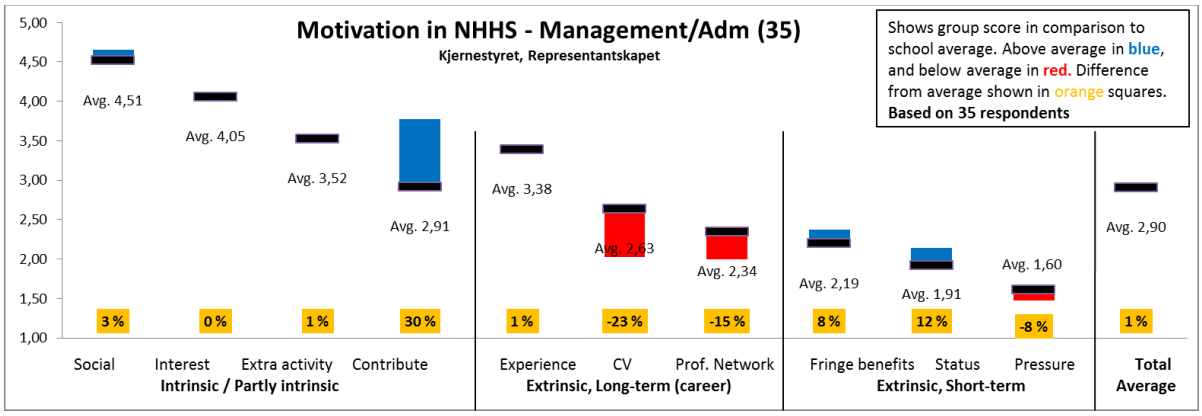
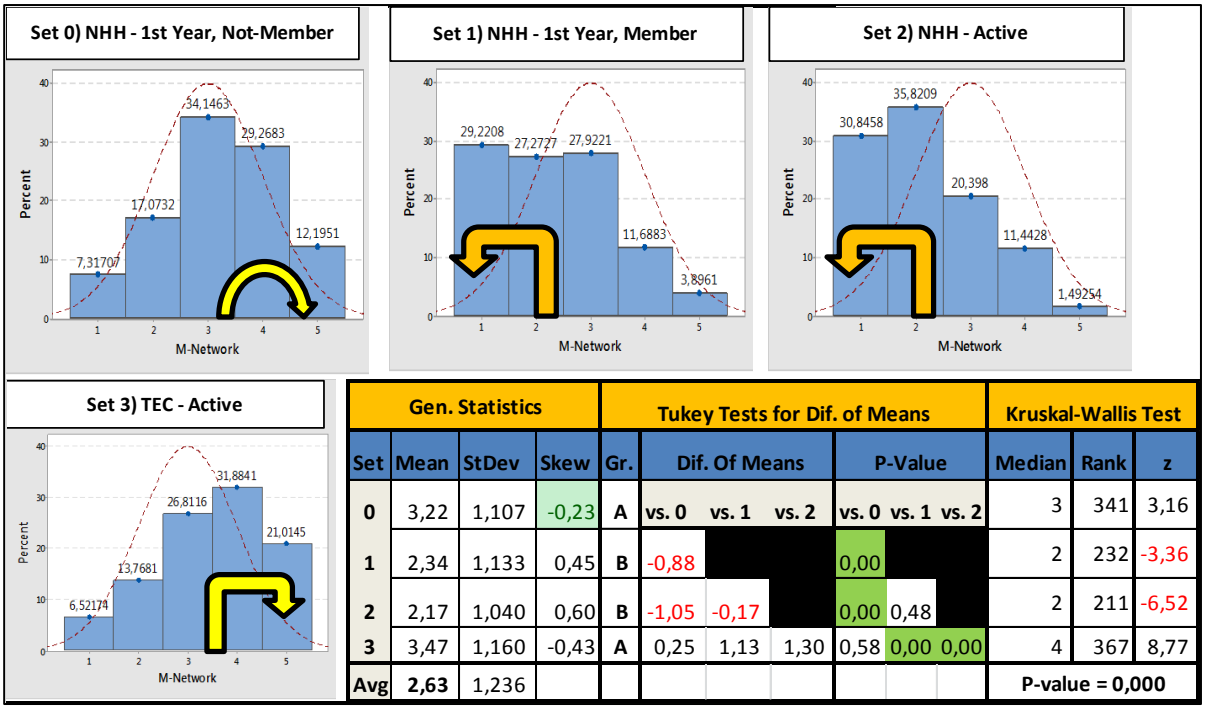


Figure 23: Motivation analysis – Management/Adm. groups at NHH

TEC has a significantly higher score than the NHH sets, is slightly skewed to the right and has flat distribution (high kurtosis). There are no significant variables to explain the distribution, but the long-term extrinsic factors score high in general for the TEC-students.



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
0	3,22	1,107	-0,23	A	vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2	3	341	3,16
1	2,34	1,133	0,45	B	-0,88			0,00			2	232	-3,36
2	2,17	1,040	0,60	B	-1,05	-0,17		0,00	0,48		2	211	-6,52
3	3,47	1,160	-0,43	A	0,25	1,13	1,30	0,58	0,00	0,00	4	367	8,77
Avg	2,63	1,236									P-value = 0,000		

Figure 24: Motivation analysis – Professional network

For professional network we can observe two groupings. The first one is NHH members, having a relatively low score and left skewness, and the second is NHH non-members and TEC members, with a medium score and a slight right skewness. Similar as for CV the non-member females score higher than their male counterparts for professional network. Among the NHH-members the main predictor is age, as older students report a lower motivational importance for professional network. It could be hypothesized that a higher age reduces the expected returns for investments, but it seems unlikely that such a small age-difference should have any significant effect. Another possibility is that the students' focus and weighting of this factor change as they mature.

As with CV this factor scores high among business groups and low among music/dance- and social/events groups at NHH, probably for similar reasons. At TEC the religious groups have a low score for professional networks, and it sounds logical that the focus of these groups is on other factors than building a professional network.

4.2.3 Extrinsic Factors, Short-Term

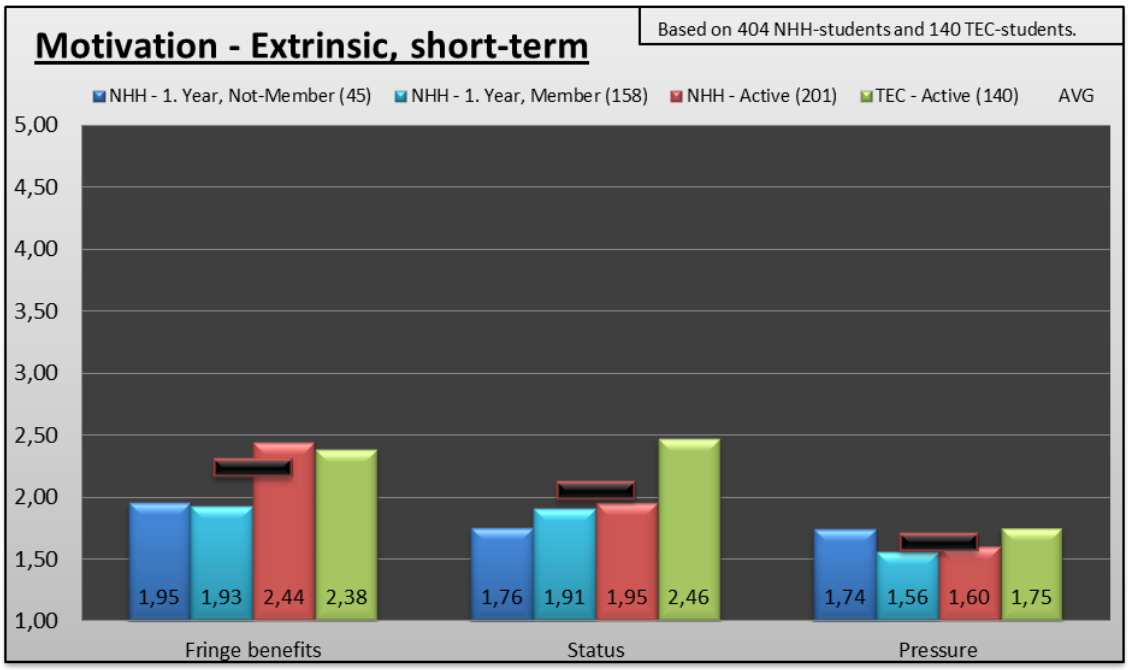
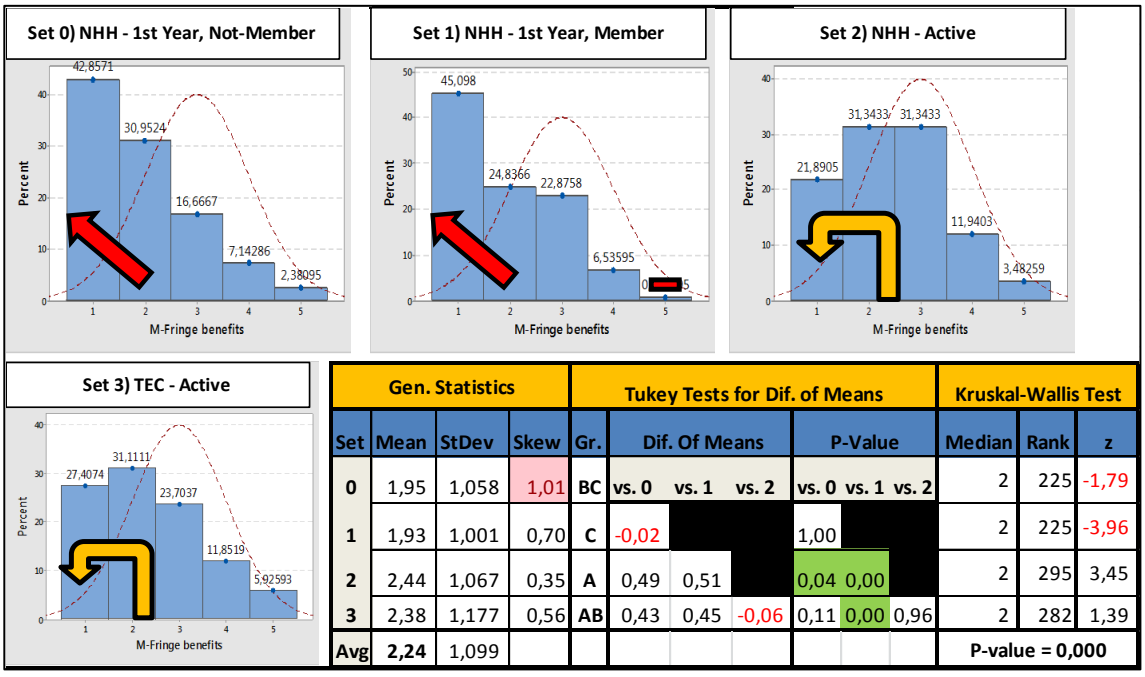


Figure 25: Motivation analysis – Extrinsic short-term factors for volunteering

The short-term extrinsic factors are the least important motivational factors for all sets. The three factors are ranked as the lowest, with only one exception for fringe benefits for "NHH –Active", and these factors are to a higher degree equal among the different sets.

Fringe Benefits



Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
	Gen. Statistics			Tukey Tests for Dif. of Means							Kruskal-Wallis Test		
0	1,95	1,058	1,01	BC	vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2	2	225	-1,79
1	1,93	1,001	0,70	C	-0,02			1,00			2	225	-3,96
2	2,44	1,067	0,35	A	0,49	0,51		0,04	0,00		2	295	3,45
3	2,38	1,177	0,56	AB	0,43	0,45	-0,06	0,11	0,00	0,96	2	282	1,39
Avg	2,24	1,099									P-value = 0,000		

Figure 26: Motivation analysis – Fringe benefits

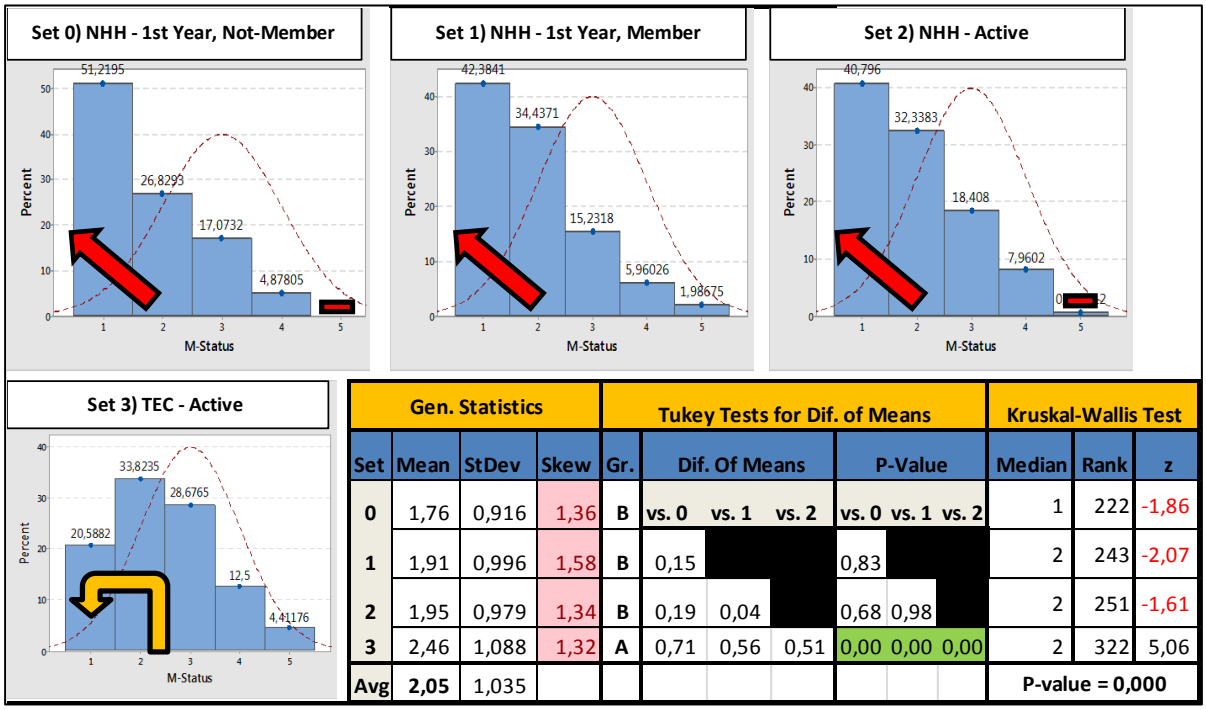
Fringe benefits are ranked almost identically for 1st year NHH students, with a low mean and a strong left skewness. This shows that fringe benefits are not important for new students joining the student union at NHH.

For the students who have participated a while the importance of fringe benefits is larger. This is most likely due to an increased knowledge of what benefits are actually available, and it shows us that this factor is not very important for participation initially, but it might have an effect on long-term persistence. This can be seen in context of the crowding-out theory presented by Frey and Jegen (2001), which predicts that the introduction of extrinsic rewards can undermine intrinsic work motivation. My results do not prove that the intrinsic motivation of the 1st year students are undermined, but it shows that the extrinsic motivation based on fringe benefits increases with time in the student union. We can see from the motivational ranking (table 10 and 11) that the intrinsic motivational factors score higher for older students than for 1st year's, indicating that the presence of fringe benefits do not damage intrinsic motivation more than participation increases it. This does not rule out the presence of a crowding-out effect, as we are unable to isolate the effect with the present data, but it shows that there are other positive factors that are stronger. In any case, this effect must be considered when organizing student unions. Due to their volunteer nature they are likely to be dependent on intrinsic motivation and as of such exposed to the potential negative consequences of a crowding-out effect. According to theory (see chapter 2.3.2 and 2.3.3) rewards and benefits that are contingent on performance can lead to reduced intrinsic motivation, and a lower total motivation and effort if the positive extrinsic effect of a reward is smaller than the lost intrinsic motivation (see table 3, chapter 2.3.2). To reduce this effect the rewards can be presented as informational acknowledgments, and they should rather be presented after an activity, to reward competence and avoid controlling behavior. Condry and Chambers (1978) state that "rewards often distract attention from the process of task activity to the product of getting a reward", which is supported by research showing a positive short-term impact of rewards and a negative long-term impact (Kohn, 1993). For student organizations this can defend the use of rewards for short-term activities that require a strong effort over a short period of time (such as specific one-time events), but they should most likely be avoided when steady persisting effort over time is required.

For 1st year NHH members the score increases slightly for students who have been living longer in the city, and might be connected to the previously mentioned increase of knowledge. The data also shows that media(front)-, music/dance-, and social/event groups

score higher for this motivation, which might be caused by initial preferences by the groups' members or due to a higher amount of benefits received in these groups.

Status in School



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	1,76	0,916	1,36	B							1	222	-1,86
1	1,91	0,996	1,58	B	0,15			0,83			2	243	-2,07
2	1,95	0,979	1,34	B	0,19	0,04		0,68	0,98		2	251	-1,61
3	2,46	1,088	1,32	A	0,71	0,56	0,51	0,00	0,00	0,00	2	322	5,06
Avg	2,05	1,035									P-value = 0,000		

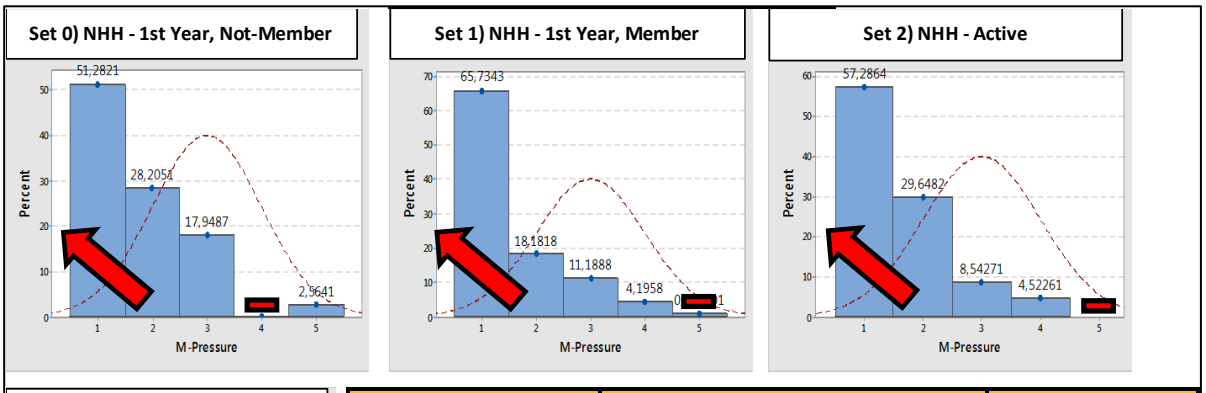
Figure 27: Motivation analysis – Status in school

Status in school has a similar score for all NHH sets, and is ranked as the 2nd least important factor for all three sets. The TEC sample has a considerably higher mean, and it seems that status is more important for this group. This might be affected by a selection bias, as most of the TEC respondents hold leadership positions, which likely have a higher status, compared to the NHH samples that have a more comprehensive set of positions. It might also be affected by cultural differences as Mexico has a higher power distance (81 vs. 31) and a higher masculinity (69 vs. 8) than Norway, according to Hofstede's cultural dimensions ((Hofstede, 2014). This means that it is a more hierarchical society driven by competition, achievement and success, and this can be a reason why membership (and leadership position) of a student group is associated with higher status.

Among NHH's non-members the value of status is reduced with age, and among the 1st year members it is lower for those who already have a job. This can indicate that the higher status is not only driven by the characteristics of the activity, but that having an extra activity in itself is associated with status. The data also shows a negative correlation between this factor and technical- and "back office" media groups (photo/graphic). These groups are

characterized by technically, interest-driven work that is not always directly visible for the other students, resulting in a lower personal recognition by others. These positions are often filled by people with an intrinsic interest for the tasks, making the status-aspect less important. On the other hand, social/events groups are more driven by status, possibly due to the higher visibility of their work, or the previously mentioned reason of having an extra activity

Pressure from Friends and Acquaintances



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	1,74	0,938	1,36	A							1	272	0,76
1	1,56	0,901	1,58	A	-0,18			0,66			1	237	-1,71
2	1,60	0,828	1,34	A	-0,14	0,04		0,80	0,97		1	252	-0,32
3	1,75	0,926	1,32	A	0,00	0,19	0,15	1,00	0,30	0,47	2	273	1,67
Avg	1,64	0,883									P-value = 0,110		

Figure 28: Motivation analysis – Pressure from friends and acquaintances

Pressure is ranked as the least important factor for all sets, and there is no statistically significant difference between any of the sets. The regression analyses for set 1 shows that the pressure is perceived to be higher for students who are new to the city and who have previously held volunteer positions. It is difficult to pinpoint exact reasons for this, but it might be that these students are more pressured due to the lack of a social network or other activities, and that having held a previous position(s) increases the expectations from others to participate again. For set 2 the pressure is reduced as the students move to higher cohorts, maybe because they have already proved themselves or because they get more confident in their environment with time. It can also be the fact that it seems more accepted to focus more on school work and less on volunteering as students get closer to graduation. At NHH the membership of sport groups is also correlated with a lower pressure.

4.2.4 Motivation for Participation

To analyse which control variables lead to reduced or increased motivation for participating we can perform a regression analysis on the average score for all motivational factors.

This regression shows us that among all NHH respondents the motivation is lower for those with a higher network in the city, and higher for those with a higher network in school. This highlights the importance of the social factor, and it seems to make a distinction where those who have more of their friends and family in the city are less motivated to participate, and those who have more of their friends at school are more motivated. This can also be self-reinforcing, as those who become "insiders" increase their circle of friends at school, and get more engaged. This is supported by an average of about 2 memberships per NHH member (see table 5, chapter 4.1.1). It is also likely that this network makes it not only more desirable, but also easier to obtain new positions within different groups.

For those with a higher network in the city the motivation to participate is lower. They most likely do not have the same social belongingness needs (see Maslow's needs in chapter 2.2), as they already have a social network outside of school. Another important point is that they are more likely to already have other activities, such as jobs and other organizations that leave less time for student volunteering, as we will see in the next chapter.

Another result is that females are on average more motivated than males, but only among 1st year students. This is hard to explain, but as we saw before they scored significantly higher than their male counterparts on the factors "Social", "Contribution", "CV" and "Network". It can seem as if they have a higher intrinsic motivation for building a social network and contributing to society, at the same time as they are more ambitious in regards to building a CV and a professional network. For TEC there are no significant control variables.

Response Variable: Motivation - Average							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH- All	**388**	**4,22 %**	Constant	3,13	0,12		
			C: Gender (male)	-0,14	0,05	**	1,48 %
			A: Network at school	0,11	0,05	*	0,65 %
			A: Network in city	-0,08	0,03	**	2,09 %
			C: Previous positions	0,09	0,05	-	0,58 %
			C: Job	-0,07	0,04	*	0,97 %
M-average (NHH-All) = 3,13 - 0,14 * "C: Gender (male) + 0,11 * "A: Network at school" - 0,08 * "A: Network in city" + 0,09 * "C: Previous position" - 0,07 * "C: Job"							
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001							

Table 12: Motivation – Regression analysis for "motivation average" for NHH

4.3 Hindrance

HINDRANCE									
Hindrance Analysis - By Response Set									
School →		NHH						TEC	
Respondents →		45		158		201		140	
Hindrance Factors	AVG.	1. Year, Not-Member	Diff. from avg.	1. Year, Member	Diff. from avg.	Active	Diff. from avg.	Active	Diff. from avg.
Studies	3,35	3,49	4 %	3,49	4 %	3,22	-4 %	3,35	0 %
Family/Friends	2,01	2,09	4 %	1,93	-4 %	1,82	-10 %	2,38	18 %
Job	1,98	2,14	8 %	1,91	-4 %	1,89	-4 %	2,14	8 %
Other positions	1,84	2,10	14 %	1,63	-11 %	1,45	-21 %	2,59	40 %
Time	2,70	3,11	15 %	2,71	0 %	2,20	-19 %	3,28	21 %
Average	2,38	2,59	9 %	2,33	-2 %	2,12	-11 %	2,75	16 %

Table 13: Hindrance – Descriptive presentation of scores

The hindrance to participate is measured through five different factors, as seen in the descriptive presentation of scores above. There are some notable differences between the sets, as TEC also here has a significantly higher total score, 16 % over the total average, compared to 12 % above for motivation and 5 % for satisfaction. This can support the theory that the Mexican students utilize the scale differently from the Norwegians, and that this should be considered when comparing the sets. We can also see that the non-members score above average, which can represent their reasons for not participating (at least for those who have not applied). On the other side of the scale we find the active NHH students, who seem to perceive fewer hindrances for participating.

