Social Identity and Employer Attractiveness of the Tobacco Industry

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EXECUTIVE SUMMARY

Organizations today face an increasing competition in attracting and recruiting talents. To find, attract and retain talented people is a source for competitive advantage and are by some even argued to be crucial for an organization's survival. It is shown that employers with less favored employer attractiveness attract fewer applicants, and therefore also limit their choices to select qualified applicants. For organizations with a less favored employer attractiveness, to know which type of individual that still is attracted to the organization may help managers to target their recruitment efforts more efficiently, and thus decrease overall recruitment costs.

This paper builds on Social Identity Theory and Social Categorization Theory, collectively named social identity approach (Hornsey, 2008), to argue that there is a specific type of individual that is more likely to apply to firms with less favored employer attractiveness, compared to employers with more favorable attractiveness. More specifically, the current paper argues that individuals that put less emphasis on the reflection their social groups have on themselves, according to the social identity approach to have a low social identity saliency, are more likely to apply to an industry with a less favored employer attractiveness.

The research question is:

RQ: Which type of individual, according to the social identity approach, is more likely to apply to an industry with a less favored employer attractiveness?

The research question is answered through a quantitative study where data is collected through a survey. The data is analyzed through a multiple regression analysis.

Findings does not support the notion that individuals with a low social identity saliency, that is, individuals that place less emphasis on their social groups' identity reflection, are more likely to apply to industries with a less favored employer attractiveness. The findings does however show that men are more attracted to an industry with a less favored employer attractiveness, in this case the tobacco industry. Findings also show that if an individual knows someone at a tobacco company, that individual is more likely to apply to the tobacco industry herself.

A THANKFUL NOTE

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1 INTRODUCTION

Organizations today face an increasing competition in attracting and recruiting talents. To find, attract and retain talented people is a source for competitive advantage (Lewis & Heckman, 2006), and are by some even argued to be crucial for an organization's survival (Ehrhart & Ziegert, 2005; Horwitz, Heng, & Quazi, 2003). As firms compete to find the most talented people in an ever increasing global environment, concepts such as employer branding, talent management and employer attractiveness have increased in popularity for both academics and managers. As a result of this, researchers have investigated the relationship between employer attractiveness and applicant pool quality and quantity (Turban & Cable, 2003).

It is shown that employers with less favored employer attractiveness attract fewer applicants, and therefore also limit their choices to select qualified applicants (Turban & Cable, 2003). The focus of this kind of research has over the last decades increased (Turban & Cable, 2003). However, as noted by Breaugh and Starke (2000), much of the recruitment research focuses on new employees or students to understand what attracts an applicant to an organization, but little is known about other applicant groups (see Rynes, Orlitzky, & Bretz, 1997 for an exception).

For managers and researchers alike, it is important to know the effects employer attractiveness has on all applicant groups. Moreover, for organizations with a less favored employer attractiveness, to know which type of individual that still is attracted to the organization may help managers to target their recruitment efforts more efficiently, and thus decrease overall recruitment costs.

The aim of the current paper is two-fold. The first aim is to find out if individual's personal characteristics influence the applicant's decisions to apply to an organization. With this insight, organizations can target individuals with characteristics that are most likely to apply to the organization, which will make the match-and-seek process more efficient. The second aim is to increase the knowledge of other applicant groups than students and newly graduated.

This paper builds on Social Identity Theory and Social Categorization Theory, collectively named social identity approach (Hornsey, 2008), to argue that there is a specific type of individual that is more likely to apply to firms with less favored employer attractiveness,

compared to employers with more favorable attractiveness. More specifically, the current paper argues that individuals that put less emphasis on the reflection their social groups have on themselves, according to the social identity approach to have a low social identity saliency, are more likely to apply to an industry with a less favored employer attractiveness. As Barber (1998) concluded, little is known of which type of individual an organization should focus on in its recruitment efforts, a concern this thesis will try to answer.

Moreover, much research focuses on applicants that *apply* for a position, but little is know about the whole applicant pool, including those that do *not* apply. Therefore, to expand current research, I will focus on the whole applicant pool, including those that do not see the employer as a possible organization to work for. By doing so, I will respond to the call by Breaugh and Starke (2000) to have a broader applicant focus and include individuals that have not made the decision to apply to the organization or do not see the organization as a possible employer. It is first when researchers do this that it is possible to compare characteristics of the whole applicant group available to the organization.

This focus has several positive implications. First, it will fill a void in the current research which tends to focus on students' perceptions of employers. I will bridge the void by a combined focus of students and young professionals. Second, it makes possible a complete overview of the decisions and characteristics of the complete applicant pool available, which gives the possibility to compare the results between different applicant groups and facilitates a more thorough and valid analysis. Third, and last, it provides managers with an insight of the characteristics and decisions of possible applicants not normally available to them, since organizations can only look at applicants that actually make the decision to apply to the firm and where organizations are unknowledgeable about those that do not apply.

The above considerations has led to the following research question:

1.1   Research Question

RQ: Which type of individual, according to the social identity approach, is more likely to apply to an industry with a less favored employer attractiveness?

More specifically, is a low social identity saliency correlated with an increased likelihood to apply to an industry with a less favored employer attractiveness for individuals that are in their early professional career.

The research question will be answered by drawing on recruitment research literature and

social identity theories that builds on psychology concepts, and through a quantitative data analysis from an online survey conducted mainly to Swedish individuals. Collecting quantitative data has the benefit of increasing the generalizability of the study, but the con that in-depth explanations of the experienced findings are difficult to make. Some authors promote to use a triangulation method (Jick, 1979) which includes both quantitative and qualitative data collection methods, but preserving anonymity of respondents of the survey is not possible to make if follow-up interviews are to be conducted based on respondent's previous answers to the survey.

1.2 Delimitations

First, the current paper only investigates one factor that may influence employer attractiveness, while there are several other factors that are shown to influence employer attractiveness, e.g. HR practices (Horwitz et al., 2003), the recruiter (Turban, Forret, & Hendrickson, 1998), a firm's product image (Highhouse, Zickar, Thorsteinson, Stierwalt, & Slaughter, 1999), or organizational image (Gatewood, Gowan, & Lautenschlager, 1993; Turban & Cable, 2003; Turban et al., 1998).

Second, it is importance to note that the study only explains the relationship between social identity saliencies and industry employer attractiveness, but does not address why such relationship exists or does not exist, even if assumptions of the relationships can be drawn from the theories used to form the hypotheses.

Third, the sample is mainly derived from a Swedish population, but no knowledge of industry attractiveness generalizability over borders is known. However, studies show that individual's self-esteem and social identities are generalizable across borders (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002).

1.3 Structure of the Paper

To summarize, this paper hypothesize that a certain type of individual is attracted to an industry with a less favored employer attractiveness. The paper uses Social Identity Theory and Social Categorization Theory to support the argumentation. The present study extends current literature by focusing on: (1) the whole applicant pool, including those individuals that do not see the organization as a possible employer and have no intention to apply; (2) applicants with a few years of work experience, which is in contrast to much of the current research that tends to focus on students. The outline of the thesis is as follows: The first

section is the current introduction to the research concept; the second section gives (a) a presentation of current literature on recruitment practices, (b) a definition of the dependent, independent and intervening variables, and (c) the hypothesizes used for the empirical section; the third section gives a methodological overview of the empirical approach; the fourth section an empirical presentation of the data; the fifth section a discussion of the empirical findings; and the sixth section conclusion, implications for managers and suggestions for future research.

2 LITERATURE REVIEW

The first part of the literature review gives background information on the problem identification. The second part of the literature review gives an overview of the academic development on recruitment research in general that is made up until today, and addresses some issues in this research area. The overview takes a broad perspective and includes different perspectives on recruitment research. The third and last section introduces the hypotheses together with the theories supporting the argumentation.

2.1 Preliminary Data Collection

The first problem formulation was done on the premise that since the tobacco industry in the long run contributes to a devastating health for millions of people, few *students* want to be associated with the tobacco industry and even less to work for the tobacco industry. After a student thesis event held at Copenhagen Business School by a company in the tobacco industry, a representative of the company explained that they had no problems of hiring students and newly graduates, but that their problem laid in hiring young professionals with a few years of work experience. This raised the question why there was a difference in finding talented students to talented young professionals, and many explanations were thought of. One such is in which life situation the different applicant groups are in. A student is less likely to have a family, have obligations towards current co-workers and a vast professional network. The priorities are different too. As a newly graduated student, it is in many cases more important to get a job, especially due to the economic downturn experienced the last few years, than to get a job that fulfills the individual's self-concept. A person with a few years of work experience are more likely to have a family, on which the individual's job not only reflects on herself, but also on her children and partner. The professional network the individual has built up may also look negatively on the individual if she is associated with an industry that facilitates the use of harmful products. For all these reasons, an individual that is in a later stage of the life cycle, *may* be less inclined to seek memberships in industries with a lower status that can be seen as having a negative reflection on the individual's self-concept. This is explained by one of the employees at the tobacco industry, where she often had to defend her decision to work in the tobacco industry: "We work in the tobacco industry which is challenged, not only professionally, but also privately" (personal communication, May 17, 2013).

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The problem that a company in the tobacco industry has difficulties in hiring young professionals can have many explanations, all of them more or less likely. The examples above are just a few examples. Interesting to explain is, however, which individual that is still likely to apply to the tobacco industry in spite of its negative reflection on the individual's self-concept. The first hypothesis that needed stronger support before any testing was possible, was that individuals that care less for the reflection their social groups have on themselves would be more likely to apply to the tobacco industry. The hypothesis gained support from an employer at the tobacco company, with the statement that "you need to be strong, and self-driven, and confident on the identity you actually get when working for a tobacco company. That is something all employees possess" (personal communication, May 17, 2013).

The data collected from the personal communication with a mid-level manager supported the initial hypothesis that there is a specific type of individual that works for the tobacco company. To test which type of individual that is attracted to the company, information on the whole applicant population is needed. A discussion of why it is not sufficient to study the applicants the tobacco organizations receive themselves for their job listings, the selection of the population and sample is explained in section 3 Methodology. Before this explanation together with the methodology of this paper, a presentation of the development on recruitment research is given below.

2.2   The Academic Development on Recruitment Research

Research on Human Resource Management (HRM) has over the last decades substantially increased (Breaugh & Starke, 2000). As an example of this, in the first edition of the influential book *Handbook of industrial and organizational psychology* (Guion, 1976), less than one page was dedicated to recruitment. Guion concluded that little recruitment research existed as of 1976. Since then, whole chapters have been devoted to recruitment and applicant attraction (Rynes, 1991). Rynes (1991) found that most of the current research at the time was lacking in several ways. For example, recruitment researchers have primarily been concerned with three recruitment topics – recruitment sources, recruiters and realistic job previews – and that only one has been the focus at the same time (Rynes, 1991). This piecemeal approach to recruitment research "leaves unanswered many important questions about attracting applicants to organizations" (Rynes, 1991, p. 399).

After Rynes chapter on recruitment research, much efforts have been done to gain a better understanding of what affects the recruitment outcomes. From dedicating a chapter in a handbook, whole books were now dedicated to recruitment and recruitment outcomes (e.g. Barber, 1998). Barber (1998) concluded that recruitment research had improved significantly, but there was still many weaknesses and points to improve.

For example, Barber (1998) called for more research on whom to target. Improvements in this area have been made, where scholars (Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005; O'Reilly, Chatman, & Caldwell, 1991) have argued that hiring individuals that fit the organization, not only the job position (Edwards, 1991), creates a flexible workforce with employees who can be easily moved between jobs (Bowen, Ledford, & Nathan, 1991) and develops talent within a broader context in the organization (Cappelli, 2008). The problem with this kind of research is that they fail to explain which *type* of individual that fit which type of organization, a problem this paper attempts to explain.

Moreover, methodological weaknesses in many of the articles on recruitment research made it difficult to draw clear conclusions from many studies (Breaugh & Starke, 2000). In order to solve this, Breaugh and Starke (2000) offered an organizing framework of the recruitment process to help researchers understand the complexity of the recruitment process and provide a better organization of future studies on recruitment. One part of the framework, out of five, includes the generation and attraction of applicants (Breaugh & Starke, 2000).

The attraction of applicants to the firm is an important responsibility of the human resource department, and without successful recruitment processes the firm will inevitably fail to attract talented people.

There is already much research done to explain why some organizations attract a larger and better qualified applicant pool than others (see Breaugh & Starke, 2000, for a review). Good HR practices is crucial to attract a quality of applicants to a firm's job listings, but the effect on employer attractiveness is not only limited to the firm's HR practices. For example, it is shown that HR practices (Horwitz et al., 2003), the recruiter (Turban et al., 1998), a firm's product image (Highhouse et al., 1999), or organizational image (Gatewood et al., 1993; Turban & Cable, 2003; Turban et al., 1998) all have the possibility to influence applicant attractions to the firm. A firm's product image and organizational image are the only external factors discussed, while the other are considered internal factors dependent on the people that

hire for the position. While the research on both external and internal factors are beginning to accumulate, the research field is lacking in several ways.

First, current research tends to focus too much on students as statistical sample. Despite that it was almost 25 years since Wanous and Conella (1989) noted that "the close proximity of students to researchers has proven to be an irresistible temptation" (Wanous & Colella, 1989, p. 90), Barber (1998) noted nine years later that "it is certainly appropriate to be concerned about whether the applicants we study reflect the full range of potential applicants being recruited by organizations" (Barber, 1998, p. 7), and Ehrhart and Ziegert (2005) noted in 2005 that "existing studies have almost exclusively relied on samples of undergraduate or MBA students approaching graduation" (Ehrhart & Ziegert, 2005, p. 915). The current paper wants to fill this void by including both students and young professionals in the sample. This mix has the benefit that it is possible to compare the two sample groups with each other, and perhaps give an explanation of the differences found in the few studies that have focused on other applicant groups than students (e.g., Gatewood et al., 1993; Highhouse et al., 1999).

Second, despite that there is much research done on the different factors that influence an employer's attractiveness, there is no clear definition of what is meant by the attractiveness of an employer. Even the wordings differ between studies, where attractiveness as employers (Turban & Greening, 1996), firm reputation (Turban & Cable, 2003), company employment image (referred to as CEI) (Highhouse et al., 1999), employer attractiveness (Berthon, Ewing, & Hah, 2005) and employment reputation perceptions (Kanar, Collins, & Bell, 2008) all refer to a similar but yet slightly different concept, and it is difficult to distinguish them apart. This defragmented definition makes it difficult to compare findings between studies, especially since many of the researchers do not explicitly say what they mean by employer attractiveness (and its equivalences) but take the concept as is, without further explanations. There are exceptions to this, but even these show differences in the definitions. Berthon, Ewing and Hah (2005) define employer attractiveness as "the envisioned benefits that a potential employee sees in working for a specific organization." (2005, p. 156). Turban and Cable (2003) used the higher level definition, firm reputation, "defined as the public evaluation of a firm relative to other firms" (2003, p. 733), to assess an organization's "success in attracting quality applicants" (2003, p. 733). Highhouse and colleagues' (1999) company employment image relies on the "corporate image as a place to work" (1999, pp. 152–3). Finally, Ehrhart and Ziegert (2005) "take a somewhat expansive approach and define attraction as getting potential

candidates to view the organization as a positive place to work" (2005, p. 902). To summarize this broken and defragmented use of the concept, Berthon and colleagues (2005) use the *envisioned benefits*, Turban and Cable (2003) *the public evaluation* relative to other firms, Highhouse and colleagues (1999) *corporate image*, and Erhart and Ziegert (2005) as a *positive place to work*, to denote a firm's employer attractiveness.