HINDRANCE DISTRIBUTION									
Response Distribution - By Response Set									
School →		NHH						TEC	
Respondents →		45		158		201		140	
Score	AVG.	1. Year, Not-Member	Diff. from avg.	1. Year, Member	Diff. from avg.	Active	Diff. from avg.	Active	Diff. from avg.
1	34 %	34 %	1 %	37 %	3 %	42 %	8 %	21 %	-12 %
2	20 %	16 %	-4 %	17 %	-3 %	24 %	4 %	24 %	4 %
3	21 %	19 %	-2 %	20 %	-1 %	21 %	0 %	24 %	3 %
4	17 %	18 %	1 %	19 %	2 %	10 %	-7 %	21 %	4 %
5	9 %	13 %	5 %	7 %	-2 %	4 %	-5 %	11 %	2 %

Table 14: Hindrance – Descriptive presentation of response distribution

As already mentioned there are significant differences between the sets, which are reflected in the response distribution for how the students utilize the scale. Most notably is the spread in the TEC set, while the NHH sets are more skewed towards the lower part of the scale, increasingly with a higher level of activity. A different way of using the scale can affect this, but it is also likely that the composition of the sets and differences in the control variables have an impact, as we will investigate one factor at a time.

Respondents →	19	25	Tukey-Test	
Hindrance Factors	1. Year, Applied	1. Year, Not applied	Dif. Of Means	P-Value
Studies	3,16	3,72	-0,56	0,08
Family/Friends	1,83	2,32	-0,49	0,24
Job	1,44	2,74	-1,30	0,01
Other positions	1,50	2,61	-1,11	0,02
Time	2,53	3,52	-0,99	0,01
Average	2,11	3,01	-0,90	-

Table 15: Hindrance – Non-members

As with motivation we can look at the differences between rejected applicants and those who do not want to participate. This shows that the hindrance scores are higher for non-applicants on all points, and most notably for job and other positions, and probably as a result of this; Time. There are no significant differences between applicants and 1st year members.

HINDRANCE RANKING								
Hindrance Analysis - By Response Set								
School	NHH						TEC	
Ranking	1. Year, Not-Member	Score	1. Year, Member	Score	Active	Score	Active	Score
1	Studies	3,49	Studies	3,49	Studies	3,22	Studies	3,35
2	Time	3,11	Time	2,71	Time	2,20	Time	3,28
3	Job	2,14	Family/Friends	1,93	Job	1,89	Other positions	2,59
4	Other positions	2,10	Job	1,91	Family/Friends	1,82	Family/Friends	2,38
5	Family/Friends	2,09	Other positions	1,63	Other positions	1,45	Job	2,14
5	Average	2,59	Average	2,33	Average	2,12	Average	2,75

Table 16: Hindrance – Ranking of factors

From the ranking of hindrance factors we can see that studies is the most important hindrance for all students, with time as number two, although time can be seen as a summarizing factor as a result of the others. The last three are a bit more varied, and among the non-members there is very little difference between job, other positions and family/friends. As we can see from table 15 the high scores are mostly driven by non-applicants. For NHH members other positions rank a bit lower than the two other factors, which can probably be explained by fewer holding other positions as shown in the descriptive analysis (table 2). Among TEC members the lowest ranked factor is job, while

other positions is number three, which is also likely to be connected to the composition of the set, with fewer working compared to having other positions.

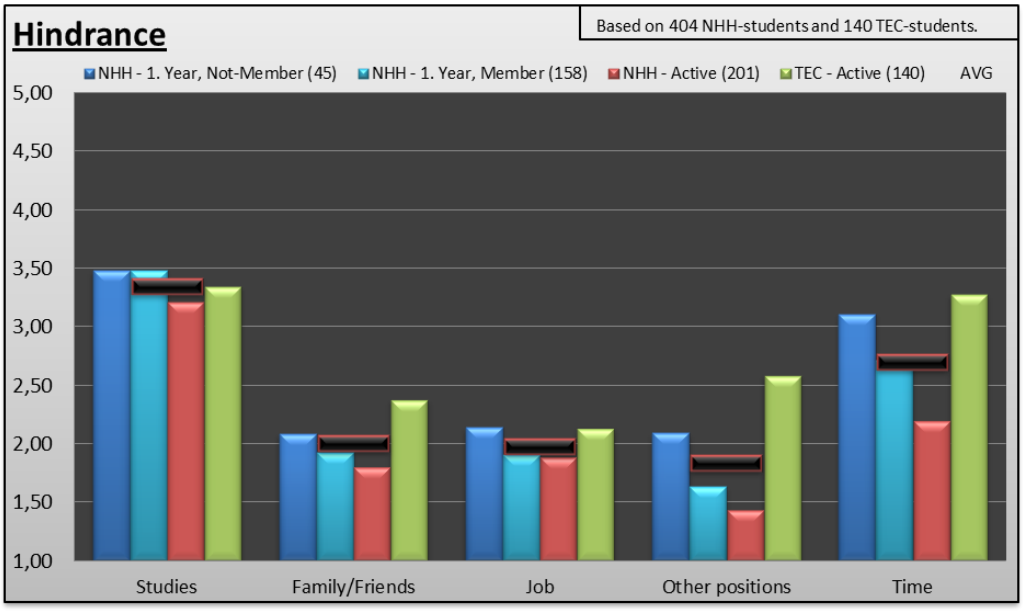


Figure 29: Hindrance analysis – Factors for not volunteering

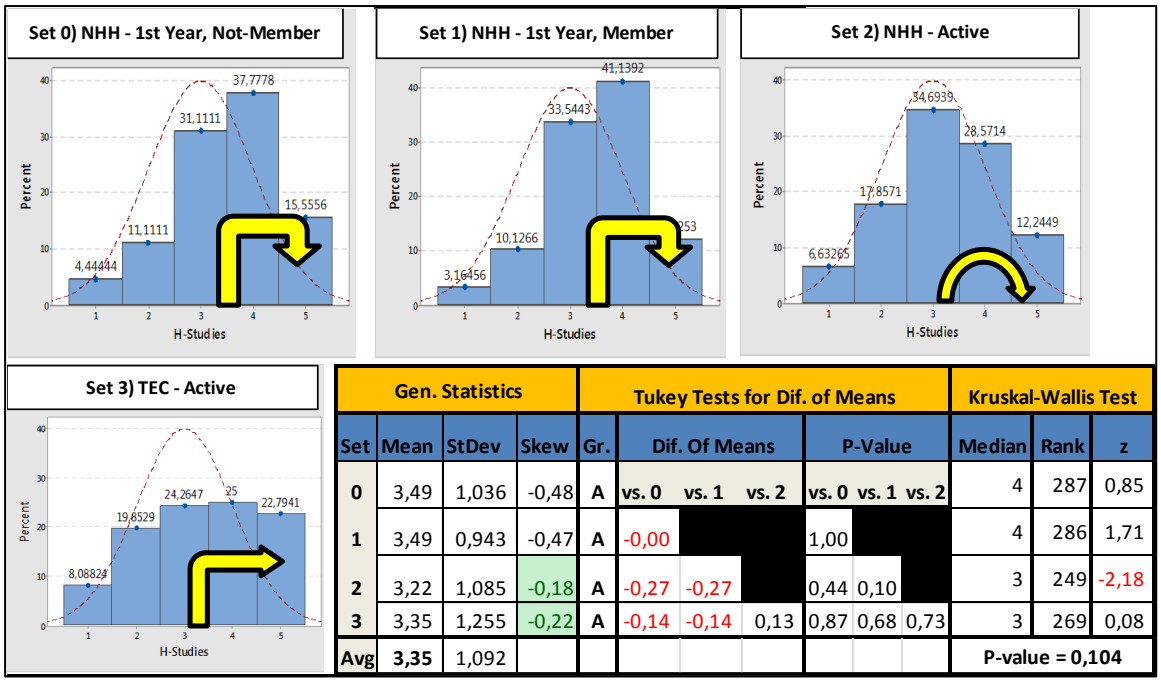
By making an overall comparison we can see that TEC scores highest for all factors but studies (equal with non-members for job), followed by the non-members as number two. We can also assume that there is a correlation between "time" and the other hindrances, which we can investigate closer with a correlation analysis.

HINDRANCE - Time				
Correlation Analysis - By Response Set				
School	NHH			TEC
Respondents	45	158	201	140
Hindrance Factors	1. Year, Not-Member	1. Year, Member	Active	Active
Studies	-	0,44	0,33	0,40
Family/Friends	-	0,17	-	0,23
Job	0,41	-	0,29	0,24
Other positions	0,38	-	0,15	0,46

Table 17: Hindrance – Correlation of "Time"

From the correlation analysis it is clear that many factors are connected with an increased score, and perceived hindrance, of "time". It shows us which factors have a significant correlation for the different sets, and it can help us understand what factors the students feel take the most of their time. For the 1st year non-members it is job and other positions, while for the 1st year members it is studies and family/friends. For the active students all but family/friends seems to "take their time", while for the TEC students all four factors increase in correlation with time. From these results we can assume that those factors that are not correlated with time are not perceived to take a lot of time away from possible volunteering, even though they might be reported as important.

Studies



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	3,49	1,036	-0,48	A							4	287	0,85
1	3,49	0,943	-0,47	A	-0,00			1,00			4	286	1,71
2	3,22	1,085	-0,18	A	-0,27	-0,27		0,44	0,10		3	249	-2,18
3	3,35	1,255	-0,22	A	-0,14	-0,14	0,13	0,87	0,68	0,73	3	269	0,08
Avg	3,35	1,092									P-value = 0,104		

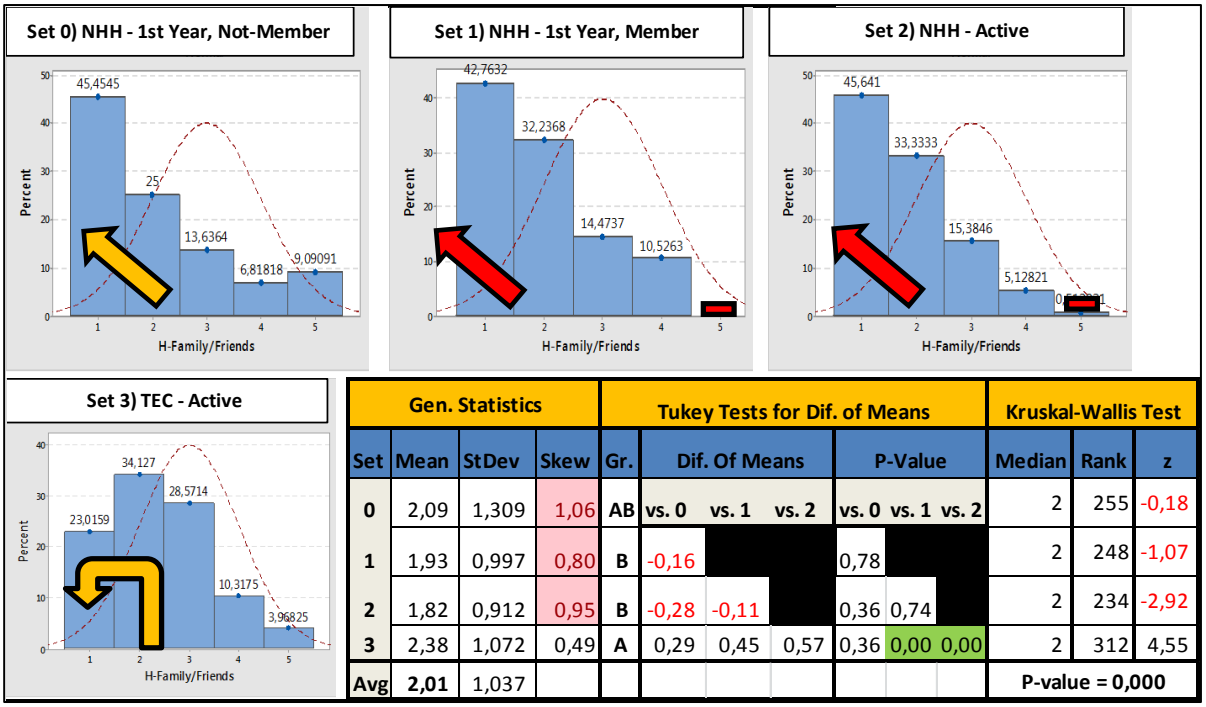
Figure 30: Hindrance analysis – Studies

For studies there are no significant differences between the means for any of the sets, although the 1st year sets have a slightly stronger skewness towards the right, with a median of four. The NHH and TEC sets are more centered, have a median of three, and the TEC set in particular is more spread out, with a high standard deviation, indicating little consensus about the factor's importance.

From the regression analysis for set 2, we can see that this factor is affected negatively by cohort, meaning that the students see their studies as less of a hindrance to volunteering as they progress in their degrees. This can be a result of the students being more relaxed with academic results and progression after some time at school, but it can also be that they learn better how to combine studies and student commitment through their experience. It also appears that the studies are less of a hindrance for local students, which can be connected to them having other activities, making studies relatively less important. For explanation of the regressions see the introduction to chapter 4.2, and for the actual regressions see the appendix.

For TEC students those with a job are less hindered by studies. This can have the same reason as mentioned for local NHH students, but it can also be that those working are part-time students or that they place less importance in their studies. This is supported by a higher proportion of the TEC students working more than 20 hours (7 %, vs. 1 % at NHH).

Family and Friends



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	2,09	1,309	1,06	AB							2	255	-0,18
1	1,93	0,997	0,80	B	-0,16			0,78			2	248	-1,07
2	1,82	0,912	0,95	B	-0,28	-0,11		0,36	0,74		2	234	-2,92
3	2,38	1,072	0,49	A	0,29	0,45	0,57	0,36	0,00	0,00	2	312	4,55
Avg	2,01	1,037									P-value = 0,000		

Figure 31: Hindrance analysis – Family and friends

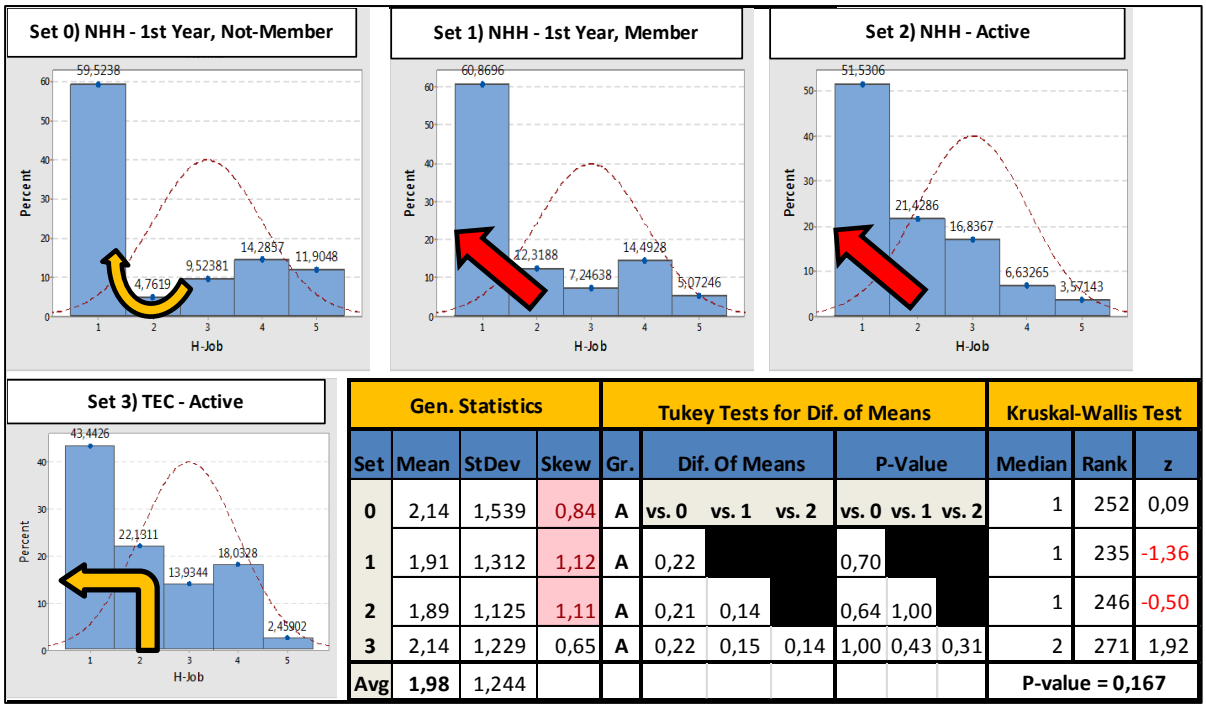
The TEC set is the only one that has a significant different mean for this factor, as it is higher than the NHH member sets. It has a lower skewness than the others, and the top point is 2, compared to 1 for all the NHH sets. For the NHH sets there is a clear similarity between set 1 and 2, with a range from 1 to 4 and about 75 % percent answering that this factor is of low importance. The non-members have a similar tendency, but with a much higher standard deviation, and 9 percent of respondents says they are hindered to a very large degree by this factor.

When it comes to reasons for this hindrance the control factors with statistical significant effect are a larger network in the city and having lived more years in the city before enrolment. This makes intuitive sense, as those are students who most likely have a social network in close geographical proximity and more social obligations outside of school. For the TEC students the hindrance increase with increased cohort, and might be culturally dependent on family situations, as Mexicans are more likely to establish a family at earlier age.

Cohort	N	Mean	StDev	Grouping
1	11	1,64	0,67	B
2	37	2,14	0,98	B
3	47	2,45	1,12	AB
4	26	3,00	1,02	A
5	5	2,00	0,71	AB

Table 18: Hindrance – Family/friends for different cohorts for TEC

Job



Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
	Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	2,14	1,539	0,84	A							1	252	0,09
1	1,91	1,312	1,12	A	0,22			0,70			1	235	-1,36
2	1,89	1,125	1,11	A	0,21	0,14		0,64	1,00		1	246	-0,50
3	2,14	1,229	0,65	A	0,22	0,15	0,14	1,00	0,43	0,31	2	271	1,92
Avg	1,98	1,244									P-value = 0,167		

Figure 32: Hindrance analysis – Job

For "job" the sets' means are not significantly different, but the distributions are not the same. Set 1 has a high standard deviation, indicating that this is a factor that is more "yes or no", depending if the subject has a job or not. For the majority of NHH members this factor is not very important, and it is interesting to see how equal the sets are, even though 72 % of NHH 1st year members do not have a job, while the number for NHH active is 40 %. This can indicate the same as suggested under "studies", that students learn how to better combine different tasks through experience, and therefore feel the job as a smaller hindrance.

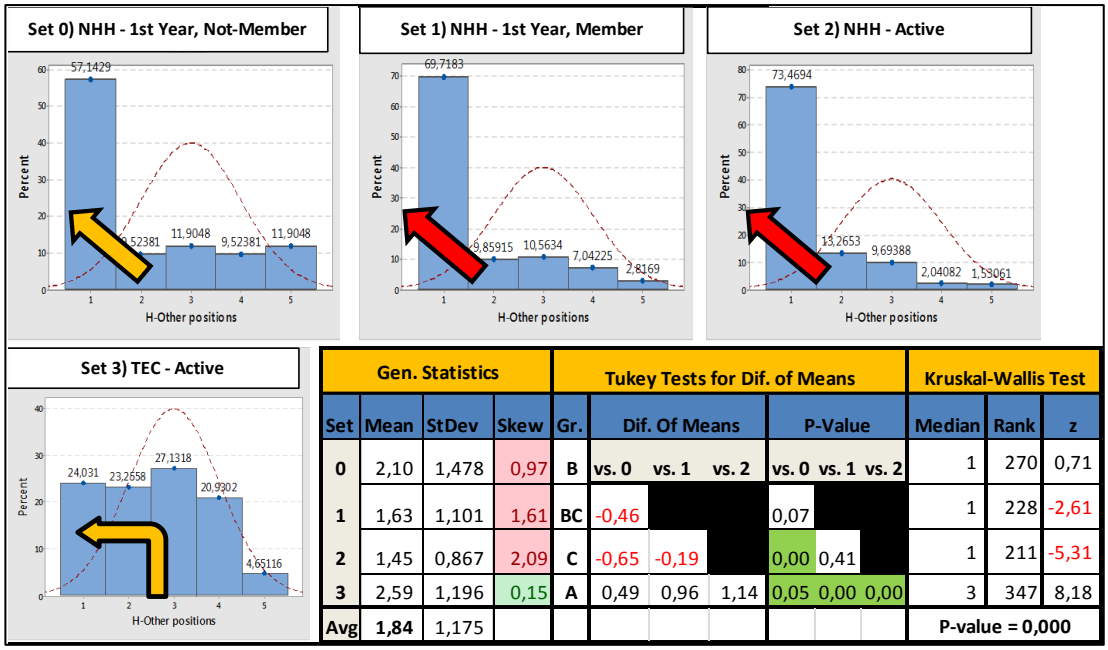
It is not very surprising that job is the most important control variable for this factor for all NHH sets, explaining 85 % of the variance for set 1, 52 % for set 2, and 21 % for set 3.

Job, hours	Female	Male
None	1,45	2,36
10-	1,50	2,20
10+	2,80	3,11

Table 19: Hindrance – Job for gender for TEC

For TEC it is the 2nd most important factor, explaining 9 % of the variance. The most important being gender, explaining 12,29 %. The data shows that 25 % of women had a job and 42 % of men (for NHH 47 % of women and 37 % of men). This difference by itself does not explain the large contribution, but the Mexican men also had a much larger mean score for each category. This is most likely due to cultural differences, as a similar trend is not seen in the Norwegian sample.

Other Activities



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	2,10	1,478	0,97	B							1	270	0,71
1	1,63	1,101	1,61	BC	-0,46			0,07			1	228	-2,61
2	1,45	0,867	2,09	C	-0,65	-0,19		0,00	0,41		1	211	-5,31
3	2,59	1,196	0,15	A	0,49	0,96	1,14	0,05	0,00	0,00	3	347	8,18
Avg	1,84	1,175									P-value = 0,000		

Figure 33: Hindrance analysis – Other activities

We could see in the descriptive analysis that a larger proportion of TEC students were engaged in other activities outside of school, with about 50 % versus 20-30 % for the NHH students. A likely result of this can be seen in their responses, which are significantly higher than for all NHH sets, and with a very low skewness and kurtosis, giving it a flat and centered distribution. Between the NHH members we find a very similar distribution, although the "active" set is a bit more skewed, with a lower mean.

For the non-members we can also see a large left skewness, with most respondents seeing the factor as having a very small degree of impact on their motivation. We could see in table 15 that there was a large difference between the responses of rejected applicants and students who did not want to participate. For this factor we can see the difference closer in the histogram in figure 34, differentiating between the two groups. The rejected group has a similar distribution as the NHH members, while those who had not applied show a "two-top" distribution. The two most important control variables are other organizations in the city and network in the city

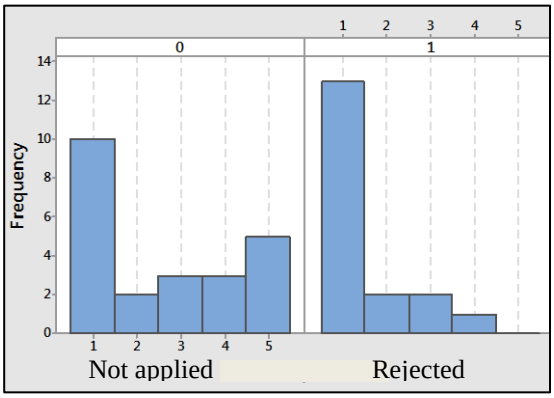
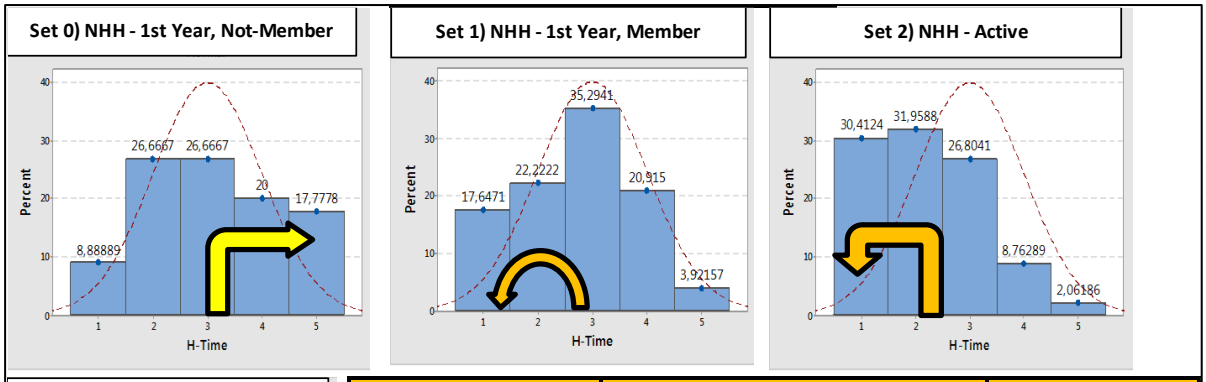


Figure 34: Hindrance analysis – Other position by "Rejected" for non-members

Time



Gen. Statistics				Tukey Tests for Dif. of Means						Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Of Means			P-Value			Median	Rank	z
					vs. 0	vs. 1	vs. 2	vs. 0	vs. 1	vs. 2			
0	3,11	1,247	0,08	AB							3	310	2,14
1	2,71	1,104	-0,03	B	-0,40			0,16			3	268	0,41
2	2,20	1,036	0,52	C	-0,91	-0,51		0,00	0,00		2	203	-7,06
3	3,28	1,250	-0,25	A	0,17	0,57	1,08	0,82	0,00	0,00	3	332	6,00
Avg	2,70	1,211									P-value = 0,000		

Figure 35: Hindrance analysis – Time

For the factor "time" there seems to be a different distribution for each set. Set 0 has a flat distribution, with the majority reporting a low to medium degree of hindrance. Set 1 has a more peaked form and a very low skewness due to a high concentration towards the center. For the 1st year students the hindrance increases for students who have lived in the city before, and who has a large network in the city. This is likely due to them having other time-consuming activities, as we could also see for the previous factors.

Set 2 has the lowest mean, and is rather equally distributed between a very low to a medium degree of hindrance, which makes it quite skewed to the left. The hindrance of time is perceived larger for males and for those students holding a job, as well as being reduced with age. We can partly explain the low mean with these students having fewer other positions, and a smaller network outside of school. It also seems that those activities they do have are seen less as hindrances as they grow older and progress through the cohorts. This can indicate that experience and maturing leads to a better time management, or at least better perceived time management.

TEC has the highest mean, with a relatively even distribution, and a top-point at 4. It has no significant control variables, but is likely affected by the high scores of the previous factors, and in particular the other activities.

4.3.2 Hindrance for Participation

To assess the total hindrance for each response set I have analysed the total mean for all five hindrance factors, to see how they relate to the control variables. The results are particularly interesting for the group of non-members, as that set gives a more reliable indication of why people would chose not to participate.

For 1st year students the largest contributing predictor is "years in the city before", followed by "job". For the non-members "network in the city" is also important. This shows that local students feel more hindered to participate, both because they have a larger social network and because they are more preoccupied with other activities. For the non-members the factor of years in the city before enrolment constitutes 38 % of the variance in the response-set.

For the active NHH students the significant negative predictor is "job". As we saw from the descriptive analysis, a smaller proportion of these students have other positions or a high network in the city, which can explain why this is the only significant negative variable. It can also be assumed that those locals included in this sample, by the fact that they are members, are less hindered by their activities or do not have other activities. The total hindrance decreases with age, possibly from an increased ability to combine different tasks.

For the TEC students the hindrance increases with higher cohorts, and is likely due to an increase of other responsibilities as we can see the higher cohorts reporting higher hindrance levels for family/friends, job and other positions (not all are statistically significant). The hindrance also increases with a higher network in the city, probably for the same reason.

Response Variable: Hindrance - Average							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	**43**	**60,88 %**	Constant	1,23	0,24		
			C: Years in city before	0,30	0,13	*	37,71 %
			A: Network in city	0,30	0,12	*	8,24 %
			C: Job	0,51	0,13	***	14,94 %
NHH, 1st-M	**156**	**13,79 %**	Constant	1,63	0,16		
			C: Years in city before	0,18	0,07	**	7,50 %
			C: Job	0,38	0,12	**	6,29 %
NHH - Active	**184**	**9,11 %**	Constant	2,40	0,17		
			C: Age	-0,19	0,07	**	2,54 %
			C: Job	0,21	0,06	***	6,57 %
TEC - Active	**135**	**10,91 %**	Constant	1,62	0,29		
			C: Study-Year	0,23	0,07	**	5,59 %
			A: Network in city	0,23	0,08	**	5,32 %
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001							

Table 20: Hindrance – Regression analyses of "hindrance average"

4.4 Satisfaction

SATISFACTION					
Satisfaction Analysis - By Response Set					
School →		NHH		TEC	
Respondents →		201		140	
Satisfaction Factors	AVG.	Active	Diff. from avg.	Active	Diff. from avg.
Social	4,36	4,54	4 %	4,10	-6 %
Exciting Tasks	4,00	3,87	-3 %	4,18	4 %
Purpose	4,16	4,11	-1 %	4,24	2 %
Visible Results	3,93	3,72	-5 %	4,22	7 %
Autonomy	3,65	3,42	-6 %	3,97	9 %
Leaders	3,70	3,64	-2 %	3,78	2 %
Communication	3,31	3,06	-7 %	3,66	11 %
Including	3,73	3,73	0 %		
Experience	4,18	3,94	-6 %	4,53	8 %
Network	3,41	2,97	-13 %	4,01	18 %
Benefits/ Welfare	3,19	3,23	1 %	3,12	-2 %
Status	3,11	2,99	-4 %	3,27	5 %
Average	3,73	3,60	-3 %	3,92	5 %

Table 21: Satisfaction – Descriptive presentation of scores

For set 2 and 3, with the active NHH- and TEC students, there was also a measurement of satisfaction for different relevant factors. The satisfaction of students should not be analyzed in the same way as motivation and hindrances for participation, as the causality must be seen from a different perspective. The satisfaction is unlikely to be driven by the control variables as we assumed for motivation and hindrance, and for this reason the same regressions would not make much sense. The only interesting results found was that satisfaction with exciting tasks, group purpose, autonomy, and treatment by leaders for TEC students increase with a higher cohort. This is likely connected to the positions and activities held being more interesting as you gain experience and network in a student union.

From a causality perspective it is more interesting to see the satisfaction differences for each school, and in relation to membership of different groups. The students' experiences and the organizational design are more likely to have a connection with student satisfaction, which is

probably why we find little correlation between the satisfaction scores and the control variables. There is also a good change to find correlations between similar factors for motivation and satisfaction, and it is likely that certain motivation leads to membership of the particular groups that are more likely to satisfy the motivational factor. For this reason we can conclude that group membership through its design and activities have, at least partially, a causal connection with the measured factors for satisfaction.

As we can see from the overview there is a tendency of higher satisfaction scores for the TEC students. This was also the case in the previous analyses, and possible reasons have already been discussed. The most notable differences are communication and networking, where TEC scores higher, and social, where NHH scores higher. There are only two sets being compared, but the measured difference from average is not equally distanced from 0 due to a higher amount of respondents for the NHH set (see table 21).

From the distribution below we can see that the biggest difference is in the use of "very large degree of satisfaction" (5), which clearly has a higher frequency among TEC students, and is the most frequent response. For NHH the top-point is at "large degree of satisfaction" (4), and the responses are more spread out along the upper part of the scale. There are few very dissatisfied students for both sets (3-4 %).

SATISFACTION DISTRIBUTION					
Response Distribution - By Response Set					
School →		NHH		TEC	
Respondents →		201		140	
Score	AVG.	Active	Diff. from avg.	Active	Diff. from avg.
1	3 %	4 %	0 %	3 %	0 %
2	10 %	12 %	2 %	8 %	-2 %
3	24 %	27 %	4 %	20 %	-4 %
4	33 %	35 %	2 %	31 %	-2 %
5	30 %	22 %	-8 %	38 %	8 %

Table 22: Satisfaction – Descriptive presentation of response distribution

SATISFACTION RANKING				
Satisfaction Analysis - By Response Set				
School	NHH		TEC	
Ranking	Active	Score	Active	Score
1	Social	4,54	Experience	4,53
2	Purpose	4,11	Purpose	4,24
3	Experience	3,94	Visible Results	4,22
4	Exciting Tasks	3,87	Exciting Tasks	4,18
5	Including	3,73	Social	4,10
6	Visible Results	3,72	Network	4,01
7	Leaders	3,64	Autonomy	3,97
8	Autonomy	3,42	Leaders	3,78
9	Benefits/ Welfare	3,23	Communication	3,66
10	Communication	3,06	Status	3,27
11	Status	2,99	Benefits/ Welfare	3,12
12	Network	2,97		

Table 23: Satisfaction – Ranking of factors

We can see from the ranking that there is a correlation between similar factors for motivation and satisfaction by comparing it to the ranking of motivational factors in table 10, and it is likely that the satisfaction is closely connected to the importance of the factor for the students. From the ranking we can see that TEC students are relatively more satisfied than NHH students for experience, visible results, and professional network, while NHH students are more satisfied with social network and benefits/welfare.

Motivation vs. Satisfaction (p<0,01)																
Correlation Analysis																
	Motivation															
Satisfaction	Social		Interests		Extra Activity		Community		Experience		CV		Network		Mot-Avg	
	TEC	NHH	TEC	NHH	TEC	NHH	TEC	NHH	TEC	NHH	TEC	NHH	TEC	NHH	TEC	NHH
Social	**0,31**	**0,29**	0,27				0,23		0,25						0,30	
Exiting tasks			**0,37**	**0,29**	0,25	0,19	0,31	0,35	0,29	0,21					0,36	
Group purpose			0,50	0,36			0,35	0,29	0,29							
Visible results				0,29		0,24		0,37		0,23						0,31
Autonomi			0,26	0,23				0,27	0,28						0,25	
Leaders					0,25					0,19	0,23				0,31	
Communication									0,30						0,34	
Including Union		0,25						0,32		0,26						0,33
Experience			0,35	0,23		0,21	0,27	0,34	**0,46**	**0,37**				0,20	0,29	0,32
Network								0,26	0,23	0,29	0,30	0,27	**0,39**	**0,44**	0,30	0,43
Fringe benefits	0,30	0,20			0,32			0,20			0,23		0,26		0,45	0,24
Status	0,23				0,35	0,22		0,23			0,25				0,48	0,35
Sat-Avg	0,26	0,21	0,26	0,27	0,33	0,21	0,27	0,40	0,38	0,29	0,24		0,29		0,53	0,40

Table 24: Satisfaction – Correlation between factors for motivation and satisfaction

The correlation analysis shows the correlation between similar factors for motivation and satisfaction, such as social, interests, experience and network (in bold). Correlations from 0,3-0,4 are in yellow and above 0,4 in green, and all p-values are below 0,01. It shows a strong correlation of 0,40 and 0,53 between the average for motivation and satisfaction, as illustrated in the scatterplots below. The motivational factors "fringe benefits", "status" and "pressure" had few correlations other than with satisfaction for "fringe benefits and "status", and was therefore removed from the table. The correlations between motivational and satisfaction factors are clearly strong, and without exception positive. It is however difficult to assess the causality, and if higher motivation leads to higher satisfaction (through group membership), or if it is the result of different interpretations and use of the Likert-scale.

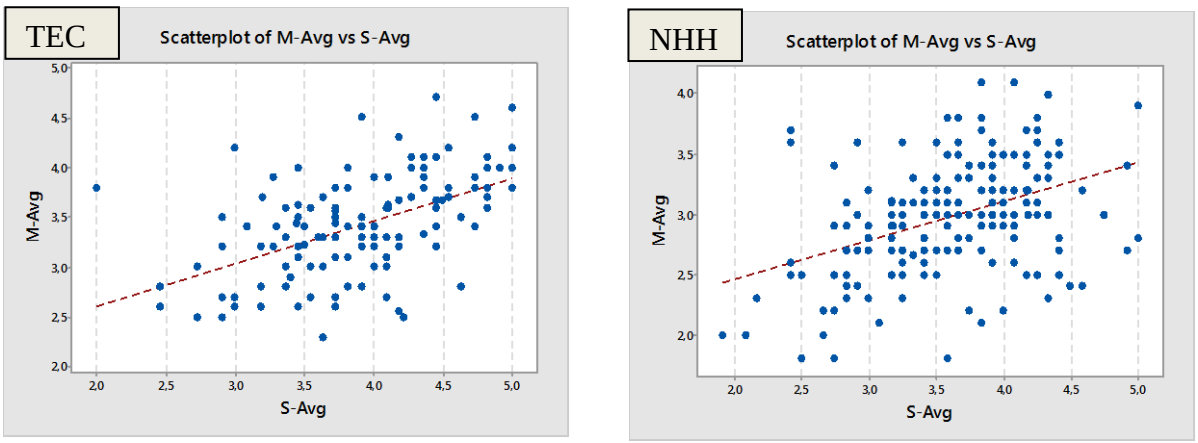
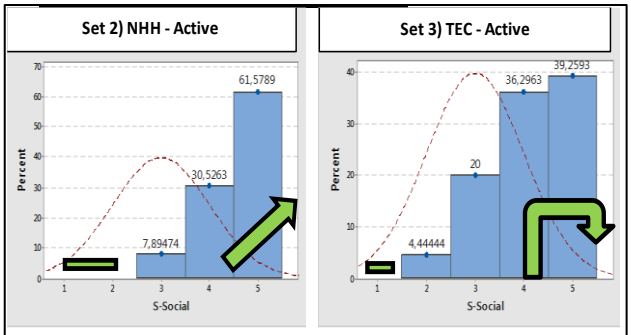


Figure 36: Satisfaction analysis – Correlation between motivation and satisfaction

Social Network / Friendship



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	4,54	0,639	-1,06	A			5	181	4,19
3	4,10	0,875	-0,61	B	-0,43	0,00	4	137	-4,19
Avg	**4,36**	0,775					**P-value = 0,000**		

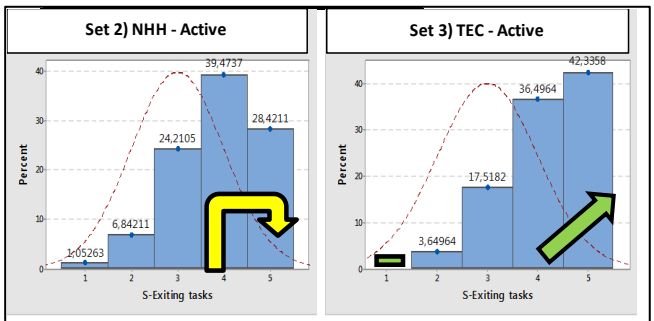
Figure 37: Satisfaction analysis – Social network

Social Network is, as with the motivational factor, higher for NHH students than for the TEC students. The difference is smaller though, as the TEC students have a higher satisfaction score than motivation score for this factor.

At NHH the score is lower among the business- and media (tv/newspaper) groups, which for the business group can be seen in connection with their low score for social motivation. The satisfaction is higher for those in leadership positions, and it might be that these positions facilitate more social contact than more "task-related" positions. For explanation of the regressions see chapter 4.2. Actual regressions are found in the appendix.

The score has a positive correlation with the social- and experience motivation for both sets, and a negative correlation with the motivation for CV at NHH, indicating that those highly motivated by building a CV will apply to groups where the social factors are less important.

Exciting Tasks



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,87	0,940	-0,56	B			4	152	-2,75
3	4,18	0,848	-0,71	A	0,30	0,00	4	181	2,75
Avg	**4,00**	0,913					**P-value = 0,004**		

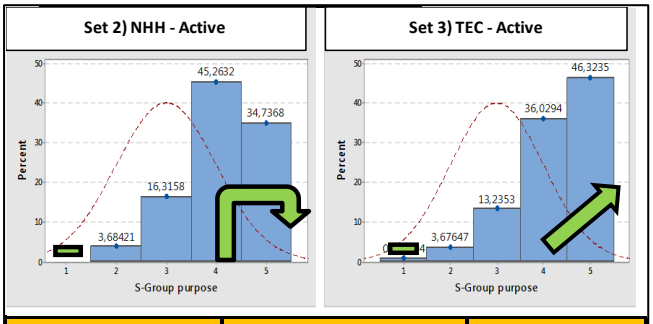
Figure 38: Satisfaction analysis – Exciting tasks

Exciting tasks are ranked as the 4th most satisfied factor for both set, although it scores significantly higher for the TEC set.

At TEC the satisfaction increases with a higher cohort, probably as the more experienced students get access to more exciting tasks. At NHH it is higher for those in leadership positions, and in music/dance groups.

For both sets this factor is higher for those motivated by interests and experience, and it seems likely that those students will be seeking more intrinsically exciting tasks. At NHH it is also connected with motivation to contribute and at TEC with social motivation.

Group Purpose



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	4,11	0,806	-0,63	A			4	156	-1,62
3	4,24	0,871	-1,09	A	0,12	0,18	4	174	1,62
Avg	**4,16**	0,835					P-value = 0,081		

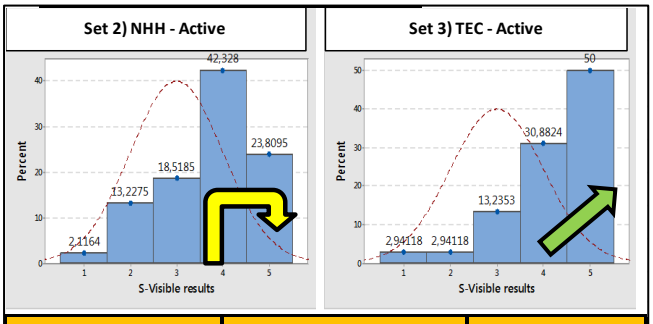
Figure 39: Satisfaction analysis – Group purpose

The satisfaction for group purpose does not differ significantly between the sets, according to the Tukey test. It is ranked as the 2nd most satisfied factor for both, and the most visible difference is the higher right skewness for the TEC set.

This factor is increasing with cohort for TEC students, while at NHH it is higher for leadership positions, and lower for social/events groups. This is probably due to task characteristics for the different groups.

The common motivational factor for both sets is interest, and that those who participate in a group whose tasks they find interesting are more likely to feel a purpose with their engagement. For NHH this factor is also connected to community contribution.

Visible Results



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,72	1,036	-0,62	B			4	143	-4,49
3	4,22	0,987	-1,40	A	0,50	0,00	5	191	4,49
Avg	**3,93**	1,043					P-value = 0,000		

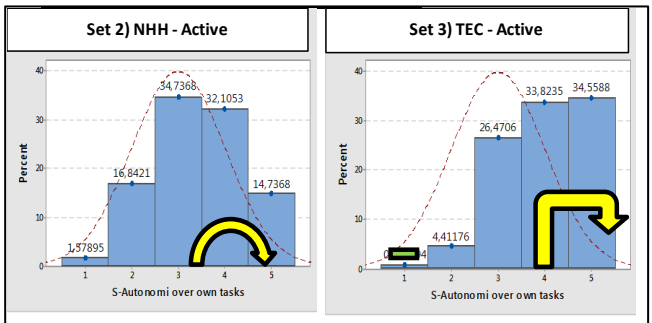
Figure 40: Satisfaction analysis – Visible results

Students are less satisfied with the visibility of results at NHH, not only relative to TEC, but also from a set-internal ranking of factors (6th vs. 3rd).

Also for this factor those in leadership positions have a higher score at NHH, but this time with a higher coefficient than for the other three factors (0,84 vs. 0,36, 0,67 and 0,24). This is positive for the leaders, but as the measurement is relative to the other students, it can also be a sign of low transparency downwards in the organizational hierarchy. This can again lead to reduced satisfaction among non-leaders, a lack of communication and information, and consequentially a lacked sense of purpose.

Those motivated of interests, contribution and CV score higher at NHH, while network and the hindrance of time have a correlation at TEC.

Autonomy Over Own Tasks



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,42	0,987	-0,08	B			3	143	-4,72
3	3,97	0,927	-0,51	A	0,56	0,00	4	193	4,72
Avg	**3,65**	0,999					**P-value = 0,000**		

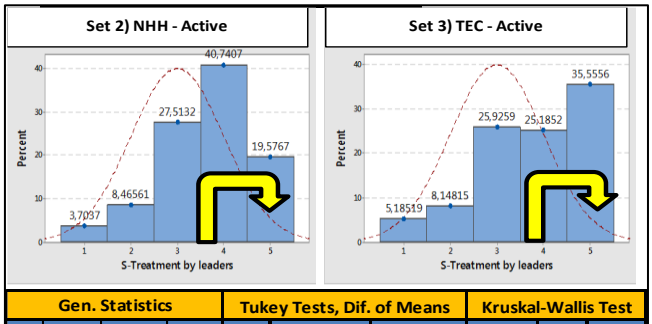
Figure 41: Satisfaction analysis - Autonomy

Autonomy is scoring relatively low for both sets, as 8th and 7th, but the TEC set is more skewed to the right, and with a higher mean and median.

At TEC the satisfaction of autonomy increases with cohort. For NHH it increases for leadership positions and for the management/adm. groups, while a decrease can be seen for music/dance groups. This is not surprising, as the autonomy is likely to be higher for positions with more internal control and power, and lower for those who perceive their environment to a higher degree controlled by others.

The autonomy is positively correlated with the motivational factor “interests" for both sets, and it is possible that those with a higher intrinsic interest for an activity feels more autonomy and find it easier to take control in their environment.

Treatment by Leaders



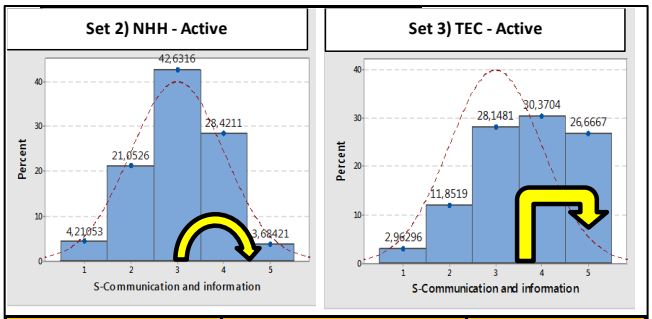
Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,64	1,009	-0,61	A			4	156	-1,43
3	3,78	1,170	-0,66	A	0,14	0,26	4	171	1,43
Avg	**3,70**	1,079					**P-value = 0,136**		

Figure 42: Satisfaction analysis – Treatment by leaders

This factor has a very similar score and distribution for both sets, only difference being a lower kurtosis for the TEC set with a top at “5”, while at NHH the most used answer is “4”.

Same as with autonomy this factor’s score increases with higher cohorts at TEC. At NHH the only significant factor is music/dance groups, whose members are less satisfied with their treatment by leaders. This is likely affected by their lower satisfaction with autonomy, and the two factors seen together can lead us to believe that the leaders are perceived as to controlling for the members of these groups.

Communication and Information



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,06	0,900	-0,17	B			3	141	-4,93
3	3,66	1,087	-0,42	A	0,60	0,00	4	194	4,93
Avg	**3,31**	1,024					P-value = 0,000		

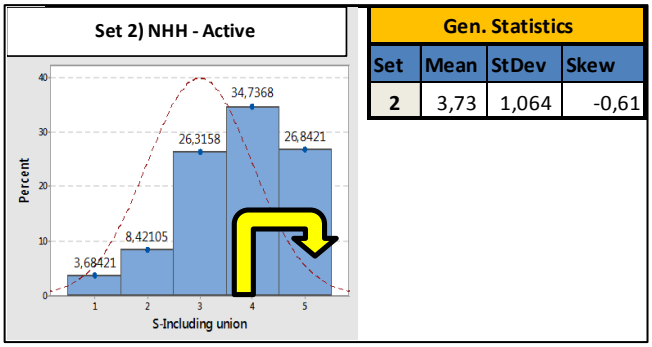
Figure 43: Satisfaction analysis – Communication

The satisfaction with communication at NHH has a very low skewness, and has a normal distribution. For TEC the average is higher with an equal distribution from medium to a very high degree of satisfaction. It is ranked 3rd lowest for both schools.

The satisfaction is lower for back-room media groups, maybe as a result of their required cooperation with, and work for, many other groups in the student union.

For both schools this satisfaction is higher when the social motivation is higher. It is negatively affected by a higher hindrance score for studies at NHH, while the effect is positive at TEC.