It is important to distinguish between a firm's reputation, on a general basis, and a firm's *employer* reputation. As noted by Dowling (1988), an organization can have several corporate images, where each image consists of several underlying factors. In this study, the focus of interest lies in the applicant's perceived reflection a firm's image has on the applicant's own identity. The focus of analyze is how applicants compare one organization relative to other organizations, and how this comparison positions the individual in her social environment. Therefore, since comparison between organizations are made from a public evaluation perspective, the definition of employer attractiveness in this study is most similar to Turban and Cable's definition as "the public evaluation of a firm relative to other firms" (2003, p. 733), with the exception that this paper studies firms on an industry-level, and therefore, firm is replaced with industry in the definition.

With a clear understanding of the definition of employer attractiveness, it is possible to continue with a discussion building up to the theories used in this paper and form the hypotheses.

2.3   Theoretical Frameworks Used in Current Paper

The organization needs to decide which *type* of individuals it wants to recruit, (e.g. knowledge, abilities, skills, characteristics), before starting the recruitment process (Breaugh & Starke, 2000). To do so, it is valuable for the organization to know which characteristics of the individual's personality that influence the decision to apply to the organization, and which type of individuals that are most likely to apply to the organization. This is where the social identity approach (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) is particularly relevant in explaining the relationship between individual fit and attraction (Ehrhart & Ziegert, 2005).

The social identity approach draws on social psychology and involves attitudes and views related to person characteristics. It explains human group behavior and the identification of an individual's self. It distinguishes between a personal identity and a collective identity, where

both identities collectively define the self. The approach contains of two interrelated theories that emerged during late 1970 and 1980: social identity theory and social categorization theory. The two concepts are explained in more detail below together with the hypotheses development.

2.3.1   Social Identity Theory

Social identity theory has its foundation in a social-psychological perspective and was developed during "a series of books, chapters, and monographs" (Hornsey, 2008, p. 205) out of laboratory experiments by Tajfel and Turner (1979).

The laboratory experiments forming the social identity theory applied a concept called minimal group paradigm, where the experiment was stripped of all group-related context. After participants were told their group memberships, the individuals participating in the experiment were asked to allocate points to members of their own group (the ingroup) and to members of the other group (the outgroup) (Hornsey, 2008). Individuals consistently favored the ingroup, in spite of the points being meaningless and not placing the ingroup in a better or worse position. Tajfel et al. (1971) argued that the participants were obeying a competitive behavior to enhance their own self-esteem. The experiment has been reproduced in numerous studies and different contexts, with the same results (cf. Hogg & Abrams, 1999; Hornsey, 2008, for reviews).

According to social identity theory, people tend to classify themselves into various social categories, such as organizational membership, gender, age or religious affiliation (Ashforth & Mael, 1989). As such, social categorization enables the individual to classify him- or herself in the social environment. Further, the theory maintains that an individual identifies with a social group or category partly to enhance the self-esteem, where both positive and negative intergroup comparisons affect the individual's self-esteem (Tajfel & Turner, 1979). This comparison occurs in interaction between other humans, and Tajfel and Turner argued that human interactions occur on a spectrum from completely interpersonal to completely intergroup interaction (Hornsey, 2008), with most people sliding along the spectrum depending on the context. A purely interpersonal individual is rare, but is explained as someone that relates fully as individual with no awareness of social categorizations. On the other end of the spectrum, an individual that interacts purely on an intergroup basis, relates fully as a representative of its own group, where individual qualities are neglected to the

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salience of one's group membership.

The greater the extent to which the individual identifies itself with an organization, the more likely the individual is to infer positive messages about the organization (Celani & Singh, 2011). When an organization is viewed in a positive light, it reflects favorably on the individual, who receive positive feedback from its surrounding, such as approval from others (Barber, 1998). This is a well-known phenomenon, where "people are relatively willing to identify with groups that seem to contribute to a positive sense of self, such as high-status or high-power groups" (Ellemers, De Gilder, & Haslam, 2004, p. 463). Therefore, since individuals seek to be members of groups with positive reputations to enhance their self-esteem, firms with positive employer reputations attract more applicants (Turban & Cable, 2003). The opposite is true for an organization with a negative employer reputation, which accordingly attracts fewer applicants. Firms within the same industry share many similar characteristics, especially with regards to the products and services they offer. If a firm sells products that are harmful to other individuals or the environment, social identity theory predicts that such negative effects will reflect on the firm, and accordingly on the individual associated with the firm. Therefore, since negative reflection positions the individual in a negative perspective in her social environment, this study predicts that individuals are less likely to apply for memberships of such firms or industries. Subsequently, industries that facilitate the use of harmful products, such as weapons or tobacco, are predicted to have a less favored employer attractiveness relative to other firms that facilitate the use of non-harmful products. This is formulated in the following null- and alternative hypotheses:

$H1_0$: There is no difference in industry employer attractiveness between industries that facilitate harmful products to those that do not.

$H1_A$: The tobacco industry has a less favored industry employer attractiveness compared to other neutral industries.

The above hypothesis is the foundation and springboard for the current study. The following hypotheses argues which *type* of individual that is still likely to apply to an industry with a negative employer attractiveness.

There is little research that uses social identity theory to argue which *type* of individual, an interpersonal or intergroup individual, that will still apply to an industry in spite of its less favored employer attractiveness. This is where the extension of social identity theory, self-categorization theory, comes in use.

2.3.2   Self-Categorization Theory

Social categorization theory uses an individual's self-concept and focuses on the notion of social identity itself. While Tajfel and Turner (1979) argued that an individual moves on a continuum between a fully interpersonal interaction to a fully intergroup interaction, Turner and colleagues (Turner et al., 1987) view interactions as operating at different levels of inclusiveness. The first level is *personal* identity, where the individual categorizes the characteristics of him/herself (e.g. bodily attributes, abilities, interests) with others, and the second level is *social* identity, where the individual compare him/herself as a member of an ingroup defined against other groups of humans. The levels functions antagonistic, where one level becomes less salient when the other becomes more so. This process of comparison gives the individual a partial answer to the question "Who am I?", initially asked by Mead (1934). In this sense, an individual's self-concept could itself be defined along a continuum between a personal and a social identity. There are similarities between Turner and colleagues' personal and social identity and the interpersonal and intergroup behavior of social identity theory: "interpersonal behaviour is associated with a salient personal identity and intergroup behaviour is associated with a salient social identity" (Haslam, 2004, p. 29). This similarity is important to keep in mind when drawing conclusions about any findings derived from the research, since much of the explanations connected to a specific identity are explained in both social identity theory and self-categorization theory.

It is important to introduce the concept of social identification in social categorization theory. Social identification is the process by which information about social groups is related to the self. It is through social identification that individuals identify with the groups they are a member of. Social categorization theory argues that the level of identification with any group is dependent on the saliency of the individual's social identity. Social categorization theory refers to how an individual perceives itself as a representative of a group (Ellemers et al., 2004). Through this process, an individual with a low social identity will put less emphasis on which social group she belongs to, and consequently be less concerned about how a firm's employer attractiveness reflects on herself in the view of others. An individual that has a

stronger social identity will put a larger emphasis on which social group she belongs to, and be more concerned about how a firm's employer attractiveness reflects on herself.

Since individuals with a low social identity saliency put less emphasis on the social groups to which they belong, this study predicts that individuals with a low social identity saliency are more likely to apply to industries with negative employer attractiveness, which is formulated in the following null- and alternative hypotheses.

$H2_0$: There is no difference in individuals' social identity saliency and their likelihood to apply to industries with a less favored employer attractiveness.

$H2_A$: Individuals with a low social identity saliency are more likely to apply to industries with a less favored employer attractiveness.

A second difference in social categorization theory is the notion of prototypes. The notions of prototypes is absolutely central to self-categorization theory (Hogg & Terry, 2000). When individuals cognitively define and stereotype a group, they use prototypes that take the form of either an exemplary member of the group or an ideal member type. The prototypes "embody all attributes that characterize groups and distinguish them from other groups" (Hogg & Terry, 2000, p. 123). In this way, any interaction of people involves prototypes, the only difference is in their accuracy and in which context the interaction takes place.

Interestingly, an individual will most likely never have complete information of a group it is not a member of, but will through prototypes only have a *perception* of the group. The perception of the group is built on perceptions gained from society, e.g. media coverage. There is a significant public relations aspect to recruitment, where individuals form a perception of organizations from their advertisements in popular media or from what is written about them in public newspapers. This consequence is what Rynes and Barber referred to as "spillovers" (Rynes & Barber, 1990).

This may lead the individual to form a negative perception of a group if media coverage is negative, and a positive perception of the group if media coverage is positive. As an example of this, Turban and Greening (1996) concluded that a firm's Corporate Social Performance (CSR), which can be seen as a positive side operation of an organization, relates positively to

a firm's reputation and its attractiveness as an employer. Individuals that actively seek more information about memberships in a group are predicted to be more favorable towards the group in the first place and have a positive pre-perception of the group. Thus, the current paper hypothesize that individuals that have attended an event at a tobacco company are more likely to apply for membership in that group, which is formulated in the following null- and alternative hypotheses.

$H3_0$: There is no difference in the tobacco industry's employer attractiveness between the group that has attended an event at a tobacco company compared to the group that has not.

$H3_A$: There is a difference in the tobacco industry's employer attractiveness between those individuals that have attended an event at a tobacco company compared to those that have not.

In the same line of argument, individuals that know a member of a particular group, can through social identification easier identify themselves with the same or a similar group. Scholars have referred to this as "familiarity with groups", where the extent to which an individual is familiar with a group, e.g. personally knows a member of the group, is positively correlated with the attractiveness of the group (Gatewood et al., 1993). This is explained by the notion that if an individual knows a member of a group, the individual can view herself as a member of the group through the perception of the already existing member. If the individual has a positive perception of the member, e.g. is a friend, the individual will also have a positive perception of membership in the group.

$H4_0$: Knowing someone in a group does not influence the individual's likelihood to apply for membership to the same or similar groups.

$H4_A$: An individual that personally knows a member of a group are more likely to apply to the same or a similar group.

The main foundation of the social identity approach and the discovery made in the first laboratory experiments, states that individuals engage in a social competitive behavior that consistently favors the in-group, i.e. the group of which the individual is a member of, to the out-group, i.e. the group the individual is not a member of (Tajfel et al., 1971; Tajfel & Turner, 1979). This competitive behavior is undertaken to improve one's own self-esteem. Memberships in groups can take different forms and be on different levels. Whereas someone that works for a company is a member of the work organization, another individual that buys the products of the company shares membership with other individuals that also buy the same products. An individual that engage in a company's products also engage in the company itself. It has been shown that individuals that have a positive image of a company's products, also have a positive view towards other forms of membership of the company, such as a positive view of the company as an employer (Gatewood et al., 1993). Hence, the current paper predicts that individuals that are smokers are more likely to have a positive image of cigarettes compared to those individuals that do not smoke, and thus a more positive view towards the tobacco industry as an employer, which is stated in the following null- and alternative hypotheses.

$H5_0$: There is no difference between individuals that smoke or do not smoke in their likelihood to apply to the tobacco industry.

$H5_A$: Individuals that smoke, regularly or occasionally, are more likely to apply to the tobacco industry compared to individuals that do not smoke.

The next chapter will describe the methodology of the study and how to test the hypotheses.

3   METHODOLOGY

3.1   Research Design

The research question will be answered through a multiple regression analysis on the primary data to test the hypotheses, and will be controlled for any control and intervening variables. The research follows a hypothetico-deductive method (Sekaran, 2003), which starts with an observation and preliminary data gathering of the less favored employer attractiveness of the tobacco industry. This was done through semi-structured interviews at a tobacco company in Denmark. Conducting a preliminary data gathering has the benefit of seeking preliminary information in depth, to get "and idea or a 'feel' for what is happening" (Sekaran, 2003, p. 29) and increase the level of awareness before the theory and hypotheses are developed. After the preliminary information gathering, the theory was formulated together with the hypotheses, followed by a data collection in the form of a survey. Finally, data was analyzed and tested for the hypotheses together with a deduction of the findings.

3.1.1   Quantitative Method

The chosen research design for answering the research question consists of a quantitative method, with an online survey as data collector. The chosen method allows for generalization of the findings to other contexts. An alternative method to gather data could be to conduct interviews with students and young professional that are in the process of finding a new job. While such an approach would give a more in-depth explanation of the tobacco industry's employer attractiveness, a vast number of interviews would be needed to be able to generalize the findings to the whole population. There was neither time nor resources available for such an extensive research approach. Since the aim of the current paper is to get an understanding of the factors that influence an individual's likelihood to apply to the tobacco industry, it is necessary to have a large sample to draw conclusions that are generalizable and applicable for the whole population.

The study was done using a non-probability sampling method. Despite the lack of generalizability such a procedure may have on the study, other factors, such as time, convenience and resources available to perform a full-scale study, had a greater impact on the choice of sampling method. Since a simple random sampling or a stratified random sampling, based on years of work experience, education and age, offers the highest generalizability to the findings (Sekaran, 2003), those would have been the preferred sampling methods.

However, mostly due to a lack of resources, especially monetary of such, those sampling methods were not possible solutions. The chosen sampling method was a convenience sampling, with respondents from the author's network. The collection of resources came from e-mail invitations, Facebook, a general link for respondents to distribute to others after completion of the survey and LinkedIn.

3.1.2   *Purpose, Type of Investigation and Researcher Interference*

The purpose of this dissertation is to gain an understanding of the factors influencing individuals' likelihood to apply to industries with a less favored employer attractiveness. More specifically, the purpose is to test through hypotheses drawn from previous research and social identity approach if individuals' social identity saliencies affect their likelihood to apply to different industries. Hopefully, the results will give managers a better understanding of which type of individual that is attracted to their industry and give researchers a better understanding of some of the factors that constitute employer attractiveness.

The variable of interest is to investigate if an industry's less favored employer attractiveness is associated with an individual's social identity saliency. Such relationship is best described through a correlational study (Sekaran, 2003) to test for the correlation between social identity saliency and employer attractiveness, as compared to a causal study which would investigate if social identity saliency is a *cause* of a less favored employer attractiveness. Since this study collects data from subjects at one single point in time, it is not possible to make causal inferences and conclude which variable that is the cause of the other since all variables are collected simultaneously. Hence, this study is cross-sectional which facilities conclusions about relationship between variables, but not in which direction the relationship goes.

The difference between a causal and correlational study is important to make, since the latter allows minimal researcher interference compared to a causal study (Sekaran, 2003). This study is done in a non-contrived setting with no interference or manipulation stimuli.

3.2   Data Collection Method

This section will describe the population and the selection of the sample.