Inclusion



Gen. Statistics			
Set	Mean	StDev	Skew
2	3,73	1,064	-0,61

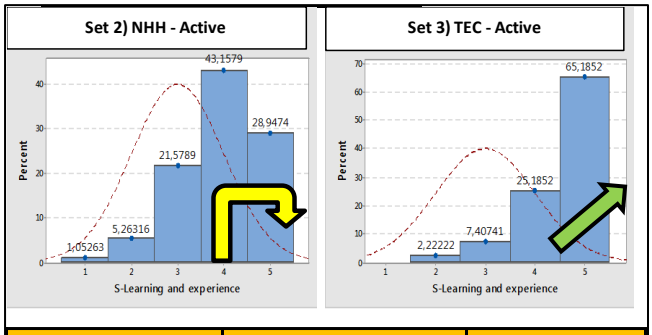
Figure 44: Satisfaction analysis – Including union

This factor was only measured at NHH, and it has a relatively high score (ranked 5th) and right skewness.

This satisfaction is higher in the management/adm. groups, which might be connected to these groups being responsible for making sure the union is including. If the union is not as including as these students report, it could be a result of cognitive dissonance. This means that the students responsible might choose to ignore or reject information that is unfitting with their desired reality (see chapter 2.3.2). For media (front) and technical groups the satisfaction is significantly lower than average. It might be that these groups perceive themselves as less included in the union, that they hold a different perspective of the general situation, or that they have access to more information on the subject. A possible explanation for the high negative correlation with the media groups is a recent focus on students who have not been accepted to student groups. The problem with

students who want to join groups, but are not accepted, can point to a lack of capacity and a less including union. Higher exposure to this information is likely to have reduced the satisfaction. The satisfaction is positively correlated with the social-, community-, and experience factors for motivation.

Learning and Experience



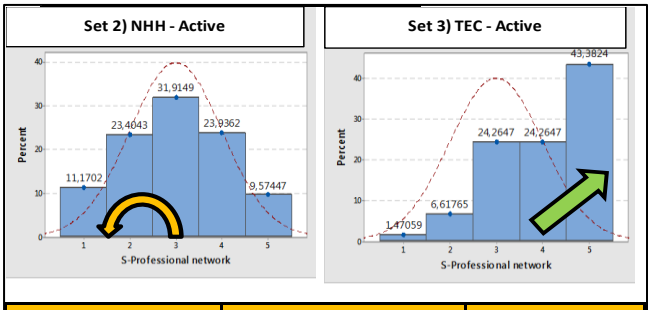
Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,94	0,900	-0,67	B			4	137	-6,01
3	4,53	0,731	-1,57	A	0,60	0,00	5	200	6,01
Avg	4,18	0,884					P-value = 0,000		

Figure 45: Satisfaction analysis – Experience

The satisfaction with learning and experience is significantly higher at TEC. This is likely a consequence of the organizational and motivational differences. From the motivational analysis we saw that TEC has a higher focus on future career enhancement, and NHH has more focus on being a social arena. These motivational differences support different organizational designs and the presence of different student groups, which again will satisfy different needs to a different degree.

At NHH this satisfaction is higher among management/adm.- and social/events groups. These groups give a different learning outcome, but both probably have a high cost/benefit ratio. The satisfaction is naturally higher for both schools when motivation for experience is high. It is also positively associated with community (NHH) and interests (TEC). At NHH it is lower for those who are more hindered by a lack of time, possibly as they have less time to participate in time-consuming activities with a higher learning- and experience yield.

Professional Network



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	2,97	1,144	-0,01	B			3	130	-7,44
3	4,01	1,040	-0,71	A	1,04	0,00	4	208	7,44
Avg	**3,41**	1,215					**P-value = 0,000**		

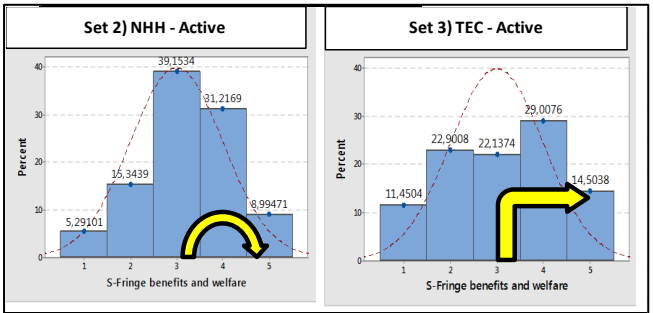
Figure 46: Satisfaction analysis – Professional network

The tendency here is the same as for experience, with a higher score for TEC. TEC has a high right skewness, while NHH has a normal distribution. Fewer NHH students have a focus on this factor, and it seems to be more group-dependent than at TEC, which can explain the different distributions.

At NHH the technical groups score lower and leadership position scores higher, and at TEC the business groups score higher. Considering the nature of these groups, these results seem intuitively rational.

For both schools this satisfaction is strongly correlated with the motivation for network. At NHH it is also positively correlated with community, status and the hindrance of other positions in the city. The correlation is negative with hindrance for family/friends and job.

Fringe Benefits and Welfare



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	3,23	0,994	-0,25	A			3	163	0,64
3	3,12	1,247	-0,14	A	0,11	0,38	3	157	-0,64
Avg	**3,19**	1,104					**P-value = 0,507**		

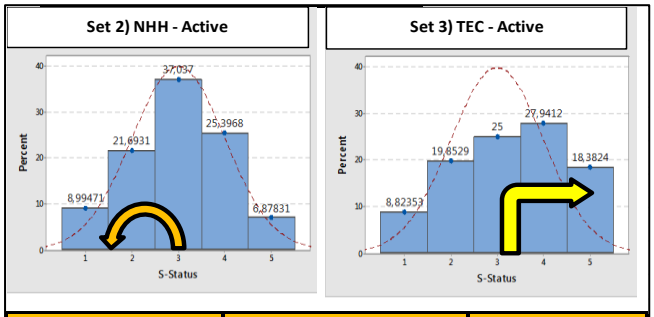
Figure 47: Satisfaction analysis – Fringe benefits

The means for this factor are not very different, but TEC has a higher standard deviation and a much higher spread on the scale, while NHH is more concentrated on a medium and high degree of satisfaction. This can indicate a more equal distribution of benefits for the different groups at NHH.

For business groups at NHH and religious groups at TEC the satisfaction is lower. The music/dance groups at NHH scores higher, most likely due to a relatively high amount of different fringe benefits.

As expected the satisfaction is also here closely connected to the motivation for the same factor, as well as the social factor, for both sets.

Status



Gen. Statistics				Tukey Tests, Dif. of Means			Kruskal-Wallis Test		
Set	Mean	StDev	Skew	Gr.	Dif. Means	P-Value	Median	Rank	z
2	2,99	1,054	-0,10	B			3	154	-2,11
3	3,27	1,226	-0,22	A	0,28	0,03	3	176	2,11
Avg	3,11	1,136					P-value = 0,029		

Figure 48: Satisfaction analysis – Status

Status has the same differences as seen, and discussed, for fringe benefits.

At NHH the satisfaction is higher for management/adm.- and music/dance groups, and lower for technical groups. This is likely to have a lot to do with their positions at school. Much of what the high scoring groups do have a strong impact and a high visibility for other students. They are also associated with a strong identity, group belongingness, and relatively strict application procedures. For the technical groups, although their work is often of a high impact nature, it is less visible and has a lower personal profile than the high-status groups.

The status is connected to the motivation for status, as well as for having an extra activity. This supports the theory that status is not only measured by the characteristics of the groups, but also that having an extra activity in itself is associated with a higher status. This might be seen as a signal of handling more responsibilities beside school, or of being more socially interesting.

4.4.2 Satisfaction from Participation

From the overview we could see that the total satisfaction was a bit higher at TEC than at NHH, but it does not say why. Through regression analysis we can find the motivational and hindrance factors that are correlated with the total satisfaction level for each set. There are three common motivational factors that are associated with a higher satisfaction in both sets: Social, interests and experience. This indicates that participation in the student groups is satisfying for students where these motivational factors are important, and that these students have a "good fit" with the characteristics of work in a student union. At NHH the motivational factors for contribution and status is also positively correlated, while pressure (although a low p-value) and time hindrance has a negative correlation with satisfaction. This means that those who feel they have too little time to participate are less satisfied, maybe as they feel their involvement has a high alternative cost and is damaging to other

activities, or perhaps because a larger, more time-consuming engagement is more satisfying. It also seems that pressure is not a good motivational factor to achieve a high satisfaction.

For TEC it has a positive correlation to be motivated by having an extra activity, and a higher time hindrance is correlated with a higher satisfaction, in contrast to NHH. From the previous analyses we found time to be connected to satisfaction from visible results and autonomy, and it might be that those hindered by time need more flexibility, have to work in more individual and autonomous positions, which make the results of their work more visible. This combined with a higher career-focus and a lower social focus can lead to a higher satisfaction from participation in student unions.

For group memberships there seems to be few strong overall connections, but at NHH those in leadership positions are satisfied above average, which we also saw for the individual satisfactory factors: Social, exiting tasks, group purpose, visible results, autonomy and network.

Response Variable: Satisfaction-Average							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	**184**	**35,77 %**	Constant	1,34	0,38		
			M-Social	0,14	0,06	*	4,42 %
			M-Interests	0,17	0,05	**	8,01 %
			M-Community	0,18	0,03	***	13,85 %
			M-Experience	0,09	0,04	*	3,57 %
			M-Status	0,15	0,04	**	3,35 %
			M-Pressure	-0,09	0,05	-	0,94 %
			H-Time	-0,07	0,04	*	1,63 %
TEC - Active	**108**	**40,40 %**	Constant	0,90	0,40		
			M-Social	0,11	0,05	*	11,15 %
			M-Interests	0,15	0,07	*	4,81 %
			M-Extra activity	0,13	0,04	**	6,58 %
			M-Experience	0,25	0,06	***	11,08 %
			H-Time	0,12	0,04	**	5,20 %
NHH - Active	**186**	**8,84 %**	Constant	3,32	0,08		
			C: Leadership Position	0,39	0,09	***	
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001							

Table 25: Satisfaction – Regression analyses of “satisfaction average”

4.5 Optimal Organization and Job Advantages

In addition to the factors for motivation, hindrance and satisfaction, the questionnaires for the active NHH and TEC students asked two more questions. Firstly if the students perceived their student unions as optimally organized to motivate for participation and effort, and secondly if they felt that their involvement in the student groups gave them an advantage for job applications. Both these questions encouraged to give qualitative answers.

4.5.1 Optimal Organization

Optimally Organized		
School →	NHH	TEC
Respondents →	188	136
Yes, to a large degree	41 %	48 %
Yes, to some degree	48 %	35 %
No	10 %	16 %

Table 26: Optimally organized

The students were presented with the following question: "Do you feel that the student organization is optimally organized to motivate student to participate and work?"

The responses were not to uneven for the different schools, but the TEC students had a larger spread to each end of the "scale", with less students agreeing to some degree.

NHH

At NHH some of the positive factors being brought forward are the many different opportunities to participate, and the broad offer of activities. The activities cover different interests, and levels of engagement and responsibility, and if the activity you want is not present it is possible to start up new groups, based on your interests. Those who are most satisfied highlight the broad array of possibilities, and are less focused on those who are not admitted. One also compares this with the workplace: "Not everyone is admitted where they want. This contributes to the optimal functioning of the groups, because the groups themselves decide who has a "good fit" with the group (and will thrive socially in the group)." They student union also has some "low-threshold" groups, which are seen as positive to make the union more including.

The problem connected to all of these opportunities is a high entrance barrier, and a high number of students fighting for each position. The social importance of the student union creates "outsiders" and "insiders", and we saw from the group memberships, that those who are already "in" are often members of more than one group (chapter 4.1.1). Several also

mention the social factor as very selective and excluding, and that this makes it uncomfortable for many to apply, as the application process can appear unfair and a bit threatening. The importance of having a network in school is also stressed as an important factor for entry into groups, making the gap between members and non-members higher, as proposed in chapter 4.1.2. It is also mentioned that the participation in some positions is too time consuming, and for some the large number of different opportunities are perceived as too complex.

The most repeated comment is the difference between those who are a part of the student union and those who are not. For the "insiders" there is a large array of opportunities, and a great social arena, while the "outsiders" are not able to take part in this. Most groups have more applicants than available positions, and the application process is perceived by many as subjective and unfair. It seem particularly hard for international students, and those who enrol directly as master-students, possibly due to a lack of network on the inside and "conformity demands".

Regression analyses (see appendix) shows that those with a higher network in the city and a job are less satisfied with the organization, and can indicate that it is hard to combine work in the student union with other obligations. We can also see that management/adm. groups are more satisfied, while "front office" media- and technical groups are less satisfied. This might be for the same reasons as mentioned under "Inclusion" in chapter 4.4, as the management/adm. groups are responsible for the organization, while the media groups' task is partly to be the "union's watchdog" and will therefore take another approach. The technical groups were also more negative to the inclusion in the student union, and it seems like this is the main problem, as seen by the students, when it comes to optimal organization.

TEC

For the TEC students the focus seems to be different, in line with the focus found in previous analyses. The positive students highlight the opportunities to contribute to society, and partake in good deeds that help others. Another positive view is the student union as a learning arena, where you can set yourself aspirational goals and work hard to reach them. Many of the goals and results of participation are related to gaining experience that is relevant for a future career, as we could interpret as important from the motivational analyses. The social environment within each group is also experienced as positive. As a contrast to NHH the focus seems much higher on each individual group, compared to seeing

the student union as a holistic entity. This can probably be a result of the much larger size and scope of educational areas of TEC.

Some negative points presented by the TEC students are the limitations put on their work by others (authorities and coordinators), a lack of support and promotion/information from the school, and that the goals of each member of the group are not always aligned. It is also seen as a problem for some to combine the participation with other activities (as we saw in chapter 4.3)

4.5.2 Job Advantage

Job Advantage		
School →	NHH	TEC
Respondents →	**189**	**136**
Yes, to a large degree	34 %	63 %
Yes, to some degree	44 %	33 %
No	6 %	1 %
Do not know	16 %	2 %

Table 27: Job advantage

The perceived job advantage from being part of a student group is considerably higher at TEC. This is consistent with the motivational factors among the TEC students, and also with the group memberships where 64 percent of TEC students were part of career groups, while the majority of NHH students participated in social/events- and sport groups. The question asked was: "Do you feel that your participation in student organizations give you an advantage when applying for jobs?"

NHH

The NHH students mention professional network as a positive factor, both through friendship with current students and from meeting company representatives through their positions. Another factor is the practical experience that compliments the theory in school, which is not only seen as something to put on a CV, but also as a source of increased skills and self-confidence. It is a signal to potential employers that the student takes initiative and has a high work capacity. Some mention that it gives an advantage just to have had an extra activity besides the studies, which might strengthen the previously discussed connection between status and having an extra activity (see "status" in chapter 4.2.3. and 4.4). Among NHH students it seems that professional network is to a large degree a positive consequence of the social network, if we also consider the motivational analyses, where professional network scores low as a motivational factor, especially among members.

Even with all these advantages many still have the impression that school grades are the most important when applying for jobs, and that a volunteer position only to some degree is helpful to stand out and compensate for lacking work experience, when grades are similar. It can also provide relevant experiences that can be mentioned during an interview, which might tip the situation to one's advantage. There are those who consider participation rather irrelevant compared to school grades, and particularly if the performed activities are small and not connected to your future career.

From the regressions (appendix) we see that the impression of job advantage is bigger for students in higher cohorts, and for students who are members of a business-, management/adm.-, politics- or sports groups. Maybe with exception of the sports groups, this can be put in connection with the relevance of the positions, as it can be expected to be higher for these groups and for higher cohorts. This is in line with the investment-theory, and career motives, as discussed previously (se chapter 2.2.2, and 4.2.2).

TEC

As we can see from table 27 the TEC students see their participation as a bigger advantage for job applications than the NHH students. The reasons presented are mostly connected to leadership- and career related experiences that increase their attractiveness. It seems that the focus of the students is towards new skills and knowledge that complement their theoretical education, which supports the findings we uncovered in the motivational analyses. Besides the directly career specific experience many also points out the signalling value from taking initiative, having team-work experience, and handling more activities at once.

The major difference between those who agree to a large degree and those who agree to some degree appears to be their view on the experience as a personal development or a signalling tool. Those who feel the participation gives a large advantage see the experience more as something that has built or improved relevant skills for their future career. The focus is on the participation's effect on the person. Those who feel some degree of advantage from their position(s) see the experience more as a differentiating factor towards other applicants, and the focus is more towards how the participation is perceived by potential employers.

Compared to the NHH students, the TEC students seem more focused on the experience from participation, and less on the social- and professional networks, which is a bit surprising considering how much higher TEC scored in the motivational factor for

professional network. The qualitative feedbacks indicate that experience is the most important factor for job applications, and that CV and professional network are important "side-effects". I conclude with this because all three factors score high in the quantitative part, but experience is much more mentioned in the qualitative.

4.6 Similar Research

Similar research to mine has been conducted at NHH before, with similar results. I will mention two surveys that support and compliment my research.

Motivation for Student Volunteer Work

In February 2013 the student group NHHS Consulting AS performed a survey for the NHH-Symposium, to identify students' motivation for volunteer work in the student union (Nordli, Thuve, & Tvetene, 2013). The survey utilized a 9-point Likert-scale to rank how different factors affect students' motivation to volunteer, while I used a 5-point Likert-scale. This makes it less appropriate to compare the actual responses and averages, but the ranking of factors can still be compared. Their survey had 289 respondents, and a response rate of 10 %. Among the respondents 79 % were current or previous members of the student union (see appendix for more descriptive data).

The questionnaire gave the ranking of motivational factors as seen in table 28, and they found no significant differences across gender, cohort, time living in the city, social network outside of school, or previous positions. This ranking is similar to mine among the active members, with the only exception that "Extra activity" and "Experience", have switched place (I did not include the factors "Future Job" and "Expectations" in my questionnaire, and they did not include "CV", "Community contribution", and "Fringe benefits"). For the non-members all the similar factors from this survey is ranked in the same order as in my data.

The negative impact analysis in table 29 measures to what degree the respondents believe participation affects the mentioned factors in a negative way. The table uses the same "traffic light" score-ranges as the motivation table, and shows us that the average of the different factors are less spread out than for the motivational factors. The respondents find that the volunteering mostly impacts their leisure time, followed by studies, job and exercise. Family and friends seems to be less affected, which can be seen in connection with so many people coming from outside the city, and having much of their social network in school.

MOTIVATION RANKING				
Motivational Analysis				
School	NHH			
Ranking	NHHS Consulting 2013, Members	Score	NHHS Consulting 2013, Non-members	Score
1	Social	8,20	Social	6,80
2	Interests	7,30	Future Job	6,60
3	Experience	7,20	Interests	6,30
4	Future Job	6,50	Experience	6,20
5	Extra activity	6,60	Network	6,10
6	Network	5,80	Extra activity	4,80
7	Expectations	4,40	Expectations	4,50
8	Status	4,40	Status	4,40
9	Pressure	3,00	Pressure	3,20
	Average	5,93	Average	5,43

Intrinsic
Extrinsic, Long-Term
Extrinsic, Short-Term

Score: 7,00 +	
Score: 5,50 - 7,00	
Score: 4,00 - 5,50	
Score: 4,00 -	

Table 28: NHHS Consulting's questionnaire – Ranking of motivational factors

NEGATVIE IMPACT RANKING			
Negative Impact Analysis			
School	NHH		
Ranking	NHHS Consulting 2013	Score	
1	Leisure Time	5,70	
2	Studies	5,00	
3	Job	4,90	
4	Exercise	4,70	
5	Family/Friends	3,80	
	Average	4,82	

HINDRANCE RANKING		
Hindrance Analysis		
School	NHH	
Ranking	NHHS Consulting 2013, Non-members	Score
1	Studies	6,40
2	Job	5,10
3	Family/Friends	4,90
4	Low utility	4,80
5	Negative impression	4,30
	Average	5,10

Table 29: NHHS Consulting's questionnaire – Ranking of hindrance and negative effects

The hindrance analysis shows why non-members do not want to participate. The most important factor is "focus on studies", while the other factors score relatively equal.

They find a negative connection between years lived in the city before or having a social network in the city, and participation in the student union. Among those with a large social network outside of school 28 % are non-members, while for those with a small social network 11 % are non-members. My 1st Year set shows a similar trend with 26 % among those with a large social network outside of school to be non-members and 20 % for those with a small social network. The difference can be affected by a self-selection bias, as the response rate of the questionnaire is only 10 percent, but it can also indicate that those with a low social network are more likely to join a student group as time progress, explaining the reduction from 20 % in the 1st year sample, to 11 % in the general one.

In support of my findings this survey shows that non-members have a lower score for intrinsic motivation, a higher score for career related motivation (long-term extrinsic), and a similar score for short-term extrinsic motivation. As a complement to my findings they show that leisure time is most affected by student participation, which can indicate that the alternative cost (other activities) of participating is low. In contrast to this survey I go past the descriptive analysis, and analyze each factors relation to control variables and group memberships to find correlation and possible causal relationships.

Inclusion in Student Unions

In March 2014 the school newspaper (Yousefi, Strand, & Kvinnsland, 2014) presented an article regarding social inclusion in the student union, and can be seen in context of my results under "inclusion" in chapter 4.4. The article focuses on the relation between a close social environment and high involvement, and the risk of being excluded from the student union. It is based on a questionnaire with 352 respondents, and 75 percent were members of an admission based student group. They site a high general level of satisfaction, but a lower level of inclusion. 61 percent of non-members report that they feel "outside of the social environment", 43 percent of all respondents had experienced trouble with being included in the union at a time, and 68 percent felt pressure to join when they were new to school.

In light of my research, it seems that even though many of the students might have felt a pressure to join, this is not reported as an important motivational factor in my data. When it comes to satisfaction with inclusion this article can also be an explanation for the low satisfaction among the media groups (tv/newspaper), as my questionnaire was distributed at the same time it was published. A possibly problematic result from my data is that the management/adm. groups, who are the most satisfied with the inclusion in the student union, are also the ones responsible for implementing measures to improve the inclusion.

A reduced perceived inclusion can be a consequence of the high social importance of the student union. If the social factor is the most important for recruitment it can make it harder to keep the admission processes objective and fair, which in turn can make a rejection feel harsher and more demotivating. This is also reflected in a comment from one of the respondents from my questionnaires who states that: "The biggest challenge for the student union is the "interview culture" where admission almost never is objectively based, and functions as a form of institutionalized bullying, and is very excluding as many are not able to participate in anything" (translated).

5. Conclusion and Further Research

The objective of this thesis was to uncover the main reasons for and against student volunteer work, and to understand what it is that gives satisfaction and benefits from participation for the students.

These questions are naturally dependent on personal preferences, as well as school environment and culture. For this reason the research was conducted on two schools from two different parts of the world, which has improved the external validity, as we are not restricted to one type of school or one country. The research also divides among different student groups, control variables, applicants and non-applicants, and members and non-members. The wide array of variables has been important for the results of this thesis.

Motivation

Motivation for participation was investigated through ten different factors, in three different categories. For both schools the intrinsic category (social, interests, extra activity and contribution) is most important, the long-term extrinsic category (experience, CV and network) is the 2nd most important, and the short-term extrinsic category (fringe benefits, status and pressure) is the least important. However the weighting is different, as the NHH members have a larger difference between intrinsic- and long-term extrinsic motivation, compared to the NHH non-members and TEC members, where the categories are more equally ranked. For all sets the short-term extrinsic motivations score significantly lower.

At NHH the most important individual factor was by far social network, followed by interests, for all sets. Extra activity, experience and contribution followed on the ranking for the members, while for the non-members experience, network and CV were among the five most important factors. For the TEC students the ranking was different with interests as the most important closely followed by experience, contribution, social and CV. This shows us that the main motivational factors are different between the two schools, and between members and non-members at NHH.

By assessing the control variables we found that motivation for participation is reduced as network in the city increases. This supports the social importance played by the student union, as it attracts those who lack a social network in the city. The local network primarily reduces the motivation for social needs, extra activities and contribution to the society.

The opposite can be seen for network in school, which is positively correlated with motivation. This shows that it is not only an arena to meet new friends, but also to socialize with existing friends. The network in school increases motivation for social needs and contribution to the society. This creates a possibly problematic barrier between "insiders" and "outsiders", as those who are already members are likely to have more than one membership, and those who are not members find it hard to be admitted. These results are most likely a consequence of the high proportion of students coming from other cities, as we do not see the same tendencies for the TEC set.