3.2.1   *Unit of Analysis and Population Calculation*

To calculate the unit of analysis, the total population is necessary to know. The population consists of two groups, unemployed and employed. There is also a third population group: students. Since previous researchers (e.g. Breaugh & Starke, 2000) call for more focus on

other population groups than students, the former two are of most interest in this study. However, including students in the population group involves several advantages. First, and foremost, as previously already noted, "the close proximity of students to researchers has proven to be an irresistible temptation" (Wanous & Colella, 1989, p. 90) to use students as sample. The same applies to the current thesis, where the author himself is a student and thus his network mostly consists of students. Second, and more importantly, including students as a population group bridges the gap between students and non-students and facilitates comparison between the two population groups, which help in facilitating an answer to the concern "whether the applicants we study reflect the full range of potential applicants being recruited by organizations" (Barber, 1998, p. 7). Including students in applicant behavior research involves a possible statistical error, since most students are not actively looking for a job and may be in their beginning of their education. Students' preferences and likelihood to apply to organizations are most likely to change during the span of their studies, especially since new topics and the information of possible employers arise during the course of their education. It can safely be argued that students in their latter part of their education are more knowledgeable and aware of their employer choice, industry and job preferences, than students in their beginning of their studies. With this in mind, a question on students' finished degree is asked to distinguish between students' length of higher education studies.

For the reason mentioned above, calculating the population of the student group is difficult. There is no data available, to my knowledge, which distinguish between students in their beginning of their education and students in their end of their education. In the sample, the closest question to make this distinction is "Which is your highest educational level?". Moreover, students can study anything from three to five years, or in some cases even longer or shorter. To follow previous research on employer attractiveness, students participating in a higher education in Sweden are selected for the population estimation. Only students studying full-time in the population, since there are many students that only takes a few courses and can not be considered to have a "true" student mindset. However, in the survey, respondents are asked the question "Which is your *main* occupation?" (italics added), which include individuals that study part-time, but consider their studies as their main occupation.

The estimation on the student population is based on data from *Universitetskanslerämbetet* in cooperation with SCB, *Statistiska Centralbyrån*, which is the government operated statistical bureau in Sweden. In 2012, there was 313.500 full-time students studying at a higher

education institution (Universitetskanslerämbetet, 2013). Of these, the group of interest is individuals aged 20-24 years old, 25-29 years old and 30-34 years old, since these are most likely to have none to a few years of work experience. In 2011 (no more recent data is available), the student population was distributed according to the numbers in **Table 1**, which is estimated into the number of students in 2012 in the same table. The population group summarizes to 234,816 individuals for the student group.

Table 1: Full-time Students in Higher Education

Age Interval	Percentage in 2011	Student equivalence in 2012 (estimate)
16-19 years	5%	16,918
20-24 years	43%	133,921
25-29 years	22%	70,019
30-34 years	10%	30,876
35-44 years	12%	37,731
45+ years	8%	24,035
Total	**100%**	**313,500**

Source: Universitetskanslerämbetet (2013)

Distinguishing between employed and unemployed respondents is important mainly for two reasons. First, the unemployed respondents are in a very different situation than employed respondents in the sense that the former may be more keen on accepting any job offer, no matter the industry, which may be misguiding in the interpretation of the results. Second, with the current economic situation in Sweden with an unusually high unemployment rate for individuals between 15 and 24 years old of 26.9% compared to the national average of 8.2% (Statistiska Centralbyrån, 2013), it is important to separate unemployed and employed respondents since this thesis focuses on young professional, that is, younger individuals. The total number of unemployed in May 2013 was 417,000 (Statistiska Centralbyrån, 2013). The total number of unemployed is presented in **Table 2**. For this thesis, since the group of interest is young professionals, the groups 20-24 years old and 25-34 years old will be used for the population, which summarizes into 175,000 unemployed.

For the last population group, the calculation is more straight-forward. The population is divided into three sub-groups: full-time employed, part-time employed and self-employed. The number of individuals to each group is presented in **Table 2**. For this thesis, the age categories 20-24 years old and 25-34 years old will be used for the population calculations. Full-time employed, part-time and self-employed individuals totals 907,200; 370,600; and

75,700; respectively. This equals a total population of employed individuals of 1,353,500.

Table 2: Number of employed and unemployed in Sweden, May 2013

Age Interval	Full-time	Part-time	Self-employed	Unemployed
15-19 years	19,700	67,500	4,300	77,000
20-24 years	183,100	183,200	10,800	95,600
25-34 years	724,100	187,400	64,900	79,400
35-44 years	909,900	90,600	112,300	61,400
45+ years	1,655,800	156,900	296,700	101,400
Total	**3,492,600**	**685,600**	**489,000**	**417,300**

To summarize, the student population consists of 234,816 individuals, the unemployed of 175,000 individuals, and the employed population of 1,353,500 individuals.

3.2.2   Selecting the sample

The target population for this study is as previously mentioned, individuals that are in the end of their studies or have up to a few years of work experience. A full-scale study with randomly selecting individuals from the population, a random sampling procedure, is not possible due to the amount of resources necessary for this to be accomplished. Selecting individuals closer to the author is both more accessible and less resource demanding. The con of this approach is that the generalizability of the study is decreased. Therefore, the result section will provide a comparison of the characteristics of the sample with the population.

The sample selection method is done in the following manner. First, possible respondents that fulfilled certain criteria were contacted on Facebook from the author's friendship list. The criteria were: aged between 20-35 years old, understands Swedish flawlessly, have some relationship with the Swedish or Danish job market (either through studies or job experience). 155 individuals were contacted with a short personal message and an inquiry to answer a survey for my master thesis. To give advance notice and a personalization of the message sent are shown to significantly improve response rate for organizational research studies (Anseel, Lievens, Schollaert, & Choragwicka, 2010).

Of these, 122 replied they would answer the survey, to which an email was sent with the survey link. 105 of these responded to the email, which resulted in a 68% response rate. A similar approach was made on LinkedIn, where 22 people were contacted and 8 responded to the survey, which is a 36% response rate. Another link was posted on Facebook at the end of

the survey process, where another 24 responses were collected. Finally, a general link for respondents that completed the survey to share generated 10 responses. In total, 147 individuals responded to the survey and the survey had in total for those personally contacted a response rate of 64% (177 contacted, 113 responses).

Contacting possible respondents from the friendship list of the author clearly has its disadvantages in selecting a non-biased sample. In general, one's close friends tend to have similar interests, perspectives and personal beliefs. But the wider the network grows, the more diverse and heterogeneous do the friends become. With 177 individuals contacted, together with another dozens from general links on Facebook, the homogeneity is less and less. Calculating the confidence interval for a sample of 147 subjects with a large population (1.3 millions for the total population) with a confidence level of 95% and the worst possible standard deviation of 0.5 yields a confidence interval of 8.08. This implies that the estimated sample mean is true to the population mean with a 8% margin of error.

Since the target population is students and young professionals, contacting friends on Facebook reaches many of those subjects, which are in a similar position as the author himself. Therefore, despite that the the chosen sampling method is a convenience sampling, the subjects of the survey can be representative of the population with similar education backgrounds. Many of the bigger companies recruit directly from the business schools, which is a further argument that the selected sample may be generalizable to other studies of the same kind.

3.2.3   Alternative Sample Selections

Other studies have used CVs and application letters (Turban & Cable, 2003) and perceptions before and after job interviews (Turban et al., 1998) to analyze the attractiveness of employers and opinions of applicants. Such research analyzes the applicant characteristics of individuals that are already interested in working for the organization, but neglects a possible applicant group that do not apply but still may be interested in the organization. Moreover, by excluding individuals that choose not to apply to an organization's job openings, it is impossible to explain why some individuals choose *not* to apply to the organization. Insight of why people choose not to apply are equally important to know for managers as why they choose to apply. Therefore, it is necessary to go beyond the organization's already existing applicants and look at the whole applicant population, including both applicants that are likely

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to apply to an organization and applicants that are less likely, and compare the results and differences between those two applicant groups. For this reason, the choice was made to use the author's network to collect responses, which should include individuals both likely and not likely to apply to an organization.

3.3   Variables and Measures

The survey conducted for this thesis involves three different parts. First, questions regarding the individuals' social identity saliency towards their work organization are made following the CSES scale (Luhtanen & Crocker, 1992). Second, the respondents answer questions regarding their likelihood to accept a job offer in specific industries. In this section, the respondents also answer questions regarding their familiarity with the tobacco industry, e.g. if they know someone working in the industry, if they have worked in it themselves. The first two sections are used to accept or reject the hypotheses. The last sections contains control variables, such as gender, age, highest degree of education completed and more. The questionnaire is given in its full, translated into English, in Appendix 6. The following gives a presentation of each section.

3.3.1   Independent Variables

Luhtanen and Crocker (1992) developed a measurement scale, the CSES scale, specifically "to assess individuals' levels of social identity based on their memberships in ascribed groups" (Luhtanen & Crocker, 1992, p. 304). The scale was initially developed to capture general, cross-group tendencies, rather than capture specific group self-esteem. However, the scale was proven significant even when tested for specific groups, such as work groups, a group of friends. The authors even point out that "altering the scale for a specific achieved group did not compromise its psychometric properties" (Luhtanen & Crocker, 1992, p. 315). With this in mind, the scale is in this study adapted to measure the individual's social identity salience towards an employer. Where the questions in the original questionnaire use 'social groups' to ask for feelings towards social groups in general, this study uses 'work organization' to emphasis the effect on self-esteem the individual has towards its current work organization.

Since social identity approach argues that there are two aspects of an individual's identity – personal and social identity – where personal identity refers to how individuals view themselves as individuals and social identity to how they view their groups to which they

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belong to, it is necessary to make a distinction in the measurement between personal and social identity. If one was to measure the personal identity saliency of an individual, one would get information on how individuals view their bodily attributes and how much emphasis they would put to such attributes. To measure an individual's social identity saliency, one would instead receive information on how the individual view her importance to a variety of social groups, "including those based on race, gender, and occupation (Luhtanen & Crocker, 1992, p. 302). Since the interest of the current paper lies in the individual's likelihood to apply to an organization, an employer's attractiveness, it is necessary to measure the individual's social identity saliency to accept or reject the hypotheses.

Luhtanen and Crocker (1992) measured the individual's collective self-esteem by "individuals' levels of social identity based on their memberships in ascribed groups" (1992, p. 304). The terminology of their measurements and the terminology of social identity theory differ slightly. While Europeans like Tajfel and Turner use the definition of a *social* identity and a *social* self-esteem, this is in American terminology referred to as a *collective* identity and a *collective* self-esteem (Luhtanen & Crocker, 1992). Accordingly, American researchers, like Luhtanen and Crocker, used "the terms *collective identity* and *collective self-esteem* to denote those aspects of identity that have to do with memberships in social groups and the value placed on one's social groups" (Luhtanen & Crocker, 1992, p. 303). Therefore, to prevent misunderstandings between the CSES scale, previous research and the current paper, it is important to clarify which terminology that is used. Such misunderstandings are easy to make. For example, Cheek and his colleagues distinguish between three, rather than two, aspects of identity: personal, social and collective (Cheek, Underwood, & Cutler, 1985), which further complicates the matter.

In line with social identity approach and European terminology, *social* identity and *social* self-esteem are in this study used to denote what Luhtanen and Crocker (1992) define as collective identity and collective self-esteem, respectively.

The scale is divided into four sub-scales to assess an individual's social self-esteem: membership esteem, private social self-esteem, public social self-esteem and importance to identity (Luhtanen & Crocker, 1992). An overall score of the respondent's answers and specific scores for each sub-scale are obtained to assess an individual's social self-esteem.

Questions concerning membership esteems involve individuals' judgments of their social

group (e.g. "I am a worthy member of my social group"). Membership assesses "one's evaluation of the self in one's social groups" (Luhtanen & Crocker, 1992, pp. 307–8) and is an important factor to determine the individual's personal self-esteem. The questions "I am a good representative of the company I work for", "I am a cooperative participant in the company", "I feel I do not have much to offer to the company" and "I often feel myself redundant in the company" are used to assess membership esteem, with the latter two reverse-scored for analysis.

The Importance to identity subscale measures to which extent social groups are important to the individual's sense of self. High values on the identity scale indicates that the social groups an individual is a member of have a large impact on the individual's identification of the self. A low value indicates that the individual puts less emphasis on the social groups to identity oneself. To assess the importance social groups have to an individual's identity, the questions "The company I work for is an important reflection of who I am", "The company I am employed by is an important part of my self-image" "To be employed by the company has very little to do of how I identify myself", and "In my perception of which type of person I am, the company I am employed by plays a less important role" are asked. The latter two questions are reverse-scored for analysis. A high score on Importance to Identity indicates an individual that constructs her identity largely based on the social groups of which she belongs to.

The Private social self-esteem assesses the individual's personal judgment of how good one's social groups are. The questions asked to assess private social self-esteem are: "Generally, I am happy to be employed by the company", "I feel good about working for the company I am employed by", "I often wish I was not employed by the company" and "I often feel it is not worth to be employed by the company", with the latter two reverse-scored for analysis.

The fourth subscale, public social self-esteem, assesses one's judgment of how other people evaluate one's social groups. A high score indicates that the individual thinks other people evaluate her social group in a positive way, and a low score that other evaluates her groups in a negative way. Important to note is the external factor in this measure, where an individual can have a negative perception of others' evaluation of one's groups, but still have a positive attitude herself towards her groups. Questions asked to assess public social self-esteem are: "The company I work for are, generally, considered a good company by others", "Others

respect the company I work for", "Most people consider that the company I work for are less productive than other, competing companies" and "Others consider the company I am employed by an unattractive company to work for", with the latter two reverse-scored for analysis.

The sub-scales constitute the total CSES-score and can only individually briefly explain a person's social identity saliency. Hence, the individual sub-scales can only be used to give a nuance of the findings, but not individually explain them.

The responses in the Luhtanen and Crocker (1992) study were made on a 7-point Likert Scale, but as mentioned by Sekaran (2003), "a 5-point scale is just as good as any, and that an increase from 5 to 7 or 9 points on a rating scale does not improve the reliability of the ratings" (Sekaran, 2003, p. 200). Therefore, the current survey uses a balanced 5-point Likert scale to maintain simplicity of the responses and to improve respondents' readability of the questions.

The original survey was written in English, and a translation of the questions were necessary. When translating a survey to another language, caution has to be taken on the cultural bases of different meanings of words (Smith, 2003). For example, the words liberty and *Liberté* in English and French have strong historical meanings associated with the historical revolutions of each country, but in other languages it may carry a more neutral meaning. To prevent such meanings to influence the outcome of the survey, two people beside the author fluent in both English and Swedish have controlled the translation of the survey.

3.3.2   *Other Measurement Scales to Assess Collective or Personal Identification of One-Self*

There are other measurement tools available to assess an individual's self-esteem. For example, a popular measurement scale is the AIQ-III (Cheek, Tropp, Chen, & Underwood, 1994), which consists of three subscales assessing the extent to which personal, social and collective aspects of identity are important to the individual's sense of who she is. The scale developed by Luhtanen and Crocker shares some similarities with the AIQ-III scale, especially the subscale Importance to Identity (Luhtanen & Crocker, 1992). While there are some similarities, there are important differences. The scale developed by Luhtanen and Crocker "deal with judgments of *worthiness* or value (either of one's social groups or of the self within the social groups)" (Luhtanen & Crocker, 1992, p. 313) and not only on the *importance* of the social groups, which the AIQ-III scale does. This study is interested in the

value individuals place on their work organization, and thus the CSES-scale is a better measure to fulfill this purpose.

Another scale that may assess the individual's likelihood to apply to an organization is the Individuation Scale (Maslach, Stapp, & Santee, 1985) which assesses people's willingness to engage in behavior that publicly differentiate themselves from others. Applying to an organization with a negative employer reputation can be an example of such behavior. It is argued that the higher an individual's social self-esteem is, the more confident the individual may be in social situations (Luhtanen & Crocker, 1992), and the more likely the individual dare to apply to organizations that a majority of the population think has a negative reputation. This was also confirmed in the study done by Luhtanen and Crocker (1992) – the "CSES and all its subscales except Identity showed significant positive correlations with individuation (Maslach et al. 1985)" (Luhtanen & Crocker, 1992, p. 314). Whereas the individuation scale measures individuals' willingness to engage in behavior that differentiate themselves, this study is interested in how individuals value their social groups, which makes the individuation scale a not suitable option.

Nario-Redmond and colleagues (Nario-Redmond, Biernat, Eidelman, & Palenske, 2004) developed a scale to capture individual differences in both personal and social identity. The scale builds upon social self-categorization and take the assumption that individuals identify themselves with the group they belong to, but also that they want to individuate themselves from other members in the in-group. It is in this sense the scale differs from the CSES-scale used in this study. The respondents in this study are not members of the group the survey targets, which is a requirement to assess how individuals individuate themselves in the in-group, which is why this measurement is not suitable for the current study.

3.3.3   Correlations Between Sub-Scales and Total CSES-Score

The CSES-questions are tested for correlations to see if any two variables are highly correlated, which may be an indication that two variables are not two distinct and different variables. The highest correlations is expected to be found between Membership and Private sub-scale and the lowest between Public and Identity sub-scales (Luhtanen & Crocker, 1992). Correlations between the sub-scales greater than 0.75 are considered highly correlated and should raise questions on their measurement of different concepts. Before performing a correlation analysis using Pearson correlation, the data is tested for linearity and screened for

outliers and variables not fully completed.

The correlations of the four sub-scales to the total score is expected to be slightly higher, with correlations between $r = 0.59$ to 0.87 at the $p < 0.001$ level in Luhtanen and Crocker's study (1992).

3.3.4   Dependent Variables

The dependent variable in this study is the individual's likelihood to apply to the tobacco industry, what is referred to as the industry's employer attractiveness. To measure an industry's employer attractiveness can be done in several ways. For example, Turban and Cable (2003) used a combination of employer rankings on selected employer reputation lists and number of applications to each company at a business school, Turban, Forret and Hendrickson (1998) conducted interviews with applicants before and after the applicants had been interviewed by the company, Turban and Greening (1996) let students rate companies on employer attractiveness on a five point Likert-scale from "very poor reputation" to "very good reputation". All of the different approaches have their cons and benefits. For example, to measure employer attractiveness from employer reputation rankings gives a broad and very generalizable measurement of employer attractiveness, but may not be generalizable to the specific group that is subject of the study. To measure employer attractiveness from students applying to a company ensure that the student is aware of the company, but clearly has the negative effect that the student is most likely already positive inclined towards the company. To ask students before and after the students had been interviewed by the company gives an employer attractiveness measure that takes into account the feeling the applicant gets inside the company, which is a clear factor that influence an employer's attractiveness, but has the same disadvantage as the previous measurement method that the applicant is most likely already positive inclined towards the company to make an application in the first place. To ask students to rate companies on a Likert-scale has the benefit that it includes both students that are positively and negatively inclined towards the company, but the measurement may only be applicable to a specific homogenous group.

This study follows previous researchers (Gatewood et al., 1993; Turban & Cable, 2003) that have measured employee attractiveness through different magazines that rank employers based on attractiveness, such as Fortune500. Further, respondents are asked to state their likelihood to apply to an industry based on a job position which suits their educations, skills

and wants, following several previous authors (Belt & Paolillo, 1982; Gatewood et al., 1993; Turban & Cable, 2003). This combination ensures that the employer reputation rankings are generalizable and valid for the selected sample.

By focusing on the likelihood to *apply* for a position, instead of the likelihood to *accept* a job offer, the respondents are faced with a very different standpoint. To apply for a position involves both time and effort, while accepting a job offer is not associated with any effort, which rules out those individuals that only want a job for the moment. An individual is less prone to spend the time and effort to apply for a position if she cannot see herself working for the company she applies for.

While much of the research discusses employer attractiveness and ask individuals of their attitudes towards specific employers, it is necessary to have a slightly different approach for this study. The variable of interest is individual's perceptions and attitudes, on a general basis, towards different social groups. The social groups are distinguished by an organization's attractiveness as employer. While differences in attractiveness exist between companies in the same industry, those differences may be difficult to be aware of for individuals outside the industry, and very likely be different for individuals within the industry. Moreover, the target population does not have much experience of working in any industry, where asking about attractiveness for specific companies in an industry may be difficult to answer for respondents. Individuals are more likely to have formed a perception of industries on a general level, for example the manufacturing industry, the consulting industry etc. Industries, as compared to specific companies, are also generally better known by the general public of which the values, work habits and work cultures are. As an example, most people are aware that the financial sector in London have almost inhuman number of work hours each week, and have a perception of which kind of individuals that work there, but very few can distinguish the difference between, say, Morgan Stanley and J.P. Morgan. For this simple reason, that industry characteristics are generally more known in general, employer attractiveness is in this study extended to *industry* employer attractiveness. The comparison between other studies is still possible, since many organizations within an industry share the same characteristics.

To measure the likelihood to apply to the different industries, there may be a different in individual's prioritization of the likelihood scale. For example, people with a lower CSES-

score may generally assign higher likelihood values to all industries, which will disrupt the results if not tested for. Therefore, the likelihood to apply to the tobacco industry is set for each respondent relative to all the other industries.

3.3.5   Test of Hypotheses

The independent variables are measured with the help of the CSES scale (Luhtanen & Crocker, 1992) with a slight adaptation to fit the measurement of social self-esteem for the work organization. The first step to undertake in the hypotheses testing is to test the data for any missing or invalid cases. Any cases that did not include either the independent or dependent variables were excluded from the analysis. This involves survey responses that were only partially finished or where the subject had missed questions.

The first hypothesis, if the tobacco industry experiences a lower employer attractiveness, is tested through a pair-wise comparison of the mean difference for each industry. The industries are tested in relation to their deviation from the average industry attractiveness.

Hypotheses 2-5 are tested through a multiple regression analysis and checked for control variables. Performing a multiple regression analysis has the benefit that control variables can be tested for and each variable's contribution to the variance of the likelihood to apply to the tobacco industry can be calculated. The multiple regression analysis is presented in **Table 7**.

3.3.6   Control Variables

Control variables are included in the model since they potentially can influence the independent variable CSES-score and the dependent variable likelihood to apply to the tobacco industry. Including control variables may also rule out alternative explanations of the findings. The control variables entered into the model include gender, age, years of work experience, finished education degree and current occupation. Below is an argumentation for why each control variable is relevant to include.

Gender is included to control for difference in general industry attractiveness, since it is shown that some industries by default are more dominated by males or females (Gardiner & Tiggemann, 1999; Panteli, Stack, & Ramsay, 1999), and the choice of industry could be associated with the gender of the subject. The CSES-score is also controlled for gender since there are inconsistent results of the gender's effect on self-esteem, which is what the CSES-score measures. Some research shows that males, especially in their adolescence, have higher self-esteem than females (e.g. Chubb, Fertman, & Ross, 1997; McMullin & Cairney, 2004)

but others show no relationship (Keltikangas-Järvinen, 1990) or a small relationship (Kling, Hyde, Showers, & Buswell, 1999) between self-esteem and gender.

Age is included as a control variable since it is shown that self-esteem and self-concept, which the concept of the social identity approach builds upon, is positively correlated with age (Erol & Orth, 2011) and rises during adulthood from a decline experienced during adolescence (Robins et al., 2002), with the results generalizable across countries and nationalities.

Since there is a lack of research concerning other applicant groups than students' perception of employers, years of work experience is controlled for to make comparisons between students and years of work experience on their likelihood to apply to the tobacco industry. If results are similar between the two groups, findings among the two groups can be overlapping.

Research has shown that there is a clear negative relationship between tertiary educated and their less educated counterpart in smoking and tobacco consumption, with higher educated consuming significantly less cigarettes and other tobacco products (Giskes et al., 2005), which is why finished education degree is controlled for.

3.3.7 *Intervening variable*

Occupation is included as an intervening variable for the likelihood to accept a position in the tobacco industry, to control if subjects without a current job are more likely to accept any job offered to them. As stated in the description of the population, more than one fourth of the young people between 16 and 24 in Sweden are without a job, which makes this variable important to control for.

3.4 **Reliability Measures of the CSES-Scale**

In the CSES-scale, there are four sub-scales that constitute the total CSES-score respondents can get. For each of these sub-scales, four questions are used to measure the same concept, but with different wordings and a slightly different meaning for each. Since the questions are: first, translated from English into Swedish; and second, changed from measuring social groups in general to measuring the work organization the respondent currently work for, it is necessary to measure whether the questions have good inter-item consistency. This is done by Cronbach's (1951) coefficient alpha and is measured for the questions for each sub-scales and for the sub-scales for the total CSES-score. There are different meanings of what a good

measure for Cronbach's alpha is, but in general, reliabilities less than .60 are considered poor, those over .8 good and those in the range between acceptable (Sekaran, 2003). Despite Cronbach's alpha not being a perfect measure and the alpha required to be considered good depends on the context, the study design and the number of items (see for example Cortina, 1993, for an examination), I will follow Luhtanen and Crocker (1992) and use .7 as a guideline. The alphas for the sub-scales and total CSES-score are presented in **Table 3** in chapter 4 Results.

3.5   Validity of the CSES-Scale

Content validity was done with *a panel of judges*, independently from each other in the pre-testing of the survey questions. The judges was shown the questionnaire and were asked to go through it together with the author and raise questions whenever something was unclear or uncertain. In situations where the questions were more than only spelling and grammar mistakes, the author explained which concept the question tried to answer and the judge gave his or her view on it. The most frequent change regarded difficulties to interpret questions and to correct wordy formulations. Translating the questions from English to Swedish proved more difficult than anticipated, and changing the questions from including social groups on a general level to including the respondent's work organization created many difficulties.

For example, in the initial scale Luhtanen and Crocker (1992) asked respondents the question "Overall, I often feel that the social groups of which I am a member are not worthwhile." (Luhtanen & Crocker, 1992, p. 307), which was initially changed to "I often feel that it is not worthwhile to be employed in the company" (translated back from Swedish; note that the definition of 'the company' is explained to the respondent beforehand). To all the judges, the word worthwhile arose difficulties and none of them could easily and distinctly give a clear explanation of which concept the question referred to. For the judges, this could be interpreted as "not worth the money", "not worth the time", or "not worth the effort". Clearly, such different concepts have implications on the reliability of the question asked, where a respondent can think it is not worth the time (e.g. works more than 60 hours a week) but definitely worth the money (e.g. earning more than others in similar situations). The definition of worthwhile can be ambiguous, and in fact can mean all three of the interpretations[1]. Such double-barrel ambiguous interpretations should, if possible, be avoided

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[1] Definition of worthwhile: "worth the time, money, or effort spent; of value or importance" (Oxford

(Trost, 2012). In this particular case, it was impossible to interpret from the original question formulation which of the three meanings it was meant to measure, and the translation had to be equally ambiguous. The validity of the question had to be relied upon factorial analysis with the other questions measuring the same concept (in this case, the private self-esteem sub-scale).

In line with Luhtanen and Crocker (Luhtanen & Crocker, 1992), construct validity is measured through a factorial analysis with varimax rotation for each of the 16 CSES questions to see if the questions actually measure the concept they are intended to measure. The factorial analysis will also show if some questions are measuring more than one concept, or if there are any questions that are unnecessary and redundant. The higher the factor for each question, the higher that question corresponds to the assigned concept. Even if it is not always necessary to perform a factor analysis for an already proven concept, it is in this case important since the scale is changed both from English into Swedish and from asking questions about social groups in general to asking questions about the respondent's work organization. Finally, performing a factor analysis for this survey on the CSES question makes possible to find an answer to how much of the variance in the questions that the factors corresponds to. Similar to Luhtanen and Crocker (1992), a varimax factor analysis is performed and only factor loadings equal or greater than 0.3 are indicated, which simplifies the interpretation of the factors. The results are presented in **Table 5** in chapter 4 Results.

3.6   Creating the Survey

The survey used an already existing and proven measurement scale to assess individuals' social identity with a slight adaptation to fit the selected social group (Luhtanen & Crocker, 1992), a similar approach to assess an industry's employer attractiveness that has been tested before (e.g. Gatewood et al., 1993; Highhouse, Lievens, & Sinar, 2003; Highhouse et al., 1999) and control variables. To use already existing and proven scales has the benefit that the scales and measures are internally consistent, which improves the reliability of the measures. Some slight changes in the internal consistency measures can be experienced, especially since the scale is slightly adapted to fit a specific social group and moreover translated into Swedish.

The industries are chosen with the following method. First, industries were selected following

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Dictionaries, 2013)

Turban and Cable's (2003) method to select companies with positive employer reputation. Company reputation was in their study operationalized using different published reputation magazines, e.g. *Business Week, Fortune, Working Mother* and *The 100 Best Companies to Work for in America*. Since the present study uses a sample mainly from Sweden and Denmark, I will use magazines that include a Scandinavian perspective on employer reputation. More specifically, the selected magazines are *Universum IDEAL™ Employer Rankings* (Universum, 2012a, 2012b)*, 4Potentials* (4Potentials, 2013) and *Great Place to Work* (which the Fortune ranking above is derived from) (Great Place to Work, 2013). Each employer that is present on a list received one point, which was then aggregated with other companies' points in the same industry. The definition of a company's industry was made using *MarketLine Advantage*, a database with vast information on companies, industries and countries. Industries were defined in two steps. First, companies were defined in the highest industry level, e.g. Retailing, Consumer Packaged Goods, Financial Services etc. Second, the companies were further defined in their second-level industry categorization, e.g. consultancy, software, IT services, educational services. See Appendix 7, Appendix 8, Appendix 9 and Appendix 10 for complete lists of the rankings, companies' industries, companies points and each industries' aggregated points, respectively.

First, the two most popular second-level industries were selected, which resulted in the consulting industries and the software industry with 49 and 40 occurrences respectively; second, an industry that was occurred an average number of times on the list to denote a "neutral" option, which resulted in the communication industry; and third, an industry that is distinctly different from other industries, namely the government sector, to expand the range of options.

3.6.1 Creating the Web-Survey

The quantitative data was collected using the online survey-tool *SurveyMonkey*, which facilitates easy to use tools for web-surveys. A web-survey was chosen as it facilitates the easiest and most convenient method to reach, collect and analyze larger information of data. To be able to analyze the data it was necessary to pay for the service, but once paid, it was possible to use the survey with no limitations.

To avoid that subjects infer what the 'usual' or 'normally accepted' answer is to questions that use some form of scale or ranking (Collins, 2003), the order of the alternatives were

randomized using an in-built feature in the web application. To randomize the alternatives also has the benefit that the respondents' individual likelihood to rank alternatives relative to the first alternative, is diminished on an aggregated level.

The survey also included a progress bar at the top, to make the respondent feel that progress were made. To motivate the respondents to continue the survey, the first two pages were light-weighted with few questions and relatively little time needed for the respondent to finish. This way, the respondent may feel that progress is done easily and completing the whole survey will not take too long.

3.6.2   Pilot Testing

The survey was pilot tested to a group of five people similar to the target group. Beside the validity check of the CSES-scale, as presented in section 3.5, the questions were checked to ensure that respondents are "able to understand the questions being asked, that questions are understood in the same way by all respondents, and that respondents are willing and able to answer such questions" (Collins, 2003, p. 231). The pilot testing showed that most questions were easily understood and that no questions were particularly sensitive for respondents to answer. The pilot testing showed that including a few 'easy' questions in the beginning of the survey the respondent could quickly answer would positively influence the attitude to completing the questionnaire.