Previous positions are positively correlated to motivation, especially through an increased interest, and it seems that previous experiences have a positive effect on future engagement. This can also help explain why the motivation is higher for the more active students in higher cohorts. Another difference between the 1st year students and students with more experience is motivation for contributing to society and for fringe benefits, where 1st year's score lower. This is probably due to changed preferences as the bond with the student union and knowledge of benefits increase, and can result in a crowding-effect.

There are indications in the NHH-data that intrinsically motivated students are more attractive for admission, as the 1st year members score higher for the intrinsic factors, particularly interests, while those who were not admitted score higher for extrinsic factors, particularly network and fringe benefits. These preferences might have been affected after or during the application process, but it is unlikely to explain the large difference alone.

For the non-members we can see a clear difference between those who chose not to participate and the rejected applicants. The first group scores lower on all factors but interests, and particularly lower for extra activity, fringe benefits and status, leading us to the conclusion that these factors have little value for those who have not applied. In other words they probably already have other activities, do not need or see much value from the fringe benefits, and do not associate membership with increased status.

Motivation is found to differ between the different student groups, and we can see that social/events groups have a relatively higher motivation for social network and extra activity, while business groups score higher for experience, CV and network. This shows us that some students more likely participate for the experience in itself, while others see it as an investment for the future, and this is connected to their motivation and group

memberships. From group memberships we can also conclude that the career relevance is a factor which correlates with the investment perspective and the motivation for long-term extrinsic reasons. This is to a higher degree the situation at TEC where more students are engaged in career relevant activities, versus social- and interest based activities at NHH. It also seems that members of different student groups score differently for the motivational factors depending on the nature of the student group.

Hindrance

Hindrance was measured through five factors: Studies, family/friends, job, other positions and time. The hindrances were considerably higher among the TEC students and the non-members, while the active NHH students had a lower score. For all sets studies are the main hindrance, followed by time. The TEC students and non-members are more hindered by time, which seems to be a result of higher scores for job, other positions and family/friends.

The analyses show that those with more years and a higher network in the city perceive themselves as more hindered from participating. The local students with a bigger local network are more likely preoccupied by other activities, such as jobs and other positions, which increases the alternative cost of participation.

Hindrance is reduced with age for the NHH students, implying that they either get more relaxed in regards to their other obligations, they hold less time-demanding positions, or possibly that they become better at combining their different obligations. For TEC students on the other hand hindrances increases with cohort, maybe as a consequence of increased obligations faced in higher cohorts.

Between the applying non-members and those who had chosen not to apply there were considerable differences for all factors, and it is apparent that the hindrances are important reasons for not applying. The differences are particularly high for job, other position and time.

Satisfaction

Satisfaction was only measured among the active NHH and TEC students, as the 1st year NHH students had not been members for a very long time.

The TEC students were relatively more satisfied with experience and professional network, while NHH students are more satisfied with social network and fringe benefits. The TEC

students also score high on visible results, autonomy and communication, which might be explained by the majority of the respondents holding leadership positions.

The satisfaction is seen in connection with motivation, hindrance and group membership. High motivation for one factor is generally correlated with high satisfaction for the same factor, but high motivation for social, interests and experience are significantly correlated to a higher general satisfaction for both schools. At NHH the students with leadership positions are especially satisfied. For the individual factors there appears to be a logical connection between the groups' characteristics and their satisfaction.

All of the above mentioned results show us that there are connections between the control variables, underlying motivation, hindrances, group memberships and satisfaction. This should be considered for each individual student when applying for groups, but maybe more importantly for the student unions when considering their organizational design.

Further Research

Many of my most interesting results were found when analysing non-members, and non-applicants. Unfortunately, the majority of my respondents were members of student groups, and the low number of non-member respondents weakens the basis for drawing conclusions. Future research should therefore be performed with a higher number of non-members to increase the strength of conclusions, and to better understand the reasons for non-members not to participate.

Another interesting opportunity is to perform time-series research as a compliment to my cross-sectional research. This can help us better understand how motivation changes with time, as the students go from not being members to being members, and depending on which student groups they join. This can again be used to assess weaknesses and strengths for the different groups depending on the motivation's development.

Finally, research should be done in order to take my results from a theoretical state, to a more practically applicable one, to facilitate improvements to the student organizations. This could hopefully increase the attractiveness, efficiency and performance-capacity of student unions, and the satisfaction of participating students.

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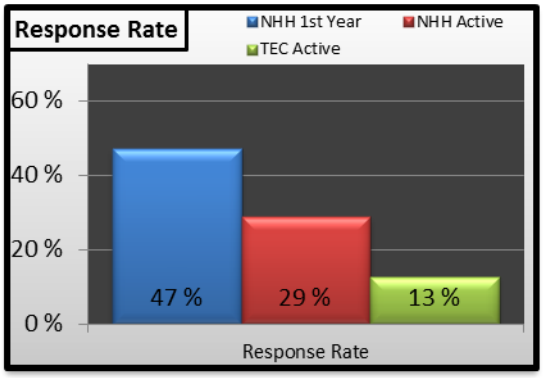
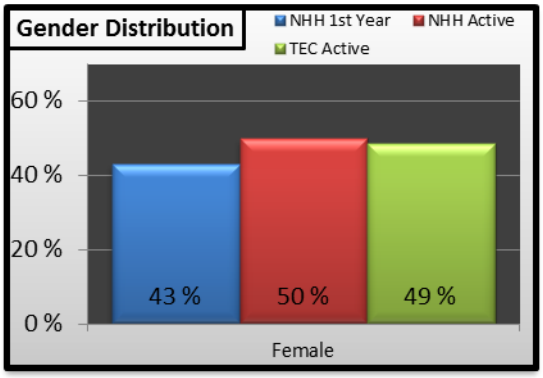
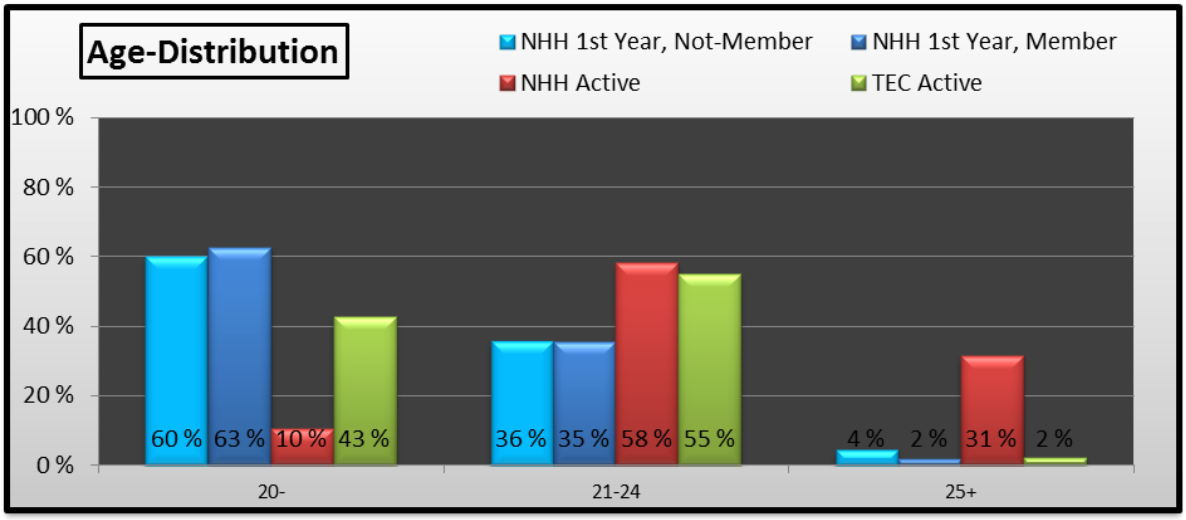
Appendix

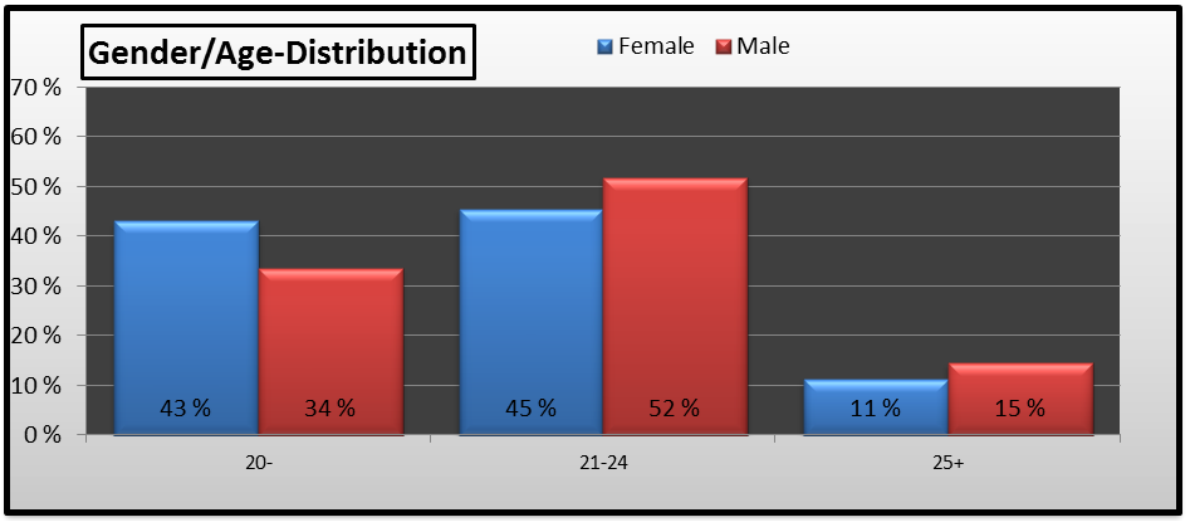
Descriptive Analysis, Graphs

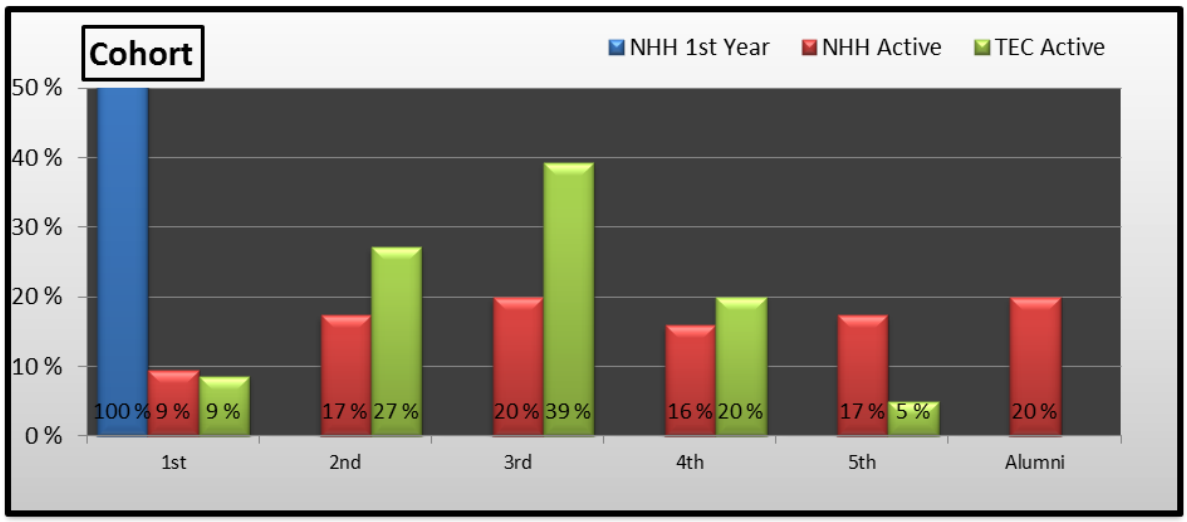
Graphs providing a more visual presentation of the descriptive data from the tables in chapter 4.1

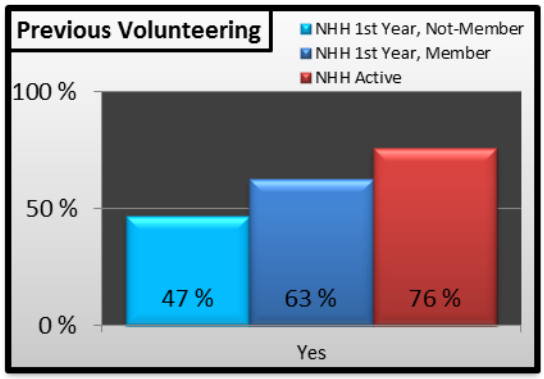


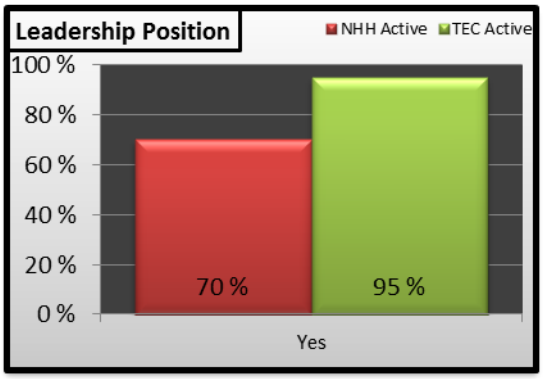


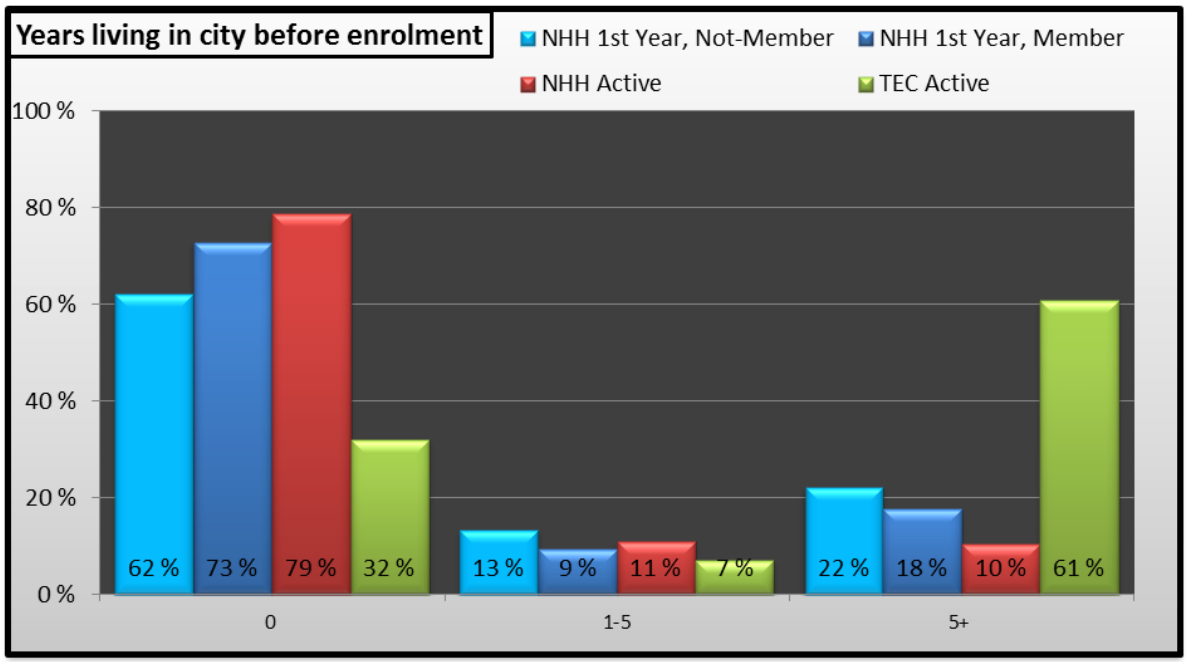


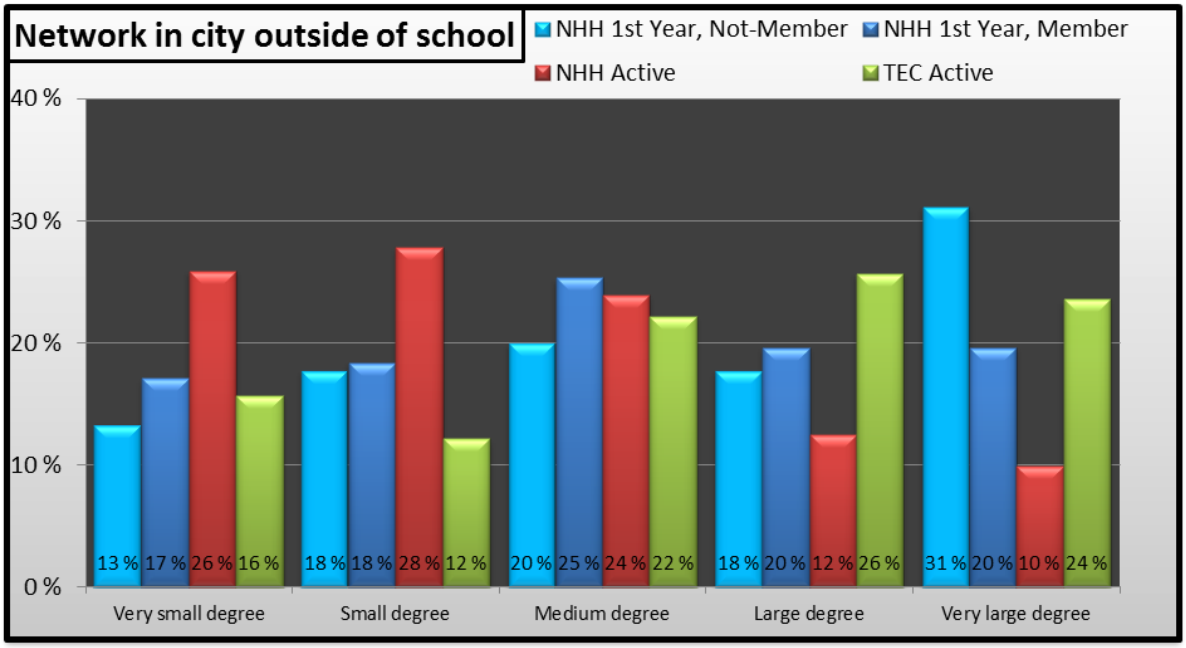


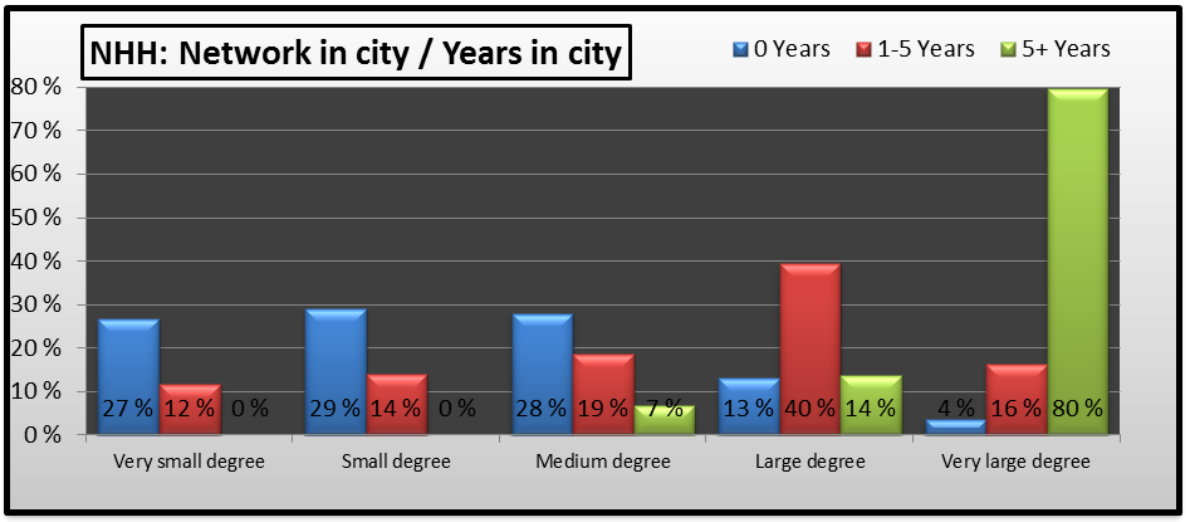

Cohort
NHH 1st Year
NHH Active
TEC Active
50 %
40 %
30 %
20 %
10 %
0 %
100 %
9 %
9 %
17 %
27 %
20 %
39 %
16 %
20 %
17 %
5 %
20 %
1st
2nd
3rd
4th
5th
Alumni

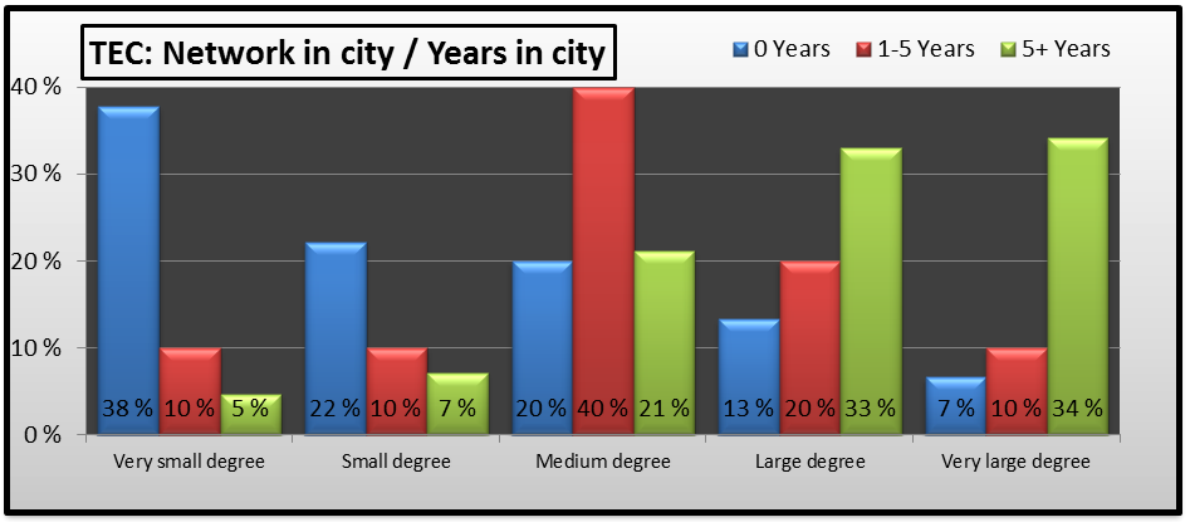

Previous Volunteering
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
100 %
50 %
0 %
47 %
63 %
76 %
Yes

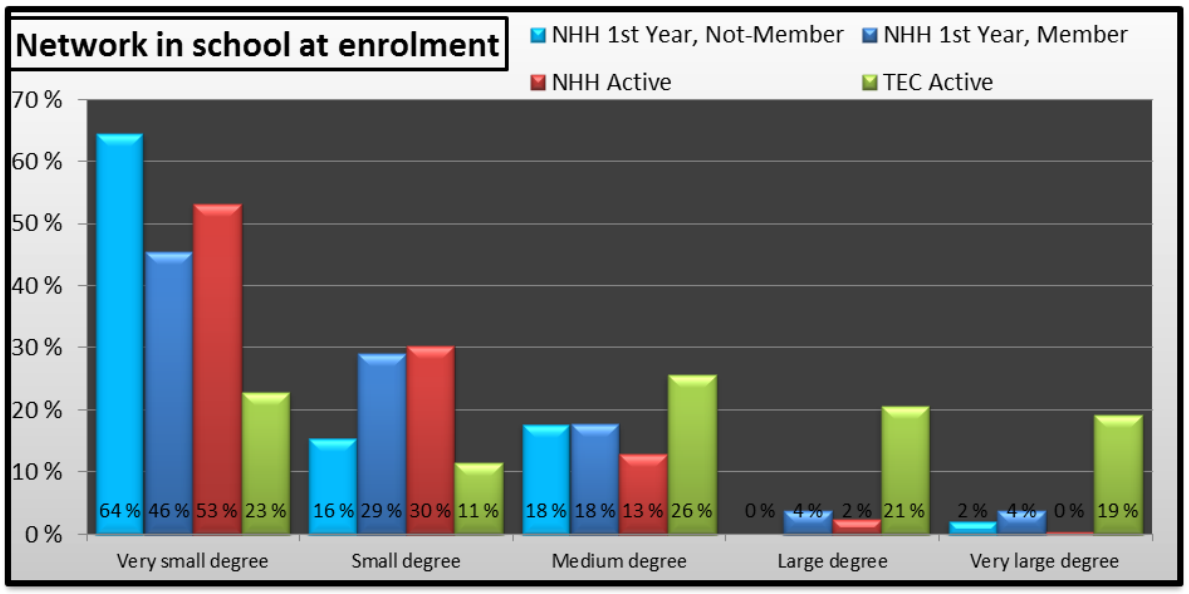

Leadership Position
NHH Active
TEC Active
100 %
80 %
60 %
40 %
20 %
0 %
70 %
95 %
Yes