3.6.3   Administering the Survey

After contacting possible respondents that fulfilled the population criteria (see section 3.2.2) and receiving agreement to send them a survey invitation, the survey-link was sent out to them with a unique, anonymous link together with a text (see Appendix 11) emphasizing the anonymity of the survey and thanks for participating. Invitations were sent at different points in time, as the number of respondents grew over time. The first invitation was sent out on July 4, 2013 to the first group of 73 respondents, the second invitation on July 10, 2013 to the second group of 47 respondents.

After each respondent had answered the survey, a thank-you e-mail was sent out to them with a general web link to share to friends to further increase the number of responses and increase the diversity of the sample. At the end of the survey period, a link was posted on the author's personal Facebook page to gather some extra responses together with an invitation on LinkedIn. Since many of the author's friends are in their early career, just graduated, or soon

to finish their studies, the author's friends on social media are similar in characteristics with the target population.

All survey links were closed for further responses on July 16, 2013. Even if the time span of the survey was relatively short, a 64% response rate was achieved, it is considered above the average response rate in organizational research which normally has response rates around 50-55% (Anseel et al., 2010; Baruch & Holtom, 2008; Baruch, 1999) and in line with similar studies (Highhouse et al., 1999).

3.6.4   Reminder by E-mail

Reminders were sent to the first group on July 12 to kindly ask if they had forgotten the survey with a reference to the first invitation and a direct link to the survey to facilitate an easier response possibility for the respondent. The email was sent out to 11 subjects. 67 of the 73 invited subjects in the first group responded to the survey. No reminder was sent to the second group, which had 38 responses of the 47 the invitation was sent to. A reminder to the second group could have been made to increase the number of participants to the survey, but since the number of responses were already satisfying, the decision was taken to close the survey and direct efforts to other prioritizations.

4   RESULTS

This chapter gives a presentation of the data from the empirical setting, without a further analysis which is presented in the next chapter. First, reliability and validity tests are presented followed by a presentation of the hypotheses testing.

4.1   Descriptive Statistics of the Sample

The sample in the study consists of 72 female respondents and 63 male respondents. Almost 62% of the subjects were between the age of 25 and 29 years old, 10% between 30 to 34 years and 21.6% between 20 to 24 years. Almost 50% were full-time employed with two thirds with 1 to 3 years of work experience. 83.5% had completed a university degree, with 29.5 % completed a bachelor, 27.3% a one-year master and 26.6% a two-year master. All the tables and sample descriptions are presented in Appendix 1.

4.2   Reliability Measures of the CSES-Scale – Cronbach's Alpha

Reliability analyses using Cronbach's (1951) alpha indicated that the adopted CSES scale is overall internally consistent, with an alpha of 0.74. The analysis revealed substantial alphas for the sub-scales (ranging from 0.76 to 0.88), except for the Membership sub-scale with an alpha of 0.44. As the factorial analysis will show, the Membership scale is not 100 percent correspondent to the Membership concept, but shares some of the variance with the Private sub-scale which may alter its internal consistency. As discussed by Cortina (1993), alpha decreases as a function of multidimensionality, that is, when a set of items answers to more than one factor. His result showed that an internal consistent scale with six items and an average inter-item correlation of $r = 0.3$ has alphas of 0.72 and 0.45 for one and two dimensions, respectively. As the number of items decrease, so does also the internal consistency value (Cortina, 1993). This implies that the Membership sub-scale with $r = 0.19$, lies within the reach of being internal consistent with an alpha of 0.44. The mean, standard deviation, mean inter-item and item-total correlation, and alpha is presented in **Table 3**.

Table 3: Reliability Analyses of the Collective Self-Esteem Scale (CSES)

Scale	Membership	Private	Public	Identity	Total
Scale Mean	17.53	16.24	16.55	11.97	62.28
Scale SD	2.19	3.56	2.76	4.07	8.17
Mean inter-item correlation	0.19	0.67	0.47	0.58	0.37

Mean item-total correlation	0.38	0.67	0.38	0.55	0.51
Cronbach's alpha	0.437	0.881	0.760	0.849	0.743
Standardized item alpha	0.477	0.889	0.777	0.849	0.748

4.3 Validity of the CSES-Scale - Factorial Analysis

Since the scale used by Luhtanen and Crocker (1992) is slightly adapted for this thesis and translated into Swedish, it is important to check if the scale measures the concepts it is intended to measure. The factor analysis using a varimax rotation specifies four factors with an Eigen-value greater than 1. Similar to the original CSES-scale, more than 63% of the variance is explained by these four factors as is seen in **Table 4**. The private, public and identity sub-scales all show strong support to measure their concepts, with factors ranging from 0.69 to 0.87, which is greater than for the original scale. The membership sub-scale, however, only accounts for less than 9% of the total variance in the total CSES-score. As is seen in **Table 5**, the membership sub-scale measures both on the private and the membership factors, with two questions loading on each factor. The questions loading on the membership factor range between 0.72 and 0.81, which indicates a good fit for these factors, and a weaker fit with 0.47 and 0.43 on the private factor. Similarities between the membership scale and the private scale was found in the original scale too, which can explain this overlapping of factor loadings. Despite this, all questions have significant loadings that constitute the total CSES-score, which is the main factor of interest for this study. If there was greater importance to the distinction between the individual sub-scales, the first and third question of the membership sub-scale would need to be re-written. While this is not the case and the questions show a very strong factor loadings overall, the scale is reliable. In fact, the scale in this study loads greater than the original scale by Luhtanen and Crocker (1992), which had loadings ranging between 0.54 to 0.83.

Table 4: Total variance explained of the total CSES-score by the CSES-subscales

	Initial Eigenvalues			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Private	4.64	28.98	28.98	4.6374	28.98	28.98
Identity	2.36	14.75	43.73	2.36	14.75	43.74
Public	1.81	11.28	55.01	1.81	11.28	55.02
Membership	1.32	8.25	63.26	1.32	8.25	63.263

Extraction Method: Principal Component Analysis.

Table 5: Factor Loadings for the CSES Items - Rotated Component Matrix[a]

Sub-scale and Item	Component			
	Pr	Id	Pu	Me
Membership				
I am a good representative of the company I work for.	.43			
I feel I do not have much to offer to the company[b].				.78
I am a cooperative participant in the company.	.47			
I often feel myself redundant in the company[b].				.72
Private				
I often wish I was not employed by the company[b].	.87			
Generally, I am happy to be employed by the company.	.81			
I often feel it is not worth to be employed by the company[b].	.85			
I feel good about working for the company I am employed by.	.78			
Public				
The company I work for are, generally, considered a good company by others.			.75	
Most people consider that the company I work for are less productive than other, competing companies[b].			.77	
Others respect the company I work for.			.84	
Others consider the company I am employed by an unattractive company to work for[b].			.69	
Identity				
To be employed by the company has very little to do of how I identify myself[b].		.79		
The company I work for is an important reflection of who I am.		.84		
In my perception of which type of person I am, the company I am employed by plays a less important role[b].		.79		
The company I am employed by is an important part of my self-image.		.84		

Note: Only factor loadings equal or greater than 0.3 are indicated. Pr = Private, Id = Identity, Pu = Public, Me = Membership
a. Rotation converged in 5 iterations.
b. Item was reversed for scoring.
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

4.4   Results of Regression Analyses – Testing the Hypotheses

Responses that did not include values for the independent and dependent variables were excluded from the analysis. This was either through only partially finished responses or where the respondent had missed to answer some of the questions. Eight cases included only partially answered questions, which had to be excluded from the analysis. In one case, the respondent had missed to answer one of the 16 CSES-questions. Since the sub-scales of the CSES-scale measure the same concepts within each sub-scale, an average of the other three questions in the sub-scale was calculated to replace the missing value. The variables total CSES-score and likelihood to apply to each of the industries: tobacco, software, consulting, government and communication industry, was checked for linearity and tested for any unusual cases. Scatter plots are presented in Appendix 5. A correlational analysis can show a significant relationship if only looking at the numbers, but when presented in a diagram the researcher may find that the data consist of several independent relationships. Hence, checking the data in a scatter diagram ensures that the data have a single linear relationship. A clear linear relationship between the data and no unusual cases were found.

The first hypothesis is tested with a t-test, which is presented below. The t-test supports hypothesis 1 and also distinguish that there is a different between gender in the attractiveness of the tobacco industry. The multiple regression for the likelihood to apply to the tobacco industry supports hypothesis hypothesis 4, but does not support hypotheses 2, 3 and 5. The details and implications of the findings are discussed in chapter 5. The regression analyses are presented below and are discussed in more details in the sub-sequent sections.

4.4.1   Industry Attractiveness Differences

In the beginning of this paper it was taken as an assumption that the tobacco industry, in general, suffers from a non-favorable employer attractiveness. This was initially derived from personal communications at a large tobacco company operated in Denmark, from personal experiences of opinions of the author's acquaintances and from a general, non-statistical *tour de table*. Thus, a proper analysis of the correctness in this assumption is necessary before any testing of the hypotheses are made. Derived from the question in the survey on the likelihood to apply to a specific industry, it is possible to analyze the *relative* employer attractiveness of the tobacco industry compared to the other industries listed in the question. Thus, if the mean of the likelihood to apply to the tobacco industry is significantly lower than to the other industries, it is possible to argue that the tobacco industry experiences a less-favored

employer attractiveness. The null-hypothesis and alternative hypothesis is formulated as follows:

$H1_0$: There is no difference in industry employer attractiveness between industries that facilitate harmful products to those that do not.

$H1_A$: The tobacco industry has a less favored industry employer attractiveness compared to neutral or high-status industries

The results of the mean for the likelihood to apply to each industry are presented in **Table 6**. The results show strong support to the hypothesis that the tobacco industry, overall, has a less favored employer attractiveness with negative mean differences of -1.00 to -1.51 compared to the other industries. As expected, the difference is greater for the industries Software and Consulting, which were selected as the most attractive industries to work in, than to the Communication industry that were selected as an "average" attractiveness industry. The least difference, which is still significantly large, is to the Government sector with a mean difference of -1.00. Also in line with expectations, the mean differences for the Software and Consulting industries are significantly positive to the average mean industry, further strengthening that these industries are attractive to work in. The Communication industry, which was supposed to function as an "average" industry, is significantly closer to the mean average than the Tobacco, Consulting and Software industries, but nevertheless not as close as the Government sector, which has a non-significant mean difference value of 0.2.

Table 6: Mean Difference in Likelihood to Apply for a job Relative to Industry Average

Industry	Software	Consulting	Government	Communication	Overall Industry Average
Tobacco	-1.39***	-1.51***	-1.00***	-1.28***	-1.02***
Software		-.10	.37*	.14	.36***
Consulting			.49**	.22	.46***
Government				-.28	-.02
Communication					-.24**

* Mean difference significant at p = 0.05

** Mean difference significant at p = 0.01

*** Mean difference significant at p < 0.001

Testing for the control variable gender shows that there is a significant difference between males and females in their likelihood to apply to the tobacco industry, with an average for females of 1.47 and an average for males of 2.36 on a scale from 1 to 5, where 1 is not likely at all to apply and five very likely to apply. The difference is significant at the $p < 0.001$ level. Interestingly, there is no other significant differences for the other industries in regards to gender. The output of the differences between males and females is presented in Appendix 3. Since males were more favorable towards the tobacco industry compared to females, it is necessary to test if the tobacco industry still experiences a less favored industry employer attractiveness for males. Further testing showed that males rated the tobacco industry 0.78 points less than the average industry at $p < 0.001$ level, which still supports hypothesis 1. It is now possible to use the assumption that the tobacco industry has a less favored industry attractiveness to apply to for both genders, with females rating the industry employer attractiveness even lower, which supports hypothesis 1.

The concepts of social categorization theory and social identity theory suggests, as discussed in the theory section and hypotheses development earlier in this paper, that individuals with a less salient social identity, and accordingly a lower CSES score, are more likely to apply to an industry with a lower attractiveness compared to those individuals with an average or high social identity saliency. This argumentation, which was developed into a hypothesis, will be discussed next.

4.4.2   Multiple Regressions and Likelihood to Apply to the Tobacco Industry

The multiple regression analysis presented in **Table 7** shows significant β-values for *Know someone at a tobacco company* and *gender*, but in contrast to expected result does not show any significant relationships for *Total CSES-score*, *Attended an event personally* or *Smoking*. Thus, hypothesis 4 is supported but not hypotheses 2, 3 and 5. Model 5 has a R-square of 0.197, which indicates that the model explains 19.7% of the total variance in likelihood to apply to the tobacco industry. The value is relatively low compared to other studies, where values as high as 0.7 for R-square has been found (Gatewood et al., 1993). The most plausible explanation for this is the form of the current study, where the aim is to analyze the relationship between individuals' social identity saliencies and *likelihood to apply to the tobacco industry*, where other studies have solely focused on finding the indicators of employer attractiveness. The single most variable that contribute to the explanation of the variance is, surprisingly, gender with a β-value of 0.253 at $p = 0.006$. The second strongest

contribution to explain the variance in *likelihood to apply to the tobacco industry* is if the respondent know someone in a tobacco company, with a β-value of 0.211 at p = 0.033. Both variables have a positive relationship with the independent variable, and make a significant contribution to the prediction of *likelihood to apply to the tobacco industry*.

Table 7: Multiple Regression Analysis - Likelihood to Apply to the Tobacco Industry

	Variables	Model 1 β	SE	Sig.	Model 2 β	SE	Sig.	Model 3 β	SE	Sig.	Model 4 β	SE	Sig.	Model 5 β	SE	Sig.
1	(Constant)		.877	.986		1.127	.991		1.106	.561		1.105	.602		1.107	.589
	Gender	.326	.221	**.000**	.326	.222	**.000**	.262	.221	**.003**	.269	.221	**.002**	.253	.228	**.006**
	Main occupation	.079	.131	.380	.079	.133	.385	.081	.128	.354	.082	.128	.349	.090	.129	.311
	Years of work experience	-.015	.088	.870	-.015	.089	.870	.046	.088	.608	.040	.088	.659	.043	.088	.636
	Highest achieved degree	.040	.103	.676	.040	.104	.680	.034	.101	.722	.026	.101	.787	.026	.101	.780
	Age	.028	.150	.772	.028	.151	.773	.060	.146	.522	.066	.146	.478	.076	.148	.423
2	Total CSES Scale Score				.000	.013	.997	.038	.013	.656	.031	.013	.714	.027	.013	.754
3	Know someone at a tobacco company							.274	.147	**.002**	.221	.164	**.024**	.211	.166	**.033**
4	Attended an event personally										.114	.397	.219	.120	.399	.198
5	Smoking													.062	.116	.474

Model									
R^2	.116			.116			.183			.193			.197
Adj. R^2	.081			.073			.137			.140			.137
F	3.280			2.711			3.937			3.650			3.289
p-value model	**.008**			**.017**			**.001**			**.001**			**.001**
n	131			133			133			131			133

β = Standardized Coefficient Beta

SE = Standard Error

Sig. = Signicance level, p-value

For the variables with a significant β a more detailed description is presented below.