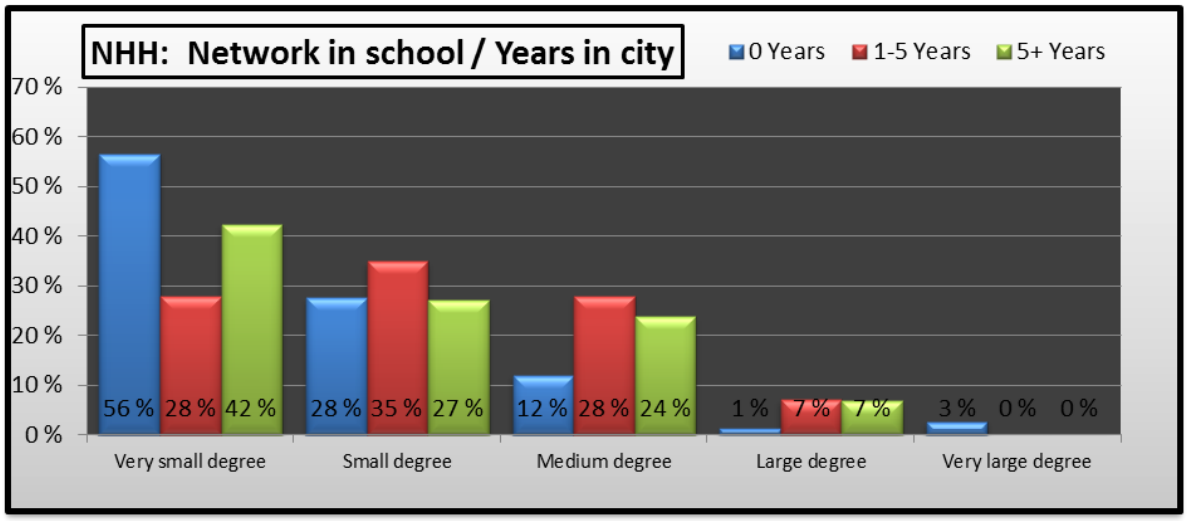

Years living in city before enrolment
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
TEC Active
100 %
80 %
60 %
40 %
20 %
0 %
62 %
73 %
79 %
32 %
13 %
9 %
11 %
7 %
22 %
18 %
10 %
61 %
0
1-5
5+

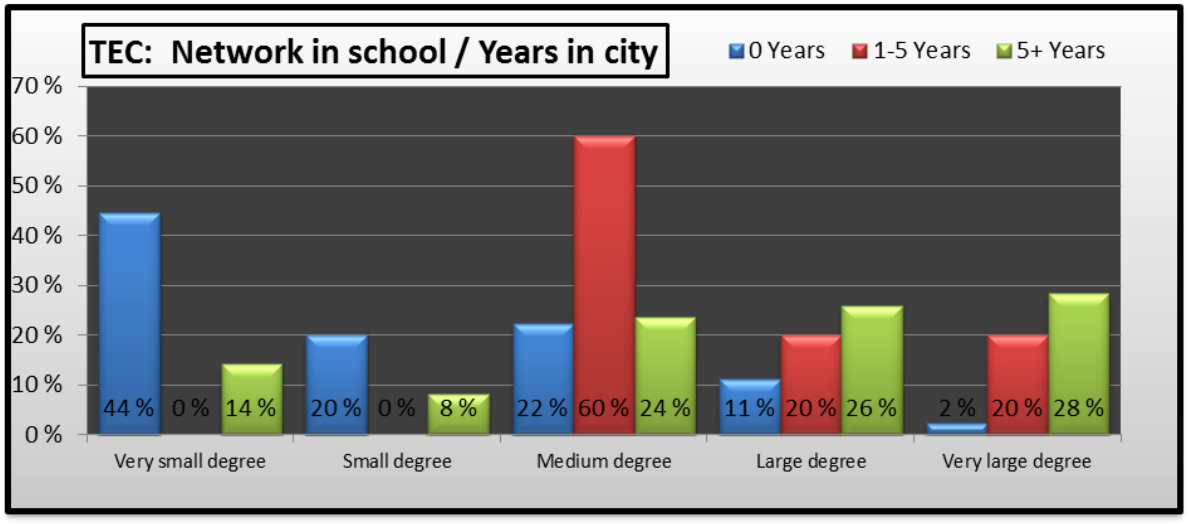

Network in city outside of school
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
TEC Active
40 %
30 %
20 %
10 %
0 %
13 % 17 % 26 % 16 %
18 % 18 % 28 % 12 %
20 % 25 % 24 % 22 %
18 % 20 % 12 % 26 %
31 % 20 % 10 % 24 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree

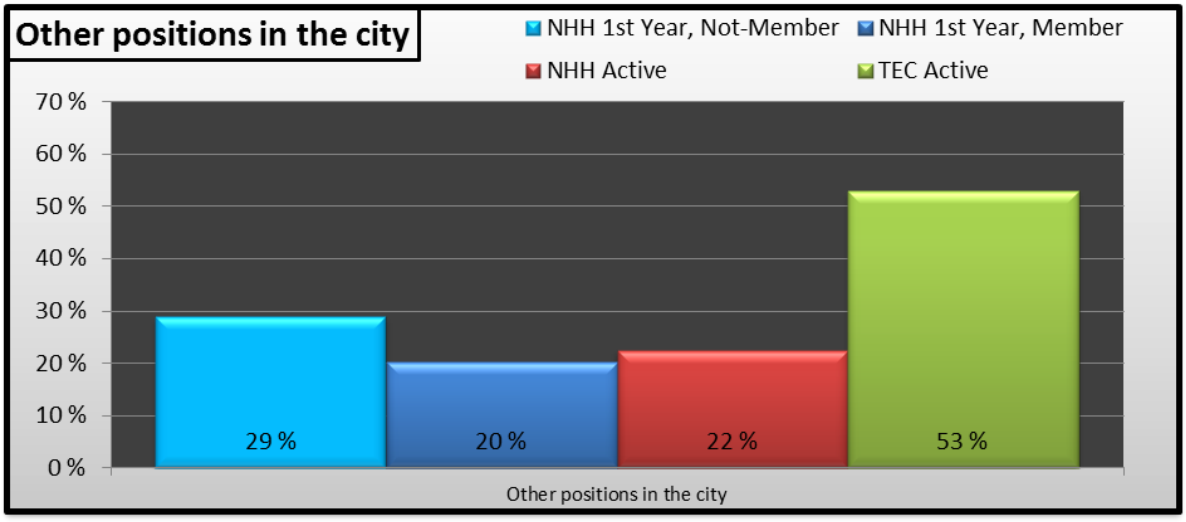

NHH: Network in city / Years in city
0 Years
1-5 Years
5+ Years
80 %
70 %
60 %
50 %
40 %
30 %
20 %
10 %
0 %
27 % 12 % 0 %
29 % 14 % 0 %
28 % 19 % 7 %
13 % 40 % 14 %
4 % 16 % 80 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree

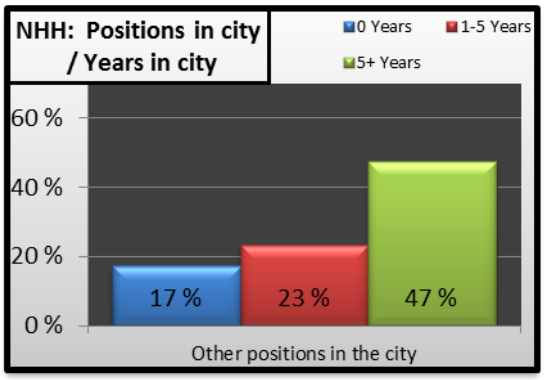

TEC: Network in city / Years in city
0 Years
1-5 Years
5+ Years
40 %
30 %
20 %
10 %
0 %
38 % 10 % 5 %
22 % 10 % 7 %
20 % 40 % 21 %
13 % 20 % 33 %
7 % 10 % 34 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree

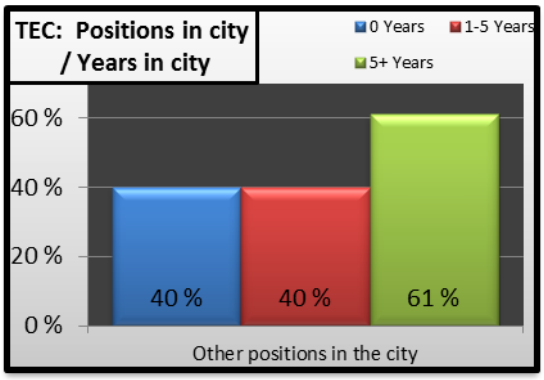

Network in school at enrolment
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
TEC Active
70 %
60 %
50 %
40 %
30 %
20 %
10 %
0 %
64 % 46 % 53 % 23 %
16 % 29 % 30 % 11 %
18 % 18 % 13 % 26 %
0 % 4 % 2 % 21 %
2 % 4 % 0 % 19 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree

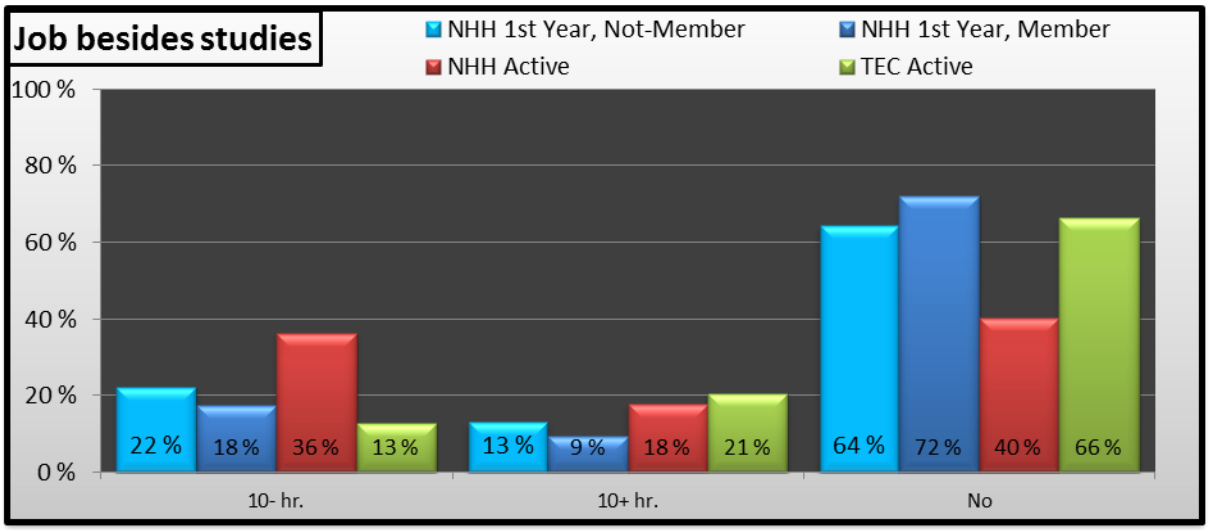

NHH: Network in school / Years in city
0 Years
1-5 Years
5+ Years
70 %
60 %
50 %
40 %
30 %
20 %
10 %
0 %
56 % 28 % 42 %
28 % 35 % 27 %
12 % 28 % 24 %
1 % 7 % 7 %
3 % 0 % 0 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree


TEC: Network in school / Years in city
0 Years
1-5 Years
5+ Years
70 %
60 %
50 %
40 %
30 %
20 %
10 %
0 %
44 % 0 % 14 %
20 % 0 % 8 %
22 % 60 % 24 %
11 % 20 % 26 %
2 % 20 % 28 %
Very small degree
Small degree
Medium degree
Large degree
Very large degree


Other positions in the city
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
TEC Active
70 %
60 %
50 %
40 %
30 %
20 %
10 %
0 %
29 %
20 %
22 %
53 %
Other positions in the city


NHH: Positions in city / Years in city
0 Years
1-5 Years
5+ Years
60 %
40 %
20 %
0 %
17 %
23 %
47 %
Other positions in the city


TEC: Positions in city / Years in city
0 Years
1-5 Years
5+ Years
60 %
40 %
20 %
0 %
40 %
40 %
61 %
Other positions in the city


Job besides studies
NHH 1st Year, Not-Member
NHH 1st Year, Member
NHH Active
TEC Active
100 %
80 %
60 %
40 %
20 %
0 %
22 %
18 %
36 %
13 %
13 %
9 %
18 %
21 %
64 %
72 %
40 %
66 %
10- hr.
10+ hr.
No

Group Memberships at NHH

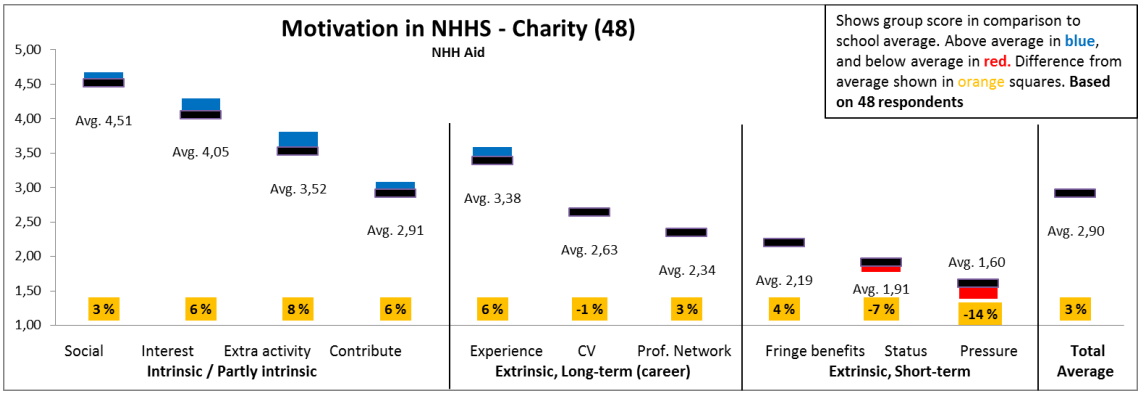
A list of the different student groups at NHH, showing what groups the different categories are made up of. The list also shows respondents for each group, and how many double memberships there are within each category. Groups with less than 5 respondents are not included. More information can be found in chapter 4.1.1.

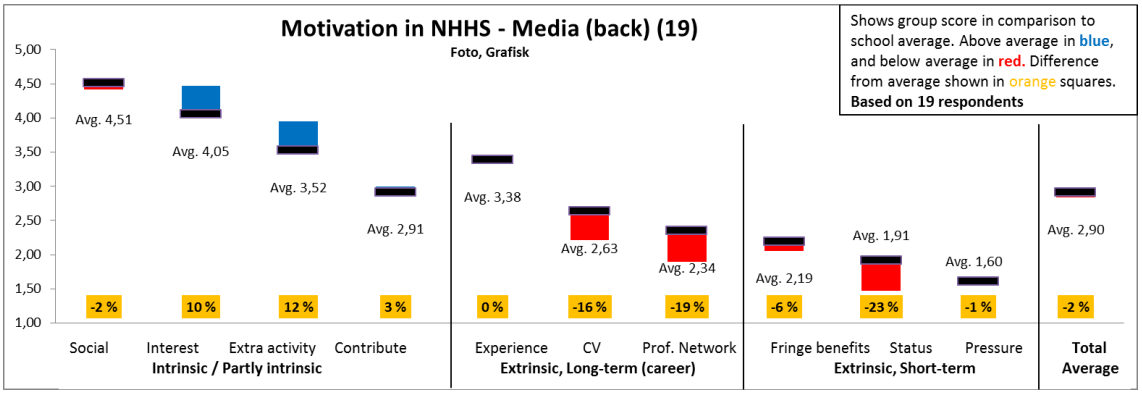
NHH - Group Membership			
Group Membership	Category	Respondents	Double memberships within category
Aisec	Business	12	
Markedsgruppen	Business	10	
NHHS Consulting	Business	6	
Næringslivsutvalget	Business	14	-
NHH Aid	Charity	48	-
Faglige grupper*	Culture	74	-
Kjernestyret	Management/Adm	27	
Representantskapet	Management/Adm	18	10
Foto	Media (back)	12	
Grafisk	Media (back)	7	-
K7 Bulletin	Media (front)	16	
K7 Minutter	Media (front)	6	1
Kjellergrupper*	Music/Dance	57	-
Fagutvalget	Politics	14	
Global Economic Perspective (GEP)	Politics	9	
Studentpolitisk Utvalg	Politics	17	5
Bergen Challenge	Social / Events	52	
Klubb og Kulturutvalget	Social / Events	30	
NHH-Symposiet	Social / Events	62	
Profileringsutvalget	Social / Events	14	
UKEN	Social / Events	173	128
NHHI	Sport	35	
Sport groups*	Sport	159	
Stafettkomiteen	Sport	28	39
Regnskapsgruppen	Technical	14	
Teknisk Gruppe	Technical	15	2
Members / Group Memberships	**359**	**929**	

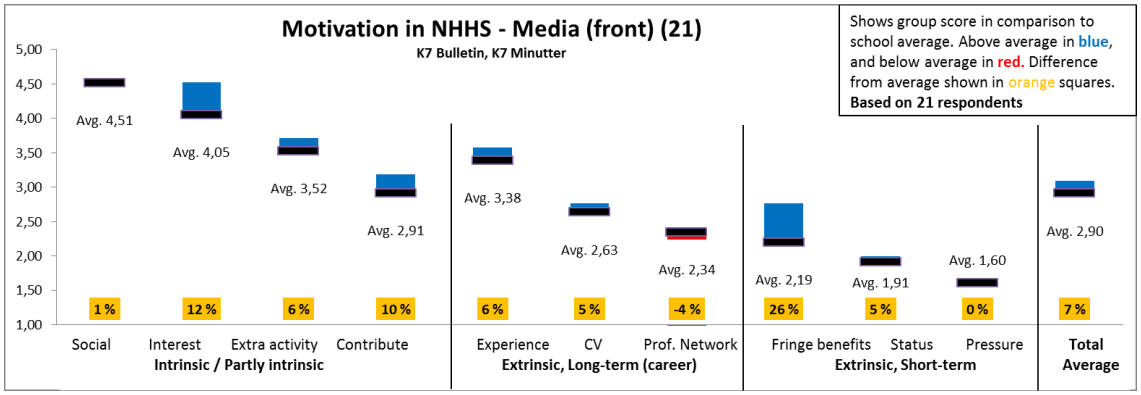
*Interest-groups (not sub-committees), meaning they have a weaker connection to the student union. They also have an independent economy and internal elections.

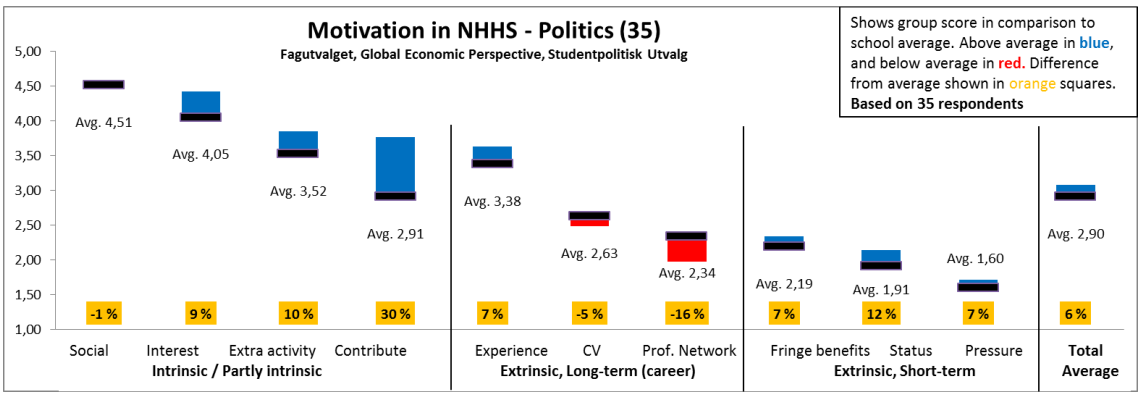
Group Membership and Motivational Factors – NHH

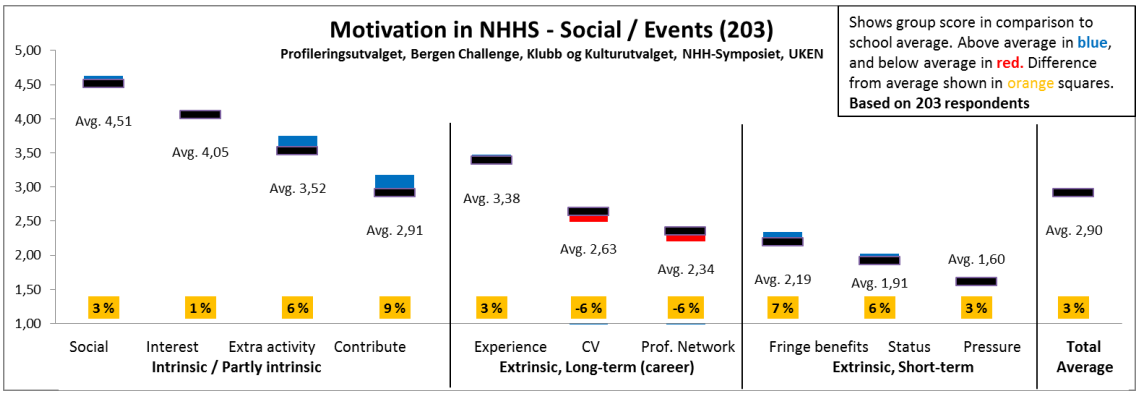
These graphs show the motivational scores for each group and category, and their difference from the average at NHH. The two missing categories are found in chapter 4.2.2.