Respondents that knew someone at a tobacco company were 47 and respondents that did not know anyone at a tobacco company were 84. The mean and standard deviation for the two groups are presented in **Table 8**. For respondents that knew someone at a tobacco company

the likelihood to apply to a tobacco company shows a mean of 2.36 compared to a mean of 1.61 for those that do not know anyone at a tobacco company. The mean of 2.36 is still below the average industry likelihood, which has a mean of 2.91, but is significantly higher for respondents that know someone compared to those that do not.

Table 8: Descriptive statistics of respondents that know someone at a tobacco company

Variable	Know someone at a tobacco company	N	Mean	Std. Deviation
Likelihood to apply to the Tobacco Industry	Yes	47	2.3617	1.52409
	No	84	1.6071	1.01812

To summarize, the variables gender and if respondents know someone in the tobacco industry positively influence the respondent's likelihood to apply to the tobacco industry. The implications and discussion of these findings are presented next.

5 DISCUSSION

The social identity approach suggests that individuals differ in how much they identify themselves with their social groups, such as their work organization. Individuals that show strong intergroup traits, what is called to have a high social collective self-esteem, identify themselves strongly with their social groups. Individuals with a low intergroup trait on the other hand, identifies very little with their social groups. On this basis, the current paper was written. It is argued that "people are relatively willing to identify with groups that seem to contribute to a positive sense of self, such as high-status or high-power groups" (Ellemers et al., 2004, p. 463). This implies that individuals seek to be member of social groups with positive reputations, such as organizations with a positive employer attractiveness, to enhance their self-esteem. Accordingly, firms with higher employer attractiveness attract more applicants (Turban & Cable, 2003). Therefore, the reasoning that individuals that identify more with their social groups – individuals with a high social collective self-esteem – would be less inclined to seek memberships in groups that have a negative reputation was made.

In contrast to expected results, it is shown that individuals' social identity saliencies are not a factor in determining the tobacco industry's employer attractiveness. Nevertheless, tobacco companies may still be interested in individuals' social identity saliencies since the industry is consistently "attacked" from the outside, i.e. from environmental groups, health care organizations and other friends and family. The social identity approach suggests that, when a group's identity is threatened from the outside, the stronger the individual's social identity saliency the better the individual is to "defend" the organization and stand up for the choices she makes. In an industry with a lot of external pressures, it is important to believe in the work the individual make in the organization. Tobacco companies and other industries may gain from hiring individuals with a high social identity saliency.

5.1 The Tobacco Industry Employer Attractiveness

The t-test presented in section 4.4.1 supports the hypothesis that the tobacco industry experiences a less favored employer attractiveness. The findings is in line with the hypothesis development but also with the general ranking lists that are used in this study. In the list of popular employees in Sweden and Denmark, tobacco companies are only mentioned three times out of 647 entries, and when they are mentioned, they are in the lower part of the lists (see Appendix 7 and Appendix 8 for a full representation of the employer rankings). The similarities between the tobacco industry's employer attractiveness found in this study and

found in current employer rankings adds substance to the sample's representativeness of the whole population.

The presence of the tobacco companies in the minds of possible applicants is very low, if not insignificant, but there are some findings worth noting. For example, men are more attracted to the tobacco industry as an employer compared to for women. The difference is significant with almost one point on the 5-point Likert scale (0.89 in difference). Social identity approach explains that individuals tend to seek membership in groups that is seen in a positive light from others, mainly to enhance their self-esteem (Ellemers et al., 2004). It is further shown that men, especially directly after their adolescence, have a higher self-esteem than women (Chubb et al., 1997; Keltikangas-Järvinen, 1990; Kling et al., 1999), which can explain that men seek membership in groups with a lower status, such as the tobacco industry, since they may be less inclined to seek memberships in groups mainly to enhance their own self-esteem.

5.2   Social Identity Saliency and Tobacco Industry Employer Attractiveness

Interestingly, the findings of the current paper shows no significance in individuals' social identity saliency and their likelihood to seek memberships in a group with a negative reputation, in this case where the tobacco industry constituted an example. Neither was there any difference in individuals' social identity saliencies and their likelihood to seek memberships in high-status groups, which was exampled by the consulting and software industry. The theory on social identity predicts that individuals seek membership in high-status groups partly to enhance their self-esteem and where both positive *and* negative intergroup comparisons affect the individual's self-esteem (Tajfel & Turner, 1979). The current findings does not support that individuals' social identity saliencies explain some part of an industry's attractiveness.

There may be many other factors that influence an individual's attractiveness towards an employer in a certain industry. One, for example, is the HR practices in the organization, which was discussed in the literature review. It has previously been shown that good HR practices positively influence the applicant's intention to accept a job offer, where undertaking proactive initiatives to attract talents are considered key to successfully attract individuals to the organization (Horwitz et al., 2003). One explanation to the less favored employer attractiveness can be found in one of the comments on the survey, where the respondent commented that "tobacco companies have not shown themselves a lot where I study, which means I have a low knowledge of what they can offer me" (respondent #54,

survey 2013-07-06). The low number of individuals that have attended a recruitment event at a tobacco company within the last two years, only 9 individuals out of 139, support this comment. While it may be that tobacco companies voluntarily try not to attract attention to themselves to avoid creating any unnecessary attention towards themselves that can lead to negative publicity, this action may be counter-productive when attracting talents.

One factor that is shown to influence an industry's employer attractiveness is if the respondent knows someone working in the industry, which will be discussed more in detail next.

5.3   Knowing Someone in a Tobacco Company and Tobacco Industry Employer Attractiveness

The findings support the hypothesis that knowing someone in a tobacco company positively correlates with the likelihood to apply to the tobacco industry. This is in line with previous research (Gatewood et al., 1993) where positive relationships were found between knowing someone at company X and response rate when an advertisement or a company name was shown. The current study expands the findings of Gatewood with colleagues to also show that if an individual knows someone at company X, in this case a tobacco company, the likelihood to apply to the *industry* in which company X operates in, is increased. Thus, knowing someone working for company X may not indicate only an increased response rate for company X, but an increased response rate for the industry as a whole. Further testing is necessary to test whether knowing someone for company X is a factor only for an increased likelihood to apply to company X, for the industry as a whole, or both.

Social identity approach suggests that individuals identify with other groups of individuals mainly to enhance their self-esteem and that positive or negative reflections from group membership influence the individual's self-esteem accordingly. If a friend of an individual is a member of a certain company, and that company has a negative reputation, the negative reputation will through the friend partly be reflected on the individual. Since the social identity approach argues that individuals consistently favor groups that are closer in connection to oneself (Tajfel & Turner, 1979), what has been called the ingroup, individuals that know someone in a group that has a negative reputation may consciously or sub-consciously favor the group with a negative reputation to enhance the self-esteem of oneself. That could be one explanation for the relationship between knowing someone in a tobacco company and the increased likelihood to apply to the tobacco industry, but the explanation

could also be that individuals that share the same values, beliefs and work preferences cluster together and therefore have the same view on specific group membership. This latter explanation is likely, but the question in the survey was asked if the respondent *know* someone, in a very broad sense of the word, that not only include friends but also more distant relations and acquaintances.

5.4   Attended an Event Personally and Tobacco Industry Employer Attractiveness

The attractiveness of the tobacco industry as an employer is not correlated with attending an event at a company in the industry. Before any further explanations are made, it is necessary to point out some important notes of the present study and the sample size of people that has attended an event at a tobacco company. The number of individuals that have within the last two years attended an event at a tobacco company were relatively small, merely nine respondents. The mean for the nine individuals' likelihood to apply to the tobacco industry is substantially larger, 3 on the Likert-scale compared to the average of 1.88, but is not significant. The significance may have been different, if a larger sample size was selected.

Assume there is a significant relationship between attending an event and an increased likelihood to apply to the tobacco industry, the findings are in line with some research and not in line with others. For example, Horwitz, Heng and Quasi (2003) show that planned recruitment visits are a weak means to attract individuals, while Kanar Collins and Bell (2008) show that personal communication, e.g. through recruitment events, were effective for changing unfavorable employer reputations. The two studies does not measure exactly the same thing, where the latter action is undertaken to improve employer reputation and the former to attract talents, but the two end means are connected. It is known that a positive employer reputation is a direct link to attracting talents (Turban & Cable, 2003; Turban et al., 1998). The current study tends to support the notion that attending an event at a company also increases the likelihood to apply to the industry, which is defined as the industry's employer attractiveness. It is very likely that individuals that do attend a recruitment event already have a positive view of the employer, otherwise they would not put the effort and time into attending the event, but whether the event changes their perception of the employer or not can not be told from this study, which has been discussed elsewhere (for a review, see Barber, 1998).

5.5   Smoking and Tobacco Industry Employer Attractiveness

It was predicted that individuals that were smokers were more likely to apply to the tobacco

industry as an industry to work in, but this hypothesis could not be supported. One factor that is explained in the theory section to influence an employer's attractiveness is its product images of the products the company offers (Highhouse et al., 1999). Highhouse et al. (1999) found significant positive correlations of a firm's product images and its attractiveness as employer. In the current paper, a similar approach was made to analyze if an individual's perception of tobacco products, in this case denoted by cigarettes, could influence the likelihood to apply to the tobacco industry. For simplicity, it was assumed that people that smoke, regularly or occasionally, had a more positive image towards cigarettes as a product compared to those that do not smoke. This argumentation may have many flaws, such as that there is not necessarily any relationship between an individual's decision to smoke and the individual's opinions of the product image. There could also be many other different reasons of why people smoke, for example to socialize with others, addictive to cigarettes from a teenager age, unaware of the hazards of smoking or to enhance their self-image. No matter the reason, smoking is a part of an individual's identity and the product images cigarettes have inarguably reflects on the individual. As noted by Celani and Singh (2011), the greater the extent the individual identifies itself with a social group, the more likely the individual is to infer positive messages about that group. Since smoking is a part of an individual's identity, people that smoke would infer more positive messages and images of cigarettes as a product. The individual would for this reason also naturally infer more positive message of the organizations behind the cigarettes, the tobacco companies.

The findings of the current paper does not support this argumentation, with a non-significant mean difference in likelihood to apply to the tobacco industry between smokers and non-smokers. An important note to make on these findings are that the they are only valid for people that smoke on an occasionally basis. The findings does, however, show some tendencies that smokers are more likely to apply to the tobacco industry, with a slightly higher, yet non-significant, mean for smokers compared to non-smokers.

The social identity approach nevertheless suggests that individuals tend to favor a group they are a member of to enhance their self-esteem (Tajfel et al., 1971; Tajfel & Turner, 1979). This would imply that they tend to favor the group 'smokers', rather than the tobacco industry, which the initial hypothesis argued. It is a distinct difference between the product brands and the tobacco companies, in the sense that an individual may defend a brand they use, e.g. Blend, Marlboro etc., but few individuals know which tobacco company that produce each

cigarette brand.

5.6 Implications for managers

In today's "War for Talent" (Chambers, Foulon, Handfield-Jones, Hankin, & Michaels III, 1998), it is necessary for the organization to know who is naturally attracted to the organization and who is not, not to spend efforts on prospects difficult to attract. This argument follows the theory on person-organization fit (Kristof, 1996; Kristof-Brown et al., 2005; O'Reilly et al., 1991), where scholars advocate to hire individuals that fit the organization and not only the job position. The present study helps managers and researches to rule out alternative factors that may influence the attractiveness of the employer and which individuals that are naturally attracted to the organization. The present study does not, however, make any indications on which social identity saliency that fit which organization, but only which social identity saliency that is attracted to, or in this case the lack of any relationship, to the organization. When managers and researchers try to de-code the factors of employer attractiveness, this study shows that social identity saliency is not one of the factors of employer attractiveness.

Nevertheless, tobacco companies may still be interested in individuals' social identity saliencies, since the industry is consistently "attacked" from the outside, i.e. from environmental groups, health care organizations and other friends and family. Social identity approach suggests that, when a group's identity is threatened from the outside, the stronger the individual's social identity saliency the better the individual is to "defend" the organization and stand up for the decision to work there. In an industry with a lot of external pressures, it is important to believe in the work the individual makes in the organization. Therefore, tobacco companies and other industries may gain from hiring individuals with a high social identity saliency that have a high self-esteem.

In the case of gender differences in the attractiveness of the tobacco industry, another interesting dilemma occurs for managers. This study clearly shows that men are more attracted to the tobacco industry as an employer compared to women. Does this mean that tobacco companies should only target men in their recruitment campaigns to minimize the cost of recruiting and improve profits? Of course not. An organization is in need of a diverse work place, where both men and women contribute with their respective gender specific qualities. Managers at tobacco companies need instead ask themselves why women are less likely to apply to the tobacco industry and which changes that can be undertaken to improve

the situation. The overall less favored employer attractiveness is also a cause for self-reflection and leaves opportunities for improvement.

As suggested by Horwitz, Heng and Quazi (2003), a bundle of practices, including offer a high competitive pay package, proactive recruitment, selection initiatives and internal staff development, improved the attractiveness of the employer. The least effective strategies in their study to attract talents included online web recruitment, advertised jobs, use of headhunters, recruitment affairs and planned recruitment visits. Not only does the company need to undertake and offer these practices, but it also needs to communicate it. As noted by the authors, "potential job applicants may not consider visiting a company's website unless they are made aware by some other means of a potential vacancy" (2003, pp. 31–32). This may be one of the explanations, but not excluded to, why the tobacco industry experiences a low employer attractiveness. One respondent of the survey in the current study stated just this, that "tobacco companies have not shown themselves a lot where I study, which means I have a low knowledge of what they can offer me" (respondent #54, survey 2013-07-06).

A less favored employer attractiveness is possible to change through corrective actions. Kanar, Collins and Bell (2008) showed that high information practices, i.e. personal communication with a recruiter, is a very effective way of changing a less favored employer attractiveness. The less favored employer attractiveness the tobacco industry experience in this study may be due to the tobacco companies non-presence among the subjects, where only 9 individuals had attended an event at a tobacco company. The findings show some trend that individuals that have attended an event, and thus have had personal contact with a recruiter, are more inclined to apply to the tobacco industry. The results are not significant, but that my rather be to the low number of subjects than to the numbers being misleading.

Finally, individuals that know someone working at a tobacco company are more likely to apply to the tobacco industry themselves. People that know someone working at a tobacco company may have more information on what a job entails, and accordingly more information of how it is to work for a tobacco company. For organizations and HR managers, this could be an indication that there is a lack of knowledge in the applicant pool about how it is to work for tobacco companies. The findings is in line with other research that has shown that individuals recruited through employer referrals, hence know someone in the company, have lower turnover (Rynes, 1991), higher organizational commitment (Latham & Leddy, 1987) and higher employer performance (Breaugh & Mann, 1984). For tobacco companies,

recruiting via employee referrals have the positive effect that the recruited are both more likely to apply for the position and have the above mentioned benefits.

The effect HR practices have on a firm's performance is well documented in academic research (e.g. Bowen & Ostroff, 2004; Wright, Gardner, Moynihan, & Allen, 2005; Youndt, Snell, Dean Jr., & Lepak, 1996) and where attracting applicants is a major and important role of the HR department. For managers to know who is attracted to the firm is equally important as attracting individuals in the first place. It does not need to say that firms that do not know their applicant group will waste efforts on targeting a too wide or too narrow applicant pool. The current paper helps managers in the tobacco industry to know who is most likely to apply to a position in the industry. The current paper also helps managers knowing which parameters that do not differ between the different applicant pools, that there is a difference among gender and employer attractiveness and that social identity is not a factor in the war for talent to attract potential applicants.

5.7   Limitations and Suggestions for Future Research

There are many possibilities for future research based on the current study. First, to undertake the same study in a few weeks up to a few months time-span would test the study's test-retest reliability and could add extra support to the present findings. One of the current paper's limitations is in its sample selection, where most of the samples were acquaintances of the author, which may bias the results. The sample is mostly limited to people with a finished or soon to be finished higher education degree. Other studies could investigate if the same results are true for different groups of people, for example those that are less educated. The question of which sample to choose is in most cases a question of convenience, need and time available. Since most tobacco companies are in need, as any other company, of talents with an education for their most important positions, it made sense in this study to focus on the group with a higher education. Other studies that study the relationship between employer attractiveness and individuals' social identity saliency may have different needs and target groups, which the author(s) need to take into consideration.

Another limitation of the current study is in its lack of regular smokers among the respondents. It would be interesting to see if there are any difference in the means of the likelihood to apply to the tobacco industry among regular smokers and non-smokers. Suggestion for this kind of research could be to analyze if there is any difference in the number of years individuals have smoked and their likelihood to apply to the tobacco

industry.

5.8   Recommendations

Based on the current findings, organizations in the tobacco industry can benefit from internally promoting employee referrals for new positions. Since individuals that know someone working at a tobacco company are more likely to apply for a position, this could decrease the number of targeted applicants that do not seek the position. Moreover, previous research suggests that employee referrals have lower turnover and a longer job survival rate (see Zottoli & Wanous, 2000 for a review).

As comments said in the survey of the current paper and what could be derived from the findings, the knowledge in the applicant group about tobacco companies as an employer leaves room for improvements. Tobacco companies as employers are still relatively unknown to students and recently graduated, with only a fraction of the respondents that have attended an event at a tobacco company. Without awareness of the tobacco companies as employers, the companies will have it difficult to attract talented applicants for their positions.

The current findings also show a difference in attractiveness depending on gender. Tobacco companies need to ask themselves why women are less attracted to the tobacco industry and what can be done in order to change this inequality. The discussion presented above give some recommendations on actions to undertake to improve the attractiveness generally, but specific actions that target women needs to be further investigated.

Despite that the current study does not show that social identity saliency influence employer attractiveness for any industry, tobacco companies may still be interested to target individuals that have a strong self-esteem and salient social identity, to defend towards the outgroup the choice the individual makes in working for a tobacco company.

6   CONCLUSION

The purpose of this study was to examine some of the factors that influence individuals' likelihood to apply to certain industries and if individuals' social identity saliency can predict the likelihood to apply to an industry with a less favored employer attractiveness.

The findings support that individuals that know someone at a tobacco company are more likely to apply to the tobacco industry, but does not support the prediction that individuals' social identity saliencies is a factor in the choice to apply to any of the mentioned industries in the study. The findings also show a difference between men and women in their attractiveness to the tobacco industry, with men more attracted to the industry.

The present study also links a gap in the literature, where much of the research on recruitment and employer attractiveness has focused on students and left out other applicant groups. The findings show no difference between students and individuals employed up to five years, which indicates that previous research on students may also be applicable to young professionals.

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8   APPENDICES

Appendix 1   Descriptive Statistics for the Sample

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	72	51.8	53.3	53.3
Male	63	45.3	46.7	100.0
Total	135	97.1	100.0	
Choose not to disclose	4	2.9		
Total	139	100.0		

Age interval

	Frequency	Percent	Valid Percent	Cumulative Percent
20-24 years	30	21.6	21.6	21.6
25-29 years	86	61.9	61.9	83.5
30-34 years	14	10.1	10.1	93.5
35-39 years	2	1.4	1.4	95.0
40 years and above	2	1.4	1.4	96.4
20 years and below	5	3.6	3.6	100.0
Total	139	100.0	100.0	

Main occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Part-time employed	10	7.2	7.2	7.2
Self-employed	5	3.6	3.6	10.8
Full-time employed	67	48.2	48.2	59.0
Student	53	38.1	38.1	97.1
Unemployed, actively looking	3	2.2	2.2	99.3
Unemployed, not actively looking	1	.7	.7	100.0
Total	139	100.0	100.0	

Years of work experience

	Frequency	Percent	Valid Percent	Cumulative Percent
0-1 year	30	21.6	21.6	21.6
1-3 years	65	46.8	46.8	68.3
3-5 years	15	10.8	10.8	79.1
5-8 years	9	6.5	6.5	85.6
No work experience	19	13.7	13.7	99.3
More than 8 years	1	.7	.7	100.0
Total	139	100.0	100.0	

Highest achieved degree

	Frequency	Percent	Valid Percent	Cumulative Percent
Specific occupation education	3	2.2	2.2	2.2
Secondary school	1	.7	.7	2.9
Upper secondary school	19	13.7	13.7	16.5
Bachelor	41	29.5	29.5	46.0
Master, 1 year	38	27.3	27.3	73.4
Master, 2 years	37	26.6	26.6	100.0
Total	139	100.0	100.0	

Nationality

	Frequency	Percent	Valid Percent	Cumulative Percent
Other	3	2.2	2.2	2.2
Danish	1	.7	.7	2.9
Norwegian	9	6.5	6.5	9.4
Swedish	126	90.6	90.6	100.0
Total	139	100.0	100.0	

Appendix 2   Descriptive Statistics for Interval Scales

		Membership	Private	Public	Identity	Total CSES
N	Valid	139	139	139	139	139
	Missing	0	0	0	0	0
Mean		17.5324	16.2422	16.5540	11.9568	62.2854
Std. Deviation		2.18792	3.56102	2.75621	4.06981	8.16857
Range		8	13	13	16	41
Minimum		12	7	7	4	39
Maximum		20	20	20	20	80

		Tobacco	Software	Consulting	Government	Commun-ication	Total Average
N	Valid	137	136	135	138	134	139
	Missing	2	3	4	1	5	0
Mean		1.88	3.29	3.40	2.89	3.19	2.91
Std. Deviation		1.28	1.45	1.33	1.45	1.26	.87
Range		4	4	4	4	4	4
Minimum		1	1	1	1	1	1
Maximum		5	5	5	5	5	5

Appendix 3   Gender Differences in Likelihood to Apply to Specific Industries

Likelihood to apply to	Gender	N	Mean	Mean Difference
Tobacco Industry	Female	72	1.472	
	Male	61	2.361	-.888*
Software industry	Female	72	3.097	
	Male	60	3.533	-.436
Consulting industry	Female	69	3.188	
	Male	62	3.613	-.425
Government sector	Female	71	3.042	
	Male	63	2.635	.407
Communication industry	Female	71	3.028	
	Male	59	3.373	-.345

* Significant at the $p < 0.001$ level

Appendix 4   Frequencies over respondents smoking

Are you smoking?	Frequency	Percent	Cumulative Percent
No	112	80.6	80.6
Yes, regularly	1	.7	81.3
Yes, occasionally in social environments	17	12.2	93.5
Yes, occasionally in other situations	9	6.5	100.0
Total	139	100.0	

Are you smoking?	Frequency	Percent	Cumulative Percent
No	112	80.6	80.6
Yes, regularly	1	.7	81.3
Yes, occasionally in social environments	17	12.2	93.5
Yes, occassionaly in other situations	9	6.5	100.0
Total	139	100.0	

Appendix 5   Scatter Diagram over Independent and Dependent Variables

70
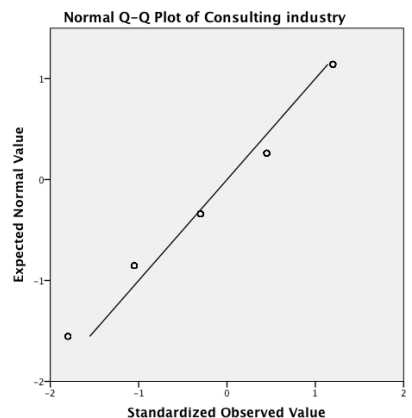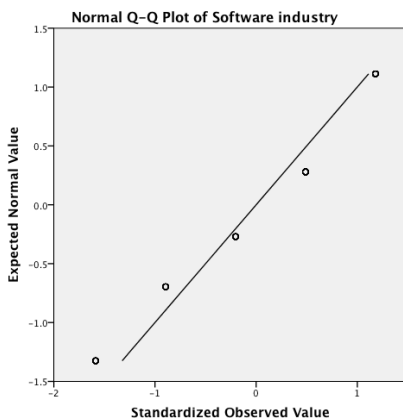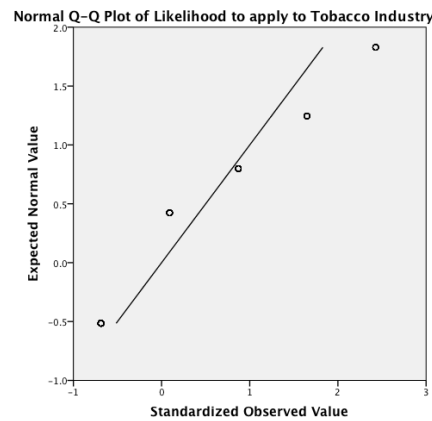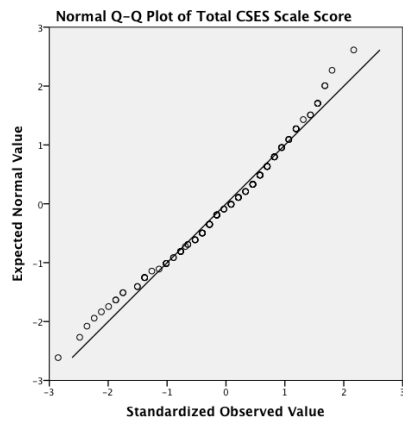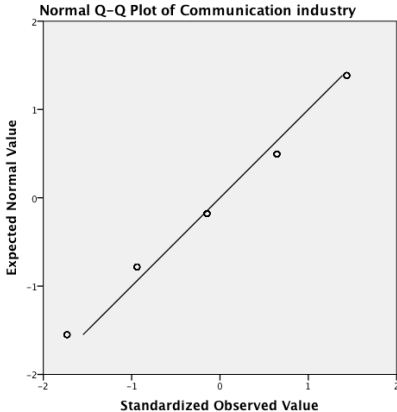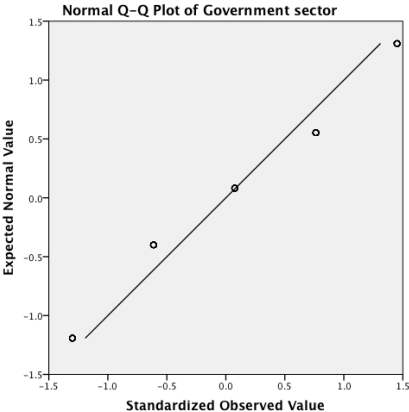
Appendix 6   Questionnaire Translated into English

Welcome!

Hello,

Thank you for taking the time to answer my survey. It means a lot for me.

All responses are completely anonymous and individual responses is only visible on an aggregated level. The survey is a part of my, Niklas Johansson's, master thesis at Copenhagen Business School.

Background information

We are all members of social groups, e.g. those based on our friendships, our family or our work organization, and we all have different relations towards those groups. This survey is about the individual's relation to a specific social group, namely our work place.

Click next to start the survey!

Question	Site Title	Question	Answer Alternatives
1	Introductory Information	Which is your main occupation?	Student
			Part-time employed
			Full-time employed
			Self-employed
			Unemployed, actively looking
			Unemployed, not actively looking
			Pensioner, long-term sick or away from work for other reason (e.g. on parental leave)
			Other, namely:
2		How many years of work experience as a full-time employed (100%) do you have?	I have not been full-time employed
			From 0 up to 1 year
			From 1 up to 3 years
			From 3 up to 5 years
			From 5 up to 8 years
			More than 8 years of work experience
3	Your relation towards the company	I am a good representative of the company I work for.	5-point Likert - Agree version*
		I feel I do not have much to offer to the company[b].	5-point Likert - Agree version*
		I am a cooperative participant in the company.	5-point Likert - Agree version*
		I often feel myself redundant in the company[b].	5-point Likert - Agree version*
4	Your private attitude towards the company	I often wish I was not employed by the company[b].	5-point Likert - Agree version*

Question	Site Title	Question	Answer Alternatives
		Generally, I am happy to be employed by the company.	5-point Likert - Agree version*
		I often feel it is not worth to be employed by the company[b].	5-point Likert - Agree version*
		I feel good about working for the company I am employed by.	5-point Likert - Agree version*
5	How the company is perceived by others	The company I work for are, generally, considered a good company by others.	5-point Likert - Agree version*
		Most people consider that the company I work for are less productive than other, competing companies[b].	5-point Likert - Agree version*
		Others respect the company I work for.	5-point Likert - Agree version*
		Others consider the company I am employed by an unattractive company to work for[b].	5-point Likert - Agree version*
6	The company's importance to your identity	To be employed by the company has very little to do of how I identify myself[b].	5-point Likert - Agree version*
		The company I work for is an important reflection of who I am.	5-point Likert - Agree version*
		In my perception of which type of person I am, the company I am employed by plays a less important role[b].	5-point Likert - Agree version*
		The company I am employed by is an important part of my self-image.	5-point Likert - Agree version*
7	Imagine that you are looking for a new job. You have found a job	For a company in the tobacco industry, e.g. Japan Tobacco, British American Tobacco?	5-point Likert - Likely version**

Question	Site Title	Question	Answer Alternatives
	position with responsibilites and work task that you are generally positive towards. The position is relevant for your education and experiences. How big is the likelihood that your apply for the position to a company in the following industries:	For a company in the software industry, e.g. Microsoft, Google?	5-point Likert - Likely version**
		For a company in the consulting industry, e.g. McKinsey & Company, Bain & Company?	5-point Likert - Likely version**
		For a company in the public sector, e.g. Stockholms Stad, Regeringskansliet?	5-point Likert - Likely version**
		For a company in the communication industry, e.g. Ericsson, Tele2?	5-point Likert - Likely version**
8	This question only regards the companies below: British American Tobacco Japan Tobacco Philip Morris International Scandinavian Tobacco Group Swedish Match	Mark the alternatives that corresponds with your situation.	I know someone that has worked/is working for any of the above mentioned companies During the lasty two years I have attended an event, e.g. a recruitment event, for any of the above mentioned companies. I work myself/have worked for any of the above mentioned companies. None of the above alternatives I know someone or has attended an event for another tobacco company, namely:

Question	Site Title	Question	Answer Alternatives
9	On the previous question you stated that you either knew someone, work yourself or have attended an event at a tobacco company. Please specify your answer here.	I know someone that has worked/is working at:	British American Tobacco Japan Tobacco Philip Morris International Scandinavian Tobacco Group Swedish Match Other company None of the above Please specify which other company here.
10		I have during the last two years attended an event at:	British American Tobacco Japan Tobacco Philip Morris International Scandinavian Tobacco Group Swedish Match Other tobacco company None of the above alternatives. Please specify which other tobacco company here:
11		I currently work for one of the above mentioned companies	Yes No, but for another tobacco company. No

Question	Site Title	Question	Answer Alternatives
12	Imagine that you are looking for a new job. You have found a job position with responsibilites and work task that you are generally positive towards. The position is relevant for your education and experiences. How big is the probability that you seek the position for each respective company?	British American Tobacco Japan Tobacco Philip Morris International Scandinavian Tobacco Group Swedish Match	5-point Likert - Likely version** 5-point Likert - Likely version** 5-point Likert - Likely version** 5-point Likert - Likely version** 5-point Likert - Likely version**
13	Finally some brief information about you and your background.	Do you smoke?	No Yes, regularly Yes, but only in social context (e.g. on parties, at the bar etc.) Yes, sporadically in other contexts
14		Which is your highest finished degree?	Secondary school Upper secondary school Specific occupational education Bachelor degree Master degree, 1 year Master degree, 2 years PhD or higher
15		In which age interval are you?	Below 20 years 20-24 years 25-29 years

Question	Site Title	Question	Answer Alternatives
			30-34 years
			35-39 years
			40 years and above
16		Are you male or female?	Female
			Male
			Prefer not to answer
17		Which nationality do you have?	Swedish
			Norwegian
			Danish
			Other
18		Do you have any other comments regarding the survey, or if it is anything you feel you did not get the possibility to answer, please add your comment here.	
			Free comment

* 5-point Likert Agree-version includes the answer alternatives: Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly Agree

** 5-point Likert Likely-version as the numbers one to five to denote the likelihood, where number one equals "Very unlikely" and number five "Very Likely". A sixth "Don't know" option is provided to capture answers where they respondent does not need to guess if she has no experience of the question asked.