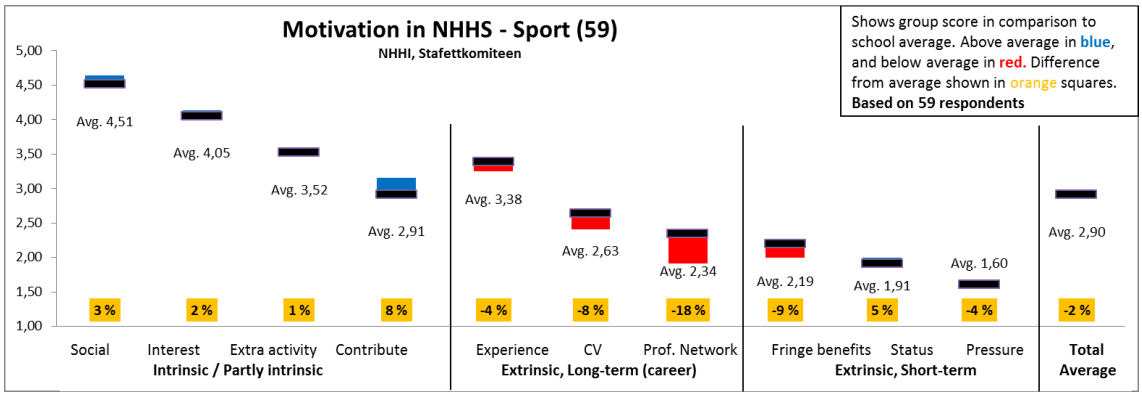


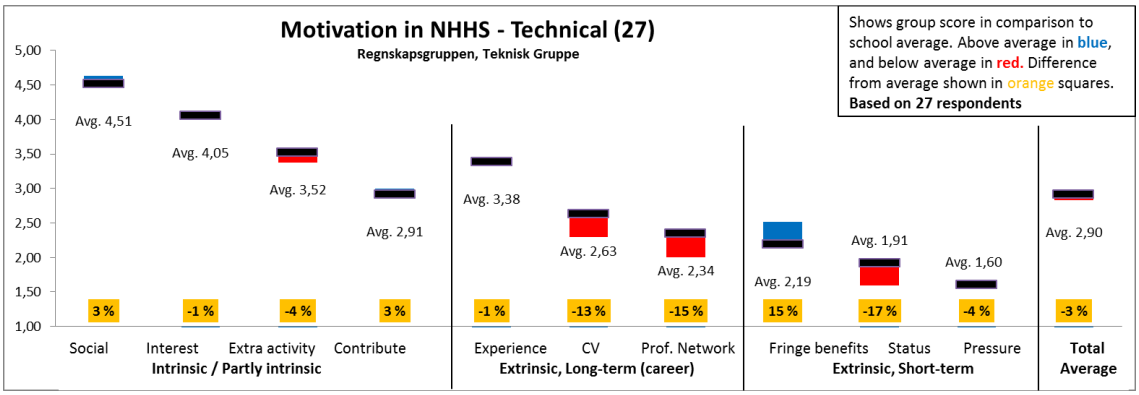


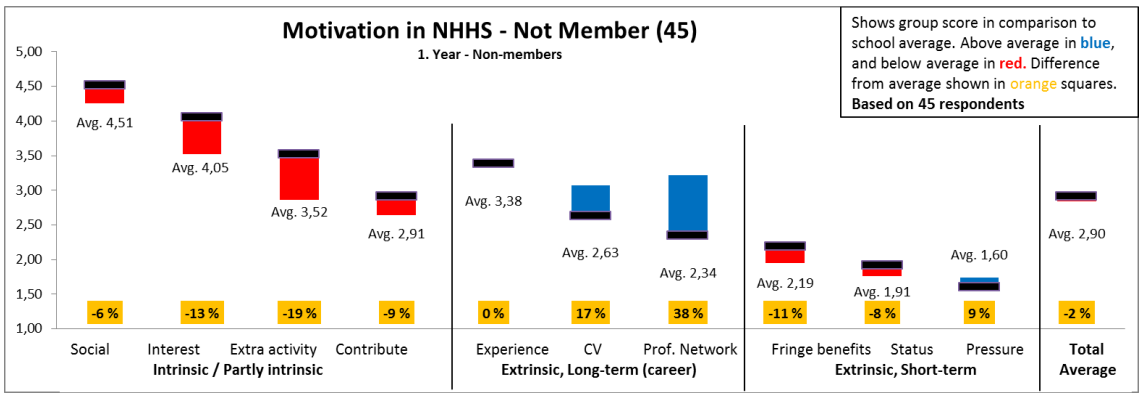





Motivation in NHHS - Social / Events (203)
Profileringsutvalget, Bergen Challenge, Klubb og Kulturutvalget, NHH-Symposiet, UKEN
Shows group score in comparison to school average. Above average in blue, and below average in red. Difference from average shown in orange squares.
Based on 203 respondents
5,00
4,50
4,00
3,50
3,00
2,50
2,00
1,50
1,00
Avg. 4,51
Avg. 4,05
Avg. 3,52
Avg. 2,91
Avg. 3,38
Avg. 2,63
Avg. 2,34
Avg. 2,19
Avg. 1,91
Avg. 1,60
Avg. 2,90
3 %
1 %
6 %
9 %
3 %
-6 %
-6 %
7 %
6 %
3 %
3 %
Social
Interest
Extra activity
Contribute
Intrinsic / Partly intrinsic
Experience
CV
Prof. Network
Extrinsic, Long-term (career)
Fringe benefits
Status
Pressure
Extrinsic, Short-term
Total Average


Motivation in NHHS - Sport (59)
NHHI, Stafettkomiteen
Shows group score in comparison to school average. Above average in blue, and below average in red. Difference from average shown in orange squares.
Based on 59 respondents
5,00
4,50
4,00
3,50
3,00
2,50
2,00
1,50
1,00
Avg. 4,51
Avg. 4,05
Avg. 3,52
Avg. 2,91
Avg. 3,38
Avg. 2,63
Avg. 2,34
Avg. 2,19
Avg. 1,91
Avg. 1,60
Avg. 2,90
3 %
2 %
1 %
8 %
-4 %
-8 %
-18 %
-9 %
5 %
-4 %
-2 %
Social
Interest
Extra activity
Contribute
Intrinsic / Partly intrinsic
Experience
CV
Prof. Network
Extrinsic, Long-term (career)
Fringe benefits
Status
Pressure
Extrinsic, Short-term
Total Average


Motivation in NHHS - Technical (27)
Regnskapsgruppen, Teknisk Gruppe
Shows group score in comparison to school average. Above average in blue, and below average in red. Difference from average shown in orange squares.
Based on 27 respondents
5,00
4,50
4,00
3,50
3,00
2,50
2,00
1,50
1,00
Avg. 4,51
Avg. 4,05
Avg. 3,52
Avg. 2,91
Avg. 3,38
Avg. 2,63
Avg. 2,34
Avg. 2,19
Avg. 1,91
Avg. 1,60
Avg. 2,90
3 %
-1 %
-4 %
3 %
-1 %
-13 %
-15 %
15 %
-17 %
-4 %
-3 %
Social
Interest
Extra activity
Contribute
Intrinsic / Partly intrinsic
Experience
CV
Prof. Network
Extrinsic, Long-term (career)
Fringe benefits
Status
Pressure
Extrinsic, Short-term
Total Average


Motivation in NHHS - Not Member (45)
1. Year - Non-members
Shows group score in comparison to school average. Above average in blue, and below average in red. Difference from average shown in orange squares.
Based on 45 respondents
5,00
4,50
4,00
3,50
3,00
2,50
2,00
1,50
1,00
Avg. 4,51
Avg. 4,05
Avg. 3,52
Avg. 2,91
Avg. 3,38
Avg. 2,63
Avg. 2,34
Avg. 2,19
Avg. 1,91
Avg. 1,60
Avg. 2,90
-6 %
-13 %
-19 %
-9 %
0 %
17 %
38 %
-11 %
-8 %
9 %
-2 %
Social
Interest
Extra activity
Contribute
Intrinsic / Partly intrinsic
Experience
CV
Prof. Network
Extrinsic, Long-term (career)
Fringe benefits
Status
Pressure
Extrinsic, Short-term
Total Average

Group Membership and Motivational Factors – TEC

These tables show the motivational scores for each group and category, and their difference from the average of the TEC set.

MOTIVATION - TEC													
Group	N	N %	Social	Interests	Extra Act.	Community	Experience	CV	Network	Fringe B.	Status	Pressure	Group avg.
Business	18	13 %	4,17	4,22	3,41	4,11	4,56	3,61	3,39	2,61	2,67	2,00	3,47
Charity	38	27 %	3,79	4,47	3,53	4,50	4,16	3,35	3,42	1,94	2,31	1,56	3,30
Management/Adm	22	16 %	4,18	4,41	3,81	4,41	4,27	3,62	3,45	2,45	2,60	1,84	3,50
Media	10	7 %	4,00	4,30	4,00	4,70	4,60	3,60	3,40	2,50	2,60	2,11	3,58
Music / Dance	11	8 %	3,64	4,64	3,45	4,09	4,09	3,73	3,45	2,60	2,55	1,80	3,40
Politics	17	12 %	4,18	4,41	3,65	4,53	3,71	3,13	3,13	2,06	2,63	1,63	3,30
Social / Events	72	51 %	4,06	4,40	3,56	4,18	4,28	3,57	3,44	2,45	2,46	1,69	3,41
Sport	30	21 %	4,00	4,27	3,17	4,20	4,27	3,55	3,38	2,66	2,55	1,63	3,37
Technical	8	6 %	4,00	4,50	3,86	4,25	4,13	3,13	3,63	2,75	2,38	1,83	3,44
Religious	17	12 %	3,88	4,29	3,65	4,12	4,18	3,41	2,76	2,06	2,76	1,93	3,31
Career	90	64 %	3,83	4,41	3,51	4,10	4,39	3,64	3,42	2,41	2,44	1,71	3,39
Region/City	18	13 %	3,50	4,17	3,56	4,44	4,06	3,41	3,65	2,59	2,67	1,86	3,39
Culture	26	19 %	3,69	4,31	3,60	4,15	4,08	3,31	3,23	2,48	2,50	1,91	3,33
Factor Average			3,85	4,39	3,55	4,13	4,29	3,63	3,47	2,38	2,46	1,75	**3,39**

			Diversion from Set-Average										
Group	N	N %	Social	Interests	Extra Act.	Community	Experience	CV	Network	Fringe B.	Status	Pressure	Group avg.
Business	18	13 %	8 %	-4 %	-4 %	0 %	6 %	0 %	-2 %	10 %	8 %	14 %	3 %
Charity	38	27 %	-2 %	2 %	-1 %	9 %	-3 %	-8 %	-2 %	-18 %	-6 %	-11 %	-3 %
Management/Adm	22	16 %	9 %	1 %	7 %	7 %	0 %	0 %	-1 %	3 %	6 %	5 %	3 %
Media	10	7 %	4 %	-2 %	13 %	14 %	7 %	-1 %	-2 %	5 %	6 %	21 %	6 %
Music / Dance	11	8 %	-6 %	6 %	-3 %	-1 %	-5 %	3 %	0 %	9 %	3 %	3 %	0 %
Politics	17	12 %	8 %	1 %	3 %	10 %	-14 %	-14 %	-10 %	-13 %	7 %	-7 %	-3 %
Social / Events	72	51 %	5 %	0 %	0 %	1 %	0 %	-2 %	-1 %	3 %	0 %	-4 %	1 %
Sport	30	21 %	4 %	-3 %	-11 %	2 %	-1 %	-2 %	-3 %	12 %	4 %	-7 %	-1 %
Technical	8	6 %	4 %	3 %	9 %	3 %	-4 %	-14 %	4 %	16 %	-4 %	5 %	2 %
Religious	17	12 %	1 %	-2 %	3 %	0 %	-3 %	-6 %	-20 %	-13 %	12 %	11 %	-2 %
Career	90	64 %	0 %	1 %	-1 %	-1 %	2 %	0 %	-1 %	1 %	-1 %	-2 %	0 %
Region/City	18	13 %	-9 %	-5 %	0 %	8 %	-6 %	-6 %	5 %	9 %	8 %	6 %	0 %
Culture	26	19 %	-4 %	-2 %	1 %	1 %	-5 %	-9 %	-7 %	4 %	1 %	9 %	-2 %

Motivation, Hindrance, and Satisfaction – Descriptive Analysis tables

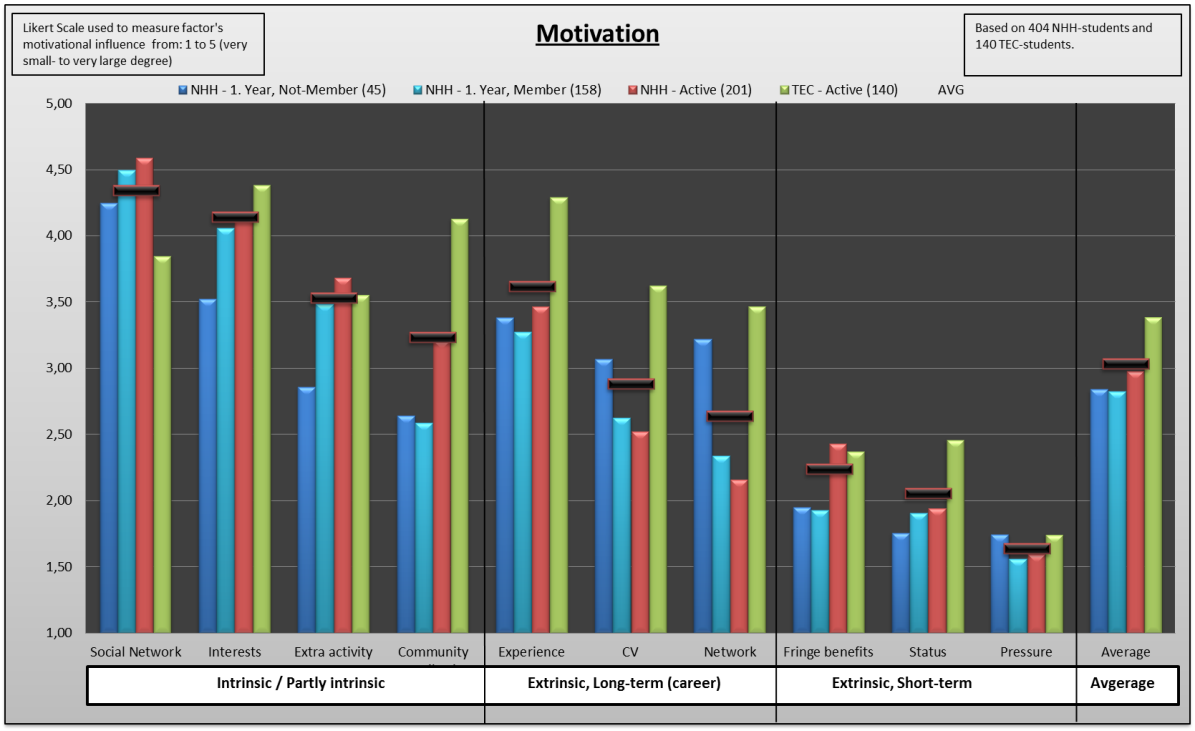
These tables show descriptive data for each measured factor divided by response set. Data included is number of respondents, mean, standard deviation, range, skewness and kurtosis. Definitions of these terms can be found in chapter 3.3.2.

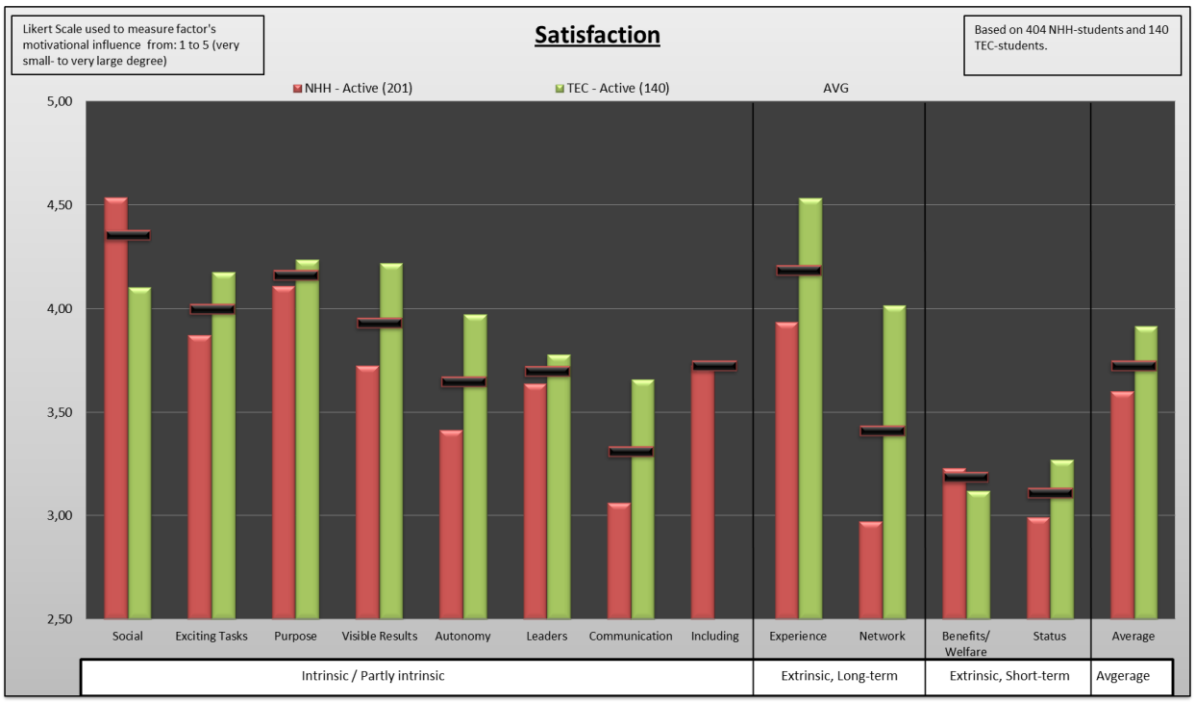
	NHH - 1. Year, Not-Member (45)						NHH - 1. Year, Member (158)					
Category	N	Mean	St.Dev	Range	Skewness	Kurtosis	N	Mean	St.Dev	Range	Skewness	Kurtosis
Motivation												
M-Social	44	4,25	0,72	2	-0,42	-0,94	157	4,50	0,65	2	-0,92	-0,23
M-Interests	44	3,52	0,95	4	-0,24	-0,05	158	4,06	0,76	3	-0,54	0,08
M-Extra activity	42	2,86	1,30	4	-0,07	-1,11	158	3,49	1,18	4	-0,55	-0,55
M-Community	42	2,64	1,12	4	0,33	-0,33	153	2,59	1,09	4	0,22	-0,67
M-Experience	42	3,38	1,06	4	-0,32	-0,31	158	3,27	1,06	4	-0,27	-0,40
M-CV	44	3,07	1,15	4	-0,04	-0,71	155	2,63	1,10	4	0,22	-0,47
M-Network	41	3,22	1,11	4	-0,23	-0,47	154	2,34	1,13	4	0,45	-0,62
M-Fringe benefits	42	1,95	1,06	4	1,01	0,42	153	1,93	1,00	4	0,70	-0,53
M-Status	41	1,76	0,92	3	0,93	-0,17	151	1,91	1,00	4	1,05	0,63
M-Pressure	39	1,74	0,94	4	1,36	2,16	143	1,56	0,90	4	1,58	1,75
HINDRANCE												
H-Studies	45	3,49	1,04	4	-0,48	-0,06	158	3,49	0,94	4	-0,47	0,10
H-Family/Friends	44	2,09	1,31	4	1,06	0,05	152	1,93	1,00	3	0,80	-0,47
H-Job	42	2,14	1,54	4	0,84	-0,97	138	1,91	1,31	4	1,12	-0,24
H-Other positions	42	2,10	1,48	4	0,97	-0,59	142	1,63	1,10	4	1,61	1,44
H-Time	45	3,11	1,25	4	0,08	-1,01	153	2,71	1,10	4	-0,03	-0,79

	NHH - Active (201)						TEC - Active (140)					
Category	N	Mean	St.Dev	Range	Skewness	Kurtosis	N	Mean	St.Dev	Range	Skewness	Kurtosis
Motivation												
M-Social	201	4,59	0,59	2	-1,13	0,28	140	3,85	0,99	3	-0,28	-1,07
M-Interests	201	4,16	0,74	3	-0,50	-0,31	140	4,39	0,75	3	-0,98	0,23
M-Extra activity	201	3,69	1,13	4	-0,71	-0,14	139	3,55	1,25	4	-0,49	-0,80
M-Community	201	3,21	1,09	4	-0,20	-0,47	140	4,13	1,01	4	-0,99	0,21
M-Experience	201	3,47	1,04	4	-0,47	-0,27	140	4,29	0,84	4	-1,27	1,70
M-CV	201	2,53	1,04	4	0,34	-0,35	139	3,63	1,12	4	-0,34	-0,93
M-Network	201	2,17	1,04	4	0,60	-0,46	138	3,47	1,16	4	-0,43	-0,59
M-Fringe benefits	201	2,44	1,07	4	0,35	-0,49	135	2,38	1,18	4	0,56	-0,52
M-Status	201	1,95	0,98	4	0,75	-0,34	136	2,46	1,09	4	0,43	-0,43
M-Pressure	199	1,60	0,83	3	1,34	1,15	127	1,75	0,93	4	1,32	1,29
HINDRANCE												
H-Studies	196	3,22	1,09	4	-0,18	-0,55	136	3,35	1,26	4	-0,22	-1,01
H-Family/Friends	195	1,82	0,91	4	0,95	0,25	126	2,38	1,07	4	0,49	-0,30
H-Job	196	1,89	1,12	4	1,11	0,33	122	2,14	1,23	4	0,65	-0,93
H-Other positions	196	1,45	0,87	4	2,09	4,12	129	2,59	1,20	4	0,15	-1,03
H-Time	194	2,20	1,04	4	0,52	-0,41	135	3,28	1,25	4	-0,25	-0,96
Satisfaction												
S-Social	190	4,54	0,64	2	-1,06	0,02	135	4,10	0,87	3	-0,61	-0,51
S-Exiting tasks	190	3,87	0,94	4	-0,56	-0,18	137	4,18	0,85	3	-0,71	-0,32
S-Group purpose	190	4,11	0,81	3	-0,63	-0,10	136	4,24	0,87	4	-1,09	0,94
S-Visible results	189	3,72	1,04	4	-0,62	-0,32	136	4,22	0,99	4	-1,40	1,78
S-Autonomi	190	3,42	0,99	4	-0,08	-0,65	136	3,97	0,93	4	-0,51	-0,41
S-Treatment by leade	189	3,64	1,01	4	-0,61	0,09	135	3,78	1,17	4	-0,66	-0,37
S-Communication	190	3,06	0,90	4	-0,17	-0,26	135	3,66	1,09	4	-0,42	-0,58
S-Including union	190	3,73	1,06	4	-0,61	-0,16						
S-Experience	190	3,94	0,90	4	-0,67	0,20	135	4,53	0,73	3	-1,57	2,01
S-Network	188	2,97	1,14	4	-0,01	-0,76	136	4,01	1,04	4	-0,71	-0,39
S-Fringe benefits	189	3,23	0,99	4	-0,25	-0,22	131	3,12	1,25	4	-0,14	-1,03
S-Status	189	2,99	1,05	4	-0,10	-0,52	136	3,27	1,23	4	-0,22	-0,93

Motivation and Satisfaction – Overview graphs

These graphs show an overview of all factors for motivation and satisfaction. The equivalent for hindrance can be found in chapter 4.3. For a closer view of each factor-category for the motivational factors see chapter 4.2.1, 4.2.2 and 4.2.3. Likert-scale scores is show on the y-axis and the different factors are listed on the x-axis. The sets, with color coding, are listed with respondents in brackets





Motivation and Hindrance – Regressions with Control Variables

These tables show the regression analyses performed for motivation- and hindrance factors as response variables and control variables as predictor variables. A detailed explanation of the tables can be found in the introduction to chapter 4.2. The regression equations are made by adding the constant and the predictor variables multiplied by their coefficient, as demonstrated in the first table, and will therefore not be shown in the following tables. The p-value definitions are also the same among all tables, and will not be repeated.