[b.] Item score was reversed for scoring.

Appendix 7   Company rankings - 4Potential, Great place to work, Universum Denmark

Rank	Universum Global - Denmark		4Potential	Great Place to Work
	Business	Engineering/Natural Science		
1	Novo Nordisk	Novo Nordisk	H&M	Microsoft
2	Lego	Novozymes	Google	Hilti
3	Carlsberg	Rambøll	McKinsey & Company	Enfo Sweden
4	A.P. Møller - Mærsk	Cowi	Boston Consulting Group	Adecco
5	Google	Lego	IKEA	IFS
6	DONG Energy	DONG Energy	Accenture	McDonald's
7	Novozymes	Miljøministeriet	Ericsson	American Express
8	Udenrigsministeriet	Teknologisk Institut	ArlaFoods	Nordic Choice Hotels
9	Arla Foods	H. Lundbeck	Business Sweden	W.L. Gore & Associates Scandinavia
10	Microsoft	Leo Pharma	Investor	Centiro Solutions
11	McKinsey & Company	Københavns Universitet	Oriflame	Key Solutions AB
12	Siemens	Siemens	Tele2	Tenant & Partner
13	Rambøll	Chr. Hansen	Bain & Co	Blocket
14	The Boston Consulting Group	Statens Serum Institut	Procter & Gamble	SAS Institute
15	Nordea	DTU	SEB	Piteå Kommun Städenheten
16	Danske Bank-koncernen	Grontmij	Unilever	Frontit
17	Deloitte	Niras	Spotify	Newsec
18	Bang & Olufsen	A.P. Møller - Mærsk	ABB	Cinnober
19	Vestas	Grundfos	Bonnier	Framtiden
20	Nestlé	Google	Schibsted	DGC
21	ATP	Carlsberg	Lantmännen	EMC
22	Danfoss	Haldor Topsøe	Electrolux	byBrick
23	Grundfos	Danisco	ICA	Affecto
24	PA Consulting Group	Danfoss	Tetra Pak	
25	Dansk Industri	Københavns		

Rank	Business	Universum Global - Denmark Engineering/Natural Science	4Potential	Great Place to Work
26	Accenture	Kommune ALK-Abello		
27	ECCO	Radiometer Medical		
28	Velux	Coloplast		
29	Coloplast	Vestas		
30	Danmarks Nationalbank	Arla Foods		
31	Nykredit	Ferring Pharmaceuticals		
32	Finansministeriet	FLSmidth		
33	Procter & Gamble	Bang & Olufsen		
34	IKEA	Århus kommune		
35	L'Oréal	Energinet.dk		
36	PwC	Alectia		
37	Oticon	Udenrigsministeriet		
38	KPMG	Orbicon		
39	Egmont	Force Technology		
40	FLSmidth	Nycomed		
41	Økonomi- og Indenrigsministeriet	NNE Pharmaplan		
42	Jyske Bank	Terma		
43	KMD	IKEA		
44	Unilever	Banedanmark		
45	Københavns Kommune	Velux		
46	H. Lundbeck	Genmab		
47	Chr. Hansen	Rockwool		
48	Quartz+Co.	Vattenfall		
49	Tivoli	Biogen Idec		
50	IBM	NNIT		
51	Cowi	McKinsey & Company		
52	Dansk Supermarked	Forsvaret		
53	Rockwool	Oticon		
54	Saxo Bank	Man Diesel		
55	Danisco	Københavns Energi		
56	Københavns Universitet	Atkins		
57	Leo Pharma	GN Store Nord		

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		Universum Global - Denmark		
Rank	Business	Engineering/Natural Science	4Potential	Great Place to Work
58	SAS	IBM		
59	Coop Danmark	The Boston Consulting Group		
60	Energinet.dk	LM Wind Power		
61	Miljøministeriet	Microsoft		
62	Århus kommune	Nestlé		
63	Tryg	BASF		
64	Bain & Company	Tivoli		
65	NNIT	Accenture		
66	SKAT	Philips		
67	Handelsbanken	Shell		
68	Forsvaret	Dansk Industri		
69	PFA	MT Højgaard		
70	TDC	Nokia		
71	Pressalit	ABB		
72	SAS Institute	Foss		
73	Niras	Nykredit		
74	Vattenfall	IO Interactive		
75	Ernst & Young	KMD		
76	SAP	Unilever		
77	Shell	Schneider Electric		
78	Haldor Topsøe	Statoil		
79	IO Interactive	Cheminova		
80	Sydbank	DSB		
81	Terma	E. Pihl & Søn		
82	LM Wind Power	NCC		
83	Microsoft Development Center Copenhagen	SAS Institute		
84	SimCorp	Danish Crown		
85	British American Tobacco	L'Oréal		
86	Philips	Nordea		
87	ISS	Danske Bank-koncernen		
88	ALK-Abello	Microsoft Development Center Copenhagen		
89	Københavns Energi	Systematic		

Universum Global - Denmark

Rank	Business	Engineering/Natural Science	4Potential	Great Place to Work
90	Teknologisk Institut	Pressalit		
91	Atea	Sony Mobile		
92	Mars	ATP		
93	GN Store Nord	Dansk Supermarked		
94	Nets	ECCO		
95	Jysk	TDC		
96	SEB	Bain & Company		
97	Danish Crown	Ericsson		
98	ABB	Netcompany		
99	Grontmij	PFA		
100	Telenor	Procter & Gamble		

Appendix 8   Company rankings - Universum Sweden

Universum Global - Sweden

Rank	Business	Engineering	IT	Humanities/Liberal Arts
1	Hennes & Mauritz	Google	Google	Regeringskansliet/alla departement
2	IKEA	Volvo Group	Apple	Utrikesdepartementet
3	Google	IKEA	Microsoft	Sida
4	McKinsey & Company	ABB	Spotify	Polisen
5	Exportrådet	ÅF	DICE	IKEA
6	Nike	Ericsson	IKEA	EU-kommissionen
7	Spotify	SWECO	Ericsson	Sveriges Riksdag
8	The Boston Consulting Group	Scania	Volvo IT	Försvarsmakten
9	SEB	Spotify	Samsung	Stockholms stad
10	Handelsbanken	Tetra Pak	Hennes & Mauritz	Sveriges Television
11	ICA	Vattenfall	Sveriges Television	Hennes & Mauritz
12	Utrikesdepartementet	Volvo Car Corporation	IBM	Bonnierförlagen
13	adidas	Hennes & Mauritz	Cisco	Göteborgs Stad

	Universum Global - Sweden			
Rank	Business	Engineering	IT	Humanities/Liberal Arts
14	Volvo Group	McKinsey & Company	HiQ	Stockholms universitet
15	L'Oréal	Skanska	Försvarsmakten	Exportrådet
16	Investor	Siemens	Know IT	TV4
17	PwC	Bombardier	Swedbank	Skatteverket
18	Sida	Atlas Copco	Massive Entertainment	Arbetsgivarverket
19	Coca-Cola Enterprise	SKF	SEB	Göteborgs universitet
20	Sveriges Riksbank	Exportrådet	Saab	Trafikverket
21	Fritidsresor	WSP	Logica	Bonnier
22	Swedbank	Electrolux	TV4	Lunds universitet
23	Finansdepartementet	Microsoft	Siemens	Umeå universitet
24	Goldman Sachs	ICA	Capgemini	Malmö Stad
25	Unilever	Saab	Sony Mobile	ICA
26	Regeringskansliet/alla departement	Accenture	Handelsbanken	SCB, Statistiska Centralbyrån
27	Procter & Gamble	NCC	Starbreeze	Fritidsresor
28	Arla Foods	SCA	Svenska Spel	ABB
29	Nordea	Tyréns	Vattenfall	Uppsala universitet
30	Ernst & Young	Nike	Skatteverket	Manpower
31	Skatteverket	AstraZeneca	Dell	Försäkringskassan
32	Åhléns	Ramböll	Nordea	Ericsson
33	TV4	Samsung	ÅF	Lernia
34	Volvo Car Corporation	The Boston Consulting Group	HP	Microsoft
35	Bonnier	GE Healthcare	QlikTech	Volvo Group
36	J.P. Morgan	SP Sveriges Tekniska Forskningsinstitut	Accenture	SAS
37	Tetra Pak	E.ON	Nokia	Arbetsförmedlingen
38	Lantmännen	Sandvik	Oracle	Åhléns
39	Nestlé	Arla Foods	Sveriges Radio	Solna stad
40	Pernod Ricard	Försvarsmakten	ABB	Proffice
41	Finansinspektionen	Husqvarna	Tele2	Lunds Kommun
42	Morgan Stanley	Peab	Regeringskansliet/alla departement	Helsingborgs Stad
43	Länsförsäkringar	DICE	Sogeti	Volvo Car

		Universum Global - Sweden		
Rank	Business	Engineering	IT	Humanities/Liberal Arts
44	Modern Times Group, MTG	Alfa Laval	Avalanche Studios	Corporation Örebro Kommun
45	Kraft Foods	Trafikverket	Göteborgs Stad	Adecco
46	EU-kommissionen	IBM	ICA	Systembolaget
47	Accenture	Göteborgs Stad	Trafikverket	Försvarshögskolan
48	Bain & Company	Regeringskansliet/alla departement	Scania	Södertörns högskola
49	Microsoft	FOI	Tieto	Vattenfall
50	ABB	Combitech	Telenor	Länsförsäkringar
51	Vattenfall	Stockholms stad	Bonnier	Coca-Cola Enterprise
52	Deloitte	EU-kommissionen	Telia (Part of TeliaSonera)	Malmö högskola
53	Sveriges Television	Semcon	FMV	AstraZeneca
54	Bonnierförlagen	Maersk	ICA Banken	VING
55	VING	Epsilon	Sigma	Arla Foods
56	Carlsberg Sverige	Procter & Gamble	FOI	Modern Times Group, MTG
57	Ericsson	Handelsbanken	Epsilon	Sandvik
58	SAS	AkzoNobel	Swedish Match	Sveriges Riksbank
59	KPMG	Lantmännen	SAP	Carlsberg Sverige
60	Danske Bank	Sony Mobile	SJ	Karlstads Kommun
61	Lindex	Capgemini	Tobii	Linköpings universitet
62	Schibsted	White Arkitekter	Klarna	Handelsbanken
63	Samsung	RUAG Space	Länsförsäkringar	Scandic Hotels
64	Electrolux	Bain & Company	NASDAQ OMX	Poolia
65	Riksrevisionen	Unilever	SAS Institute	Almi Företagspartner
66	IBM	Fortum	Tetra Pak	Swedbank
67	Sveriges Riksdag	Statoil	Sandvik	Örebro universitet
68	EF	XDIN	E.ON	SEB
69	SCA	BAE Systems	Semcon	Scania
70	MQ	Grontmij	Connecta	Västerås Kommun
71	Sandvik	Coca-Cola Enterprise	Cybercom	Norrköpings Kommun
72	SKF	LKAB	IDG (International Data Group)	Linköpings Kommun

| | Universum Global - Sweden | | | |
Rank	Business	Engineering	IT	Humanities/Liberal Arts
73	Atlas Copco	Svenska Kraftnät	Posten	Röda Korstets högskola
74	Avanza	JM	Clas Ohlson	Accenture
75	Johnson & Johnson	SSAB	Sveriges Riksbank	SKF
76	Skanska	Alstom	SBAB	Lindex
77	Axfood	Vinnova	Betsson	Uppsala Kommun
78	Systembolaget	SAS	Stockholms stad	Karlstads universitet
79	Klarna	Vestas	Malmö Stad	Mälardalens högskola
80	Stockholms stad	Haldex	Haldex	Växjö universitet
81	Volkswagen Group Sverige	St. Jude Medical	Lantmännen	Coop
82	Scandic Hotels	Tobii	Nordnet	Mittuniversitetet
83	AstraZeneca	Nestlé	Folksam	SATS Sports Club
84	Grant Thornton	Stora Enso	Försäkringskassan	Borås Stad
85	Svenska Spel	Pöyry	Visma	Sollentuna kommun
86	Capgemini/Capgemini Consulting	Pfizer	Ongame	Posten
87	Göteborgs Stad	Novo Nordisk	Skandia	Schibsted
88	NASDAQ OMX	Vectura	Trygg-Hansa	Jönköpings Kommun
89	Siemens	Boliden	Qbranch	Gävle Kommun
90	Stadium	Tele2	Arbetsförmedlingen	Botkyrka kommun
91	SATS Sports Club	Klarna	Svenska Kraftnät	Apoteket
92	Tele2	Södra	SCB, Statistiska Centralbyrån	SJ
93	ICA Banken	SJ	TradeDoubler	Halmstads Kommun
94	Svensk Exportkredit	FMV	Acando	Nacka kommun
95	Swedish Match	Orkla	XDIN	Östersunds Kommun
96	Scania	Johnson & Johnson	EVRY	Saab
97	Carnegie	Svenska Spel	BearingPoint	Eskilstuna kommun
98	Orkla	Swerea	NCC	Högskolan Väst
99	SCB, Statistiska Centralbyrån	Toyota Material Handling	SMHI	Huddinge kommun
100	LKAB	PRV (Patent- och Registreringsverket)	Fortum	Kraft Foods

Appendix 9   Number of occurrences for second-level industry categorization

Number of occurrences of second-level	Industry Categorization	
	First-level	Second-level
49	Business and Consumer Services	Consultancy
40	Technology and Services	Software
35	Technology and Services	IT Services
29	Consumer Packaged Goods	Food
22	Business and Consumer Services	Educational Services
22	Government and Non-Profit Organisations	Educational Services
19	Energy and Utilities	Utilities
16	Automotive	Vehicle Manufacturing
13	Retailing	Clothing, Footwear, Accessories and Luxury Goods
11	Construction and Real Estate	Building Construction
11	Retailing	Hypermarkets, Supermarkets and Discounters
10	Industrial Goods and Machinery	Automation and Process Controls
10	Transport and Logistics	Logistics and Freight
9	Pharmaceuticals and Healthcare	Pharmaceuticals
9	Communications	Consumer Services
9	Consumer Packaged Goods	Personal Care
8	Financial Services	Retail Banking and Lending
8	Media	Broadcasting
8	Communications	Devices