Response Variable: Motivation - Social Network / Friendship						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-NM	42	10,42 %	Constant	3,64	0,29	
			A: Network at school	0,48	0,22	*
M-social (NHH, 1st-NM) = 3,64 + 0,48 * "A: Network at school"						
NHH, 1st-M	155	6,73 %	Constant	5,03	0,19	
			C: Gender (male)	-0,34	0,10	**
M-social (NHH, 1st-M) = 5,03 - 0,34 * "C: Gender (male)"						
TEC - Active	138	3,59 %	Constant	3,24	0,23	
			C: Years in city before	0,20	0,09	*
M-social (TEC-Active) = 3,24 + 0,20 * "C: Years in city before"						
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001						

Response Variable: Motivation - Interest for the Group Activity						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-M	156	2,63 %	Constant	3,90	0,10	
			C: Previous positions	0,26	0,13	*
NHH - Active	188	3,14 %	Constant	3,91	0,11	
			C: Previous positions	0,31	0,13	*
TEC - Active	139	3,54 %	Constant	4,83	0,20	
			C: Gender (male)	-0,29	0,13	*

Response Variable: Motivation - Extra Activity Beside School							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	40	32,20 %	Constant	4,14	0,46		
			A: Network in city	-0,48	0,21	*	22,15 %
			C: Other org. In city	-1,02	0,43	*	10,05 %
NHH, 1st-M	156	5,63 %	Constant	4,28	0,28		
			C: Job	-0,63	0,21	**	
NHH - Active	188	7,36 %	Constant	4,87	0,35		
			C: Age	-0,29	0,13	*	2,26 %
			A: Network in city	-0,31	0,10	**	5,11 %

Response Variable: Motivation - Contribution to Society							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	40	23,91 %	Constant	2,96	0,52		
			A: Network at school	0,75	0,34	*	3,98 %
			A: Network in city	-0,58	0,19	**	19,93 %
NHH, 1st-M	151	4,95 %	Constant	3,36	0,29		
			C: Gender (male)	-0,49	0,18	**	
NHH - Active	188	7,02 %	Constant	3,63	0,18		
			A: Network in city	-0,29	0,09	**	3,93 %
			C: Other org. In city	0,46	0,18	*	3,09 %
TEC - Active	138	8,49 %	Constant	4,40	0,28		
			C: Gender (male)	-0,35	0,17	*	2,61 %
			C: Other org. In city	0,49	0,17	**	5,88 %

Response Variable: Motivation - Experience						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH - Active	188	2,21 %	Constant	4,05	0,29	
			C: Age	-0,26	0,13	*

Response Variable: Motivation - CV							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	42	41,12 %	Constant	3,72	0,69		
			C: Gender (male)	-1,08	0,28	***	20,95 %
			C: Age	0,67	0,25	*	4,58 %
			C: Years in city before	-0,44	0,17	*	7,53 %
			A: Network at school	0,68	0,30	*	8,06 %
NHH - Active	188	4,98 %	Constant	3,08	0,19		
			C: Study-Year	-0,15	0,05	**	

Response Variable: Motivation - Professional Network						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-NM	39	11,09 %	Constant	4,36	0,54	
			C: Gender (male)	-0,73	0,33	*
NHH, 1st-M	152	3,08 %	Constant	2,86	0,26	
			C: Age	-0,38	0,17	*
NHH - Active	188	6,05 %	Constant	3,11	0,28	
			C: Age	-0,42	0,12	**

Response Variable: Motivation - Fringe Benefits						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-M	151	2,59 %	Constant	1,63	0,17	
			C: Years in city before	0,21	0,10	*

Response Variable: Motivation - Status in School						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-NM	39	14,32 %	Constant	2,67	0,38	
			C: Age	-0,64	0,25	*
NHH, 1st-M	149	2,91 %	Constant	2,39	0,25	
			C: Job	-0,38	0,18	*

Response Variable: Motivation - Pressure							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-M	142	7,37 %	Constant	2,11	0,18		
			C: Years in city before	-0,25	0,09	**	4,63 %
			C: Previous positions	-0,30	0,15	*	2,73 %
NHH - Active	186	2,43 %	Constant	1,92	0,16		
			C: Study-Year	-0,08	0,04	*	

Response Variable: Hindrance - Studies							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	183	8,87 %	Constant	4,26	0,26		
			C: Study-Year	-0,17	0,05	**	5,85 %
			C: Years in city before	-0,28	0,12	*	3,02 %
TEC - Active	134	5,44 %	Constant	3,52	0,13		
			C: Job	-0,35	0,13	**	

Response Variable: Hindrance - Family and Friends						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH, 1st-NM	42	16,12 %	Constant	0,85	0,49	
			A: Network in city	0,58	0,21	**
NHH, 1st-M	150	3,71 %	Constant	1,58	0,17	
			C: Years in city before	0,25	0,10	*
NHH - Active	182	5,15 %	Constant	1,41	0,15	
			A: Network in city	0,25	0,08	**
TEC - Active	124	8,87 %	Constant	1,46	0,28	
			C: Study-Year	0,32	0,09	**

Response Variable: Hindrance - Job							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	41	84,59 %	Constant	1,19	0,11		
			C: Job	1,91	0,13	***	
NHH, 1st-M	137	52,18 %	Constant	-0,77	0,23		
			C: Job	2,05	0,17	***	
NHH - Active	183	20,51 %	Constant	1,37	0,11		
			C: Job	0,68	0,10	***	
TEC - Active	120	24,41 %	Constant	0,30	0,40		
			C: Gender (male)	0,71	0,20	**	12,29 %
			A: Network in city	0,23	0,12	*	2,78 %
			C: Job	0,46	0,12	***	9,35 %

Response Variable: Hindrance - Other Position							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	41	52,66 %	Constant	0,49	0,44		
			A: Network in city	0,44	0,21	*	29,16 %
			C: Other org. In city	1,32	0,41	**	17,74 %
			C: Job	0,51	0,24	*	5,76 %
NHH, 1st-M	140	17,90 %	Constant	1,40	0,10		
			C: Other org. In city	1,14	0,21	***	
NHH - Active	183	2,87 %	Constant	1,38	0,07		
			C: Other org. In city	0,35	0,15	*	
TEC - Active	127	6,91 %	Constant	1,77	0,29		
			A: Network in city	0,37	0,12	**	

Response Variable: Hindrance - Time							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH, 1st-NM	43	42,35 %	Constant	1,11	0,40		
			C: Years in city before	0,58	0,21	**	34,24 %
			A: Network in city	0,48	0,20	*	8,11 %
NHH, 1st-M	151	4,62 %	Constant	2,28	0,19		
			C: Years in city before	0,30	0,11	**	
NHH - Active	181	7,16 %	Constant	2,15	0,36		
			C: Gender (male)	0,33	0,15	*	
			C: Age	-0,28	0,13	*	
			C: Job	0,26	0,10	*	

Satisfaction – Regressions with Motivation- and Hindrance Factors

These tables show the regression analyses performed for satisfaction factors as response variables and motivation- and hindrance factors as predictor variables. A detailed explanation of the tables can be found in the introduction to chapter 4.2. The regression equations are made by adding the constant and the predictor variables multiplied by their coefficient, as demonstrated in the first table, and will therefore not be shown in the following tables. The p-value definitions are also the same among all tables, and will not be repeated.

Response Variable: Satisfaction - Social Environment							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	16,90 %	Constant	2,71	0,38		
			M-Social	0,29	0,07	***	10,05 %
			M-Community	0,09	0,04	*	3,55 %
			M-Experience	0,13	0,05	*	1,44 %
			M-CV	-0,10	0,05	*	1,86 %
S-social (NHH-Active) = 2,71 + 0,29 * "M-Social" + 0,09 * "M-Community" + 0,13 * "M-Experience" - 0,10 * "M-CV"							
TEC - Active	108	23,53 %	Constant	1,31	0,51		
			M-Social	0,32	0,08	***	14,25 %
			M-Experience	0,27	0,09	**	6,31 %
			H-Studies	0,12	0,06	*	2,97 %
S-social (TEC-Active) =1,31 + 0,32 * "M-Social" + 0,27 * "M-Experience" + 0,12 * "H-Studies"							
- p < 0,1, * p < 0,05, ** p < 0,01, *** p < 0,001							

Response Variable: Satisfaction - Exciting Tasks							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	18,61 %	Constant	1,54	0,42		
			M-Interests	0,24	0,09	**	6,32 %
			M-Community	0,26	0,06	***	9,89 %
			M-Experience	0,15	0,06	*	2,39 %
TEC - Active	108	25,80 %	Constant	0,98	0,54		
			M-Social	0,19	0,07	*	10,53 %
			M-Interests	0,33	0,10	**	9,49 %
			M-Experience	0,24	0,08	**	5,78 %

Response Variable: Satisfaction - Group Purpose							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	17,94 %	Constant	2,13	0,34		
			M-Interests	0,32	0,08	***	10,35 %
			M-Community	0,21	0,05	***	7,59 %
TEC - Active	107	29,60 %	Constant	0,59	0,55		
			M-Interests	0,61	0,10	***	26,94 %
			M-Experience	0,22	0,09	*	3,97 %

Response Variable: Satisfaction - Visible Results							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	183	19,08 %	Constant	1,03	0,47		
			M-Interests	0,32	0,10	**	7,24 %
			M-Community	0,31	0,06	***	9,84 %
			M-CV	0,14	0,07	*	2,00 %
TEC - Active	107	8,67 %	Constant	2,95	0,40		
			M-Network	0,18	0,08	*	4,32 %
			H-Time	0,17	0,08	*	4,35 %

Response Variable: Satisfaction - Autonomy Over Own Tasks							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	12,10 %	Constant	1,49	0,44		
			M-Interests	0,27	0,10	**	5,53 %
			M-Community	0,24	0,06	***	6,58 %
TEC - Active	108	22,73 %	Constant	0,85	0,62		
			M-Interests	0,24	0,11	*	6,04 %
			M-Experience	0,31	0,10	**	7,95 %
			H-Time	0,23	0,07	**	8,73 %

Response Variable: Satisfaction - Treatment by Leaders							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	183	5,10 %	Constant	1,95	0,61		
			M-Social	0,24	0,12	*	2,34 %
			M-Experience	0,16	0,07	*	2,77 %
TEC - Active	106	23,15 %	Constant	1,16	0,50		
			M-Extra activity	0,18	0,08	*	7,74 %
			M-CV	0,26	0,10	**	5,75 %
			M-Pressure	0,26	0,12	*	5,45 %
			H-Family/Friends	0,24	0,10	*	4,21 %

Response Variable: Satisfaction - Communication and Information							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	7,51 %	Constant	1,62	0,65		
			M-Social	0,24	0,11	*	1,88 %
			M-Interests	0,19	0,09	*	2,71 %
			H-Studies	-0,14	0,06	*	2,91 %
TEC - Active	107	22,83 %	Constant	0,30	0,63		
			M-Social	0,25	0,10	*	6,82 %
			M-Experience	0,37	0,11	**	8,80 %
			H-Studies	0,23	0,08	**	7,21 %

Response Variable: Satisfaction - Inclusion							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	29,14 %	Constant	0,61	0,60		
			M-Social	0,31	0,12	*	4,67 %
			M-Community	0,30	0,07	***	11,49 %
			M-Experience	0,21	0,07	**	3,98 %

Response Variable: Satisfaction - Learning and Experience							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	184	25,03 %	Constant	2,39	0,29		
			M-Community	0,23	0,05	***	11,44 %
			M-Experience	0,31	0,06	***	11,54 %
			H-Time	-0,13	0,06	*	2,06 %
TEC - Active	107	37,46 %	Constant	0,95	0,45		
			M-Interests	0,44	0,08	***	21,73 %
			M-Experience	0,37	0,07	***	15,72 %

Response Variable: Satisfaction - Professional Network							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	182	35,54 %	Constant	1,10	0,33		
			M-Community	0,19	0,07	**	7,60 %
			M-Network	0,46	0,07	***	17,04 %
			M-Status	0,27	0,07	***	5,27 %
			H-Family/Friends	-0,18	0,08	*	1,98 %
			H-Job	-0,13	0,07	*	0,80 %
			H-Other positions	0,24	0,09	**	2,85 %
TEC - Active	107	13,00 %	Constant	2,94	0,29		
			M-Network	0,31	0,08	***	

Response Variable: Satisfaction - Fringe Benefits and Welfare							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	183	25,70 %	Constant	0,60	0,67		
			M-Social	0,30	0,11	**	6,37 %
			M-Interests	0,20	0,09	*	1,54 %
			M-CV	-0,21	0,06	**	1,80 %
			M-Fringe benefits	0,38	0,06	***	15,99 %
TEC - Active	105	33,76 %	Constant	-0,12	0,50		
			M-Social	0,31	0,11	**	12,75 %
			M-Extra activity	0,19	0,09	*	7,00 %
			M-Fringe benefits	0,35	0,09	***	10,49 %
			H-Other positions	0,19	0,08	*	3,52 %

Response Variable: Satisfaction - Status							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	183	30,70 %	Constant	1,57	0,27		
			M-Extra activity	0,21	0,06	**	5,39 %
			M-Network	-0,20	0,07	**	0,49 %
			M-Status	0,56	0,07	***	24,82 %
TEC - Active	107	23,65 %	Constant	1,43	0,35		
			M-Extra activity	0,25	0,09	**	13,44 %
			M-Status	0,39	0,10	***	10,21 %

Satisfaction – Regressions with Group Membership

These tables show the regression analyses performed for satisfaction factors as response variables and group membership and leadership position as predictor variables.

Response Variable: Satisfaction - Social Environment						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	186	9,31 %	Constant	4,48	0,09	
			C: Leadership Position	0,24	0,10	*
			Group: Business	-0,41	0,13	**
			Group: Media (front)	-0,42	0,15	**

Response Variable: Satisfaction - Exciting Tasks						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	186	11,89 %	Constant	3,32	0,13	
			C: Leadership Position	0,67	0,14	***
			Group: Music / Dance	0,35	0,17	*

Response Variable: Satisfaction - Group Purpose						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	186	4,95 %	Constant	4,04	0,13	
			C: Leadership Position	0,36	0,13	**
			Group: Social/Events	-0,26	0,13	*

Response Variable: Satisfaction - Visible Results						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	185	13,43 %	Constant	3,11	0,13	
			C: Leadership Position	0,84	0,16	***

Response Variable: Satisfaction - Autonomy Over Own Tasks						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	186	16,70 %	Constant	2,97	0,13	
			C: Leadership Position	0,63	0,15	***
			Group: Management/Adm	0,40	0,18	*
			Group: Music / Dance	-0,48	0,17	**
TEC	135	3,06 %	Constant	4,13	0,11	
			Group: Social/Events	-0,32	0,16	*

Response Variable: Satisfaction - Treatment by Leaders						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	188	2,19 %	Constant	3,71	0,08	
			Group: Music/Dance	-0,38	0,19	*

Response Variable: Satisfaction - Communication and Information						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	**189**	**6,50 %**	Constant	3,20	0,08	
			Group: Media (back)	-0,57	0,24	*
			Group: Culture	-0,39	0,15	**

Response Variable: Satisfaction - Inclusion						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	189	9,31 %	Constant	3,81	0,09	
			Group: Management/Adm	0,40	0,20	*
			Group: Media (front)	-0,82	0,25	**
			Group: Technical	-0,56	0,23	*

Response Variable: Satisfaction - Learning and Experience						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	189	6,82 %	Constant	3,60	0,12	
			Group: Management/Adm	0,38	0,17	*
			Group: Social / Events	0,37	0,14	*

Response Variable: Satisfaction - Professional Network						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	184	5,60 %	Constant	2,75	0,16	
			C: Leadership Position	0,44	0,18	*
			Group: Technical	-0,64	0,25	*
TEC	135	5,06 %	Constant	3,92	0,09	
			Group: Business	0,69	0,26	**

Response Variable: Satisfaction - Fringe Benefits and Welfare						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	188	6,36 %	Constant	3,23	0,08	
			Group: Business	-0,50	0,19	*
			Group: Music/Dance	0,42	0,18	*
TEC	130	3,00 %	Constant	3,20	0,11	
			Group: Religious	-0,70	0,35	*

Response Variable: Satisfaction - Status						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH	188	9,31 %	Constant	2,87	0,09	
			Group: Management/Adm	0,52	0,20	*
			Group: Music/Dance	0,49	0,19	*
			Group: Technical	-0,48	0,23	*

Optimal Organization – Regressions with Control Variables and Group Membership

These tables show the regression analyses performed for optimal organization as response variable and control variables and group membership as predictor variables.

Response Variable: Optimally Organized							
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**	**Contribution**
NHH - Active	176	8,01 %	Constant	2,01	0,21		
			C: Age	0,15	0,08	*	1,68 %
			C: Years in city before	0,27	0,09	**	1,34 %
			A: Network in city	-0,16	0,07	*	2,27 %
			C: Job	-0,15	0,07	*	2,72 %
TEC - Active	135	5,33 %	Constant	1,80	0,19		
			A: Network in city	0,21	0,08	**	

Response Variable: Optimally Organized						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH - Active	188	13,41 %	Constant	2,31	0,05	
			Group: Management/Adm	0,48	0,12	***
			Group: Media (front)	-0,45	0,15	**
			Group: Technical	-0,28	0,14	*

Job Advantages – Regressions with Control Variables and Group Membership

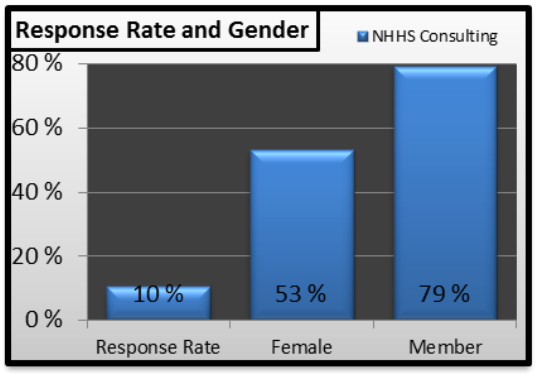
These tables show the regression analyses performed for job advantages as response variable and control variables and group membership as predictor variables.

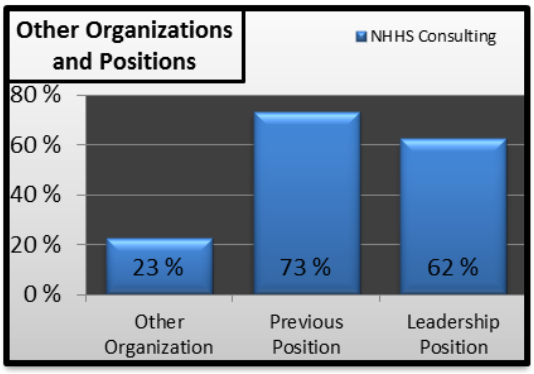
Response Variable: Job Advantage						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH - Active	177	9,98 %	Constant	1,23	0,19	
			C: Study-Year	0,20	0,04	***

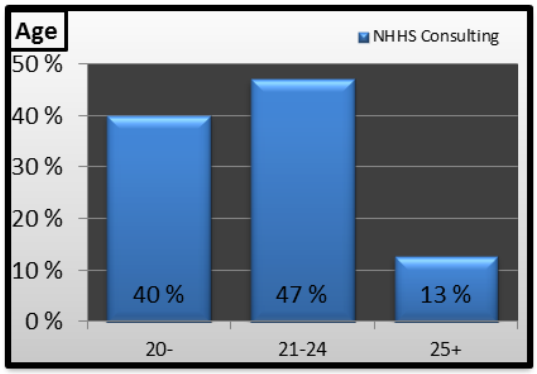
Response Variable: Job Advantage						
Response Set	**N**	**R-sq**	**Predictor Variables**	**Coef**	**SE Coef**	**P-value**
NHH - Active	189	14,34 %	Constant	1,51	0,11	
			Group: Business	0,49	0,19	*
			Group: Management/Adm	0,56	0,19	**
			Group: Politics	0,43	0,20	*
			Group: Sport	0,43	0,14	**

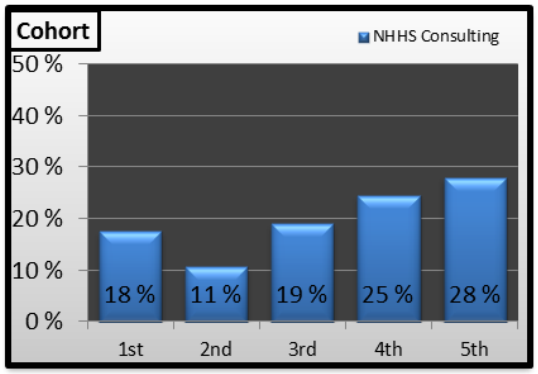
NHHS Consulting Questionnaire – Descriptive Analysis

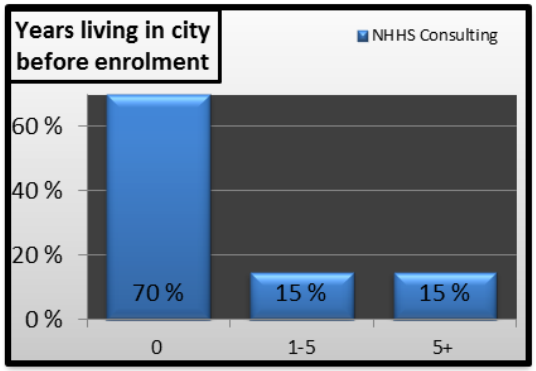
These graphs provide a visual presentation of the descriptive data constituting the NHHS Consulting survey, as seen in chapter 4.6.1

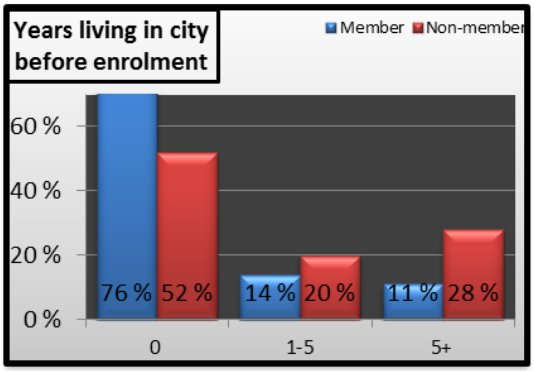


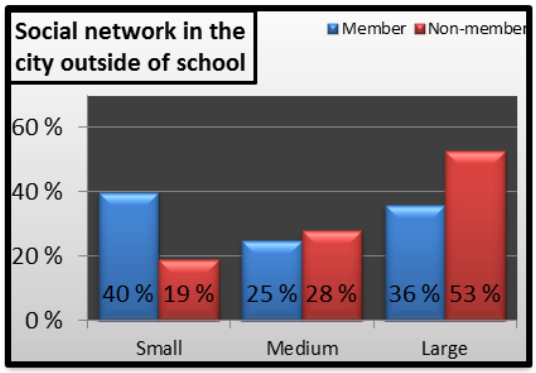












Questionnaire – TEC

(Intro)

Motivation to participate in student organizations at Tec de Monterrey

This investigation is part of a master thesis with EGADE Business School (Tec de Monterrey) and Norwegian School of Economics (NHH). Its purpose is to investigate students' motivation for participation in student organizations, and suggest changes to make it more attractive to participate.

The volunteer work of students at TEC, and their student organizations, can be important for life on campus and society in general. I hope to learn more about the good work done here at TEC. and the results of the master thesis will be shared with the groups who participate, so that your contribution can help improve the student organizations.

The questionnaire is expected to take about 4-5 minutes, and will be anonymous.

Your help is greatly appreciated!

(Control Variables)

- Sex
  - Woman
  - Man

- Age
  - 20 or less
  - 21-24
  - 25-28
  - 28 or more

- Years of higher studies (University)
  - 1. year
  - 2. year
  - 3. year
  - 4. year
  - 5. Year or more

- Place of origin
  - Mexico
  - Central America
  - South America
  - North America
  - Europe
  - Other

- How long did you live in Monterrey before you started studying at TEC?
    - 0 years
    - 1-2 years
    - 3-5 years
    - 5 years or more

- When you began studying at TEC, did you know many people already studying at TEC or that started studying at the same time as you?
    - Very small degree
    - Small degree
    - Medium degree
    - Large degree
    - Very large degree

- Do you have a social network (family and friends) in Monterrey outside of TEC?
    - Very small degree
    - Small degree
    - Medium degree
    - Large degree
    - Very large degree

- Are you a member of volunteer organizations in Monterrey outside of TEC? (Sport, politics, charity etc.)
    - Yes
    - No

- Do you have a job besides your studies?
    - Yes, I work less than 10 hours a week
    - Yes, I work 10 – 20 hours a week
    - Yes, I work 20 – 40 hours a week
    - Yes, I work more than 40 hours a week
    - No

(Participation / Membership)

- Are or have you been member of a student organization
    - Yes
    - No

- Are you paid for your participation / position (if member = yes)
    - Yes
    - No

- Do you have or have you had a leadership position in a student organization? (if member = yes)
    - Yes
    - No

- Do you have or have you had a leadership position in a student organization? (if member = yes)
    - Business
    - Charity
    - Management / Administration
    - Media
    - Music / Dance
    - Politics
    - Religious
    - Social / Events
    - Sport
    - Technical
    - Region / City
    - Culture
    - Other (text entry area)

- Why have you not participated in student organizations (if member = no)
    - I do not have the motivation / need
    - I have not investigated the opportunities
    - I have applied, but was not accepted
    - I do not have time / Have other activities
    - Other (specify) – (text entry area)

(Motivation)

- To what degree do the following factors motivate you to work in a student organization?
    - Social network / Friendship
    - Interest for the group activity
    - Experience
    - To build my CV / Resume
    - Professional network for job applications
    - Fringe benefits (office, equipment, trips etc.)
    - Status in school
    - Pressure from friends and acquaintances
    - To contribute to society
    - To have an activity beside school
    - Other 1 - (text entry area)
    - Other 2 - (text entry area)

- To what degree do the following factors motivate you to not want to work in a student organization?
  - Focus on studies
  - Family and friends
  - I have a paid job
  - I have other activities outside the student organization
  - I do not have enough time
  - Other 1 - (text entry area)
  - Other 2 - (text entry area)

- To what degree are you satisfied with the following factors regarding your participation in a student organization?
  - Social environment
  - Exciting tasks / activities
  - The groups purpose
  - Learning and experience
  - Right to decide on own activities
  - How I am treated by my leaders
  - Communication and flow of information
  - Welfare and fringe benefits
  - Status from being part of a student organization
  - Visible results of my work
  - Increased professional network
  - Other 1 - (text entry area)
  - Other 2 - (text entry area)

- Do you feel that your participation in student organizations give you an advantage when applying for jobs? Feel free to explain why.
  - Yes, to a large degree - (text entry area)
  - Yes, to some degree - (text entry area)
  - No - (text entry area)
  - Do not know - (text entry area)

- Do you feel that the student organization is optimally organized to motivate student to participate and work? Feel free to explain why.
  - Yes, to a large degree - (text entry area)
  - Yes, to some degree - (text entry area)
  - No - (text entry area)
  - Do not know - (text entry area)

- If you have any comments to this questionnaire, please add them here.
  - Comments (text entry area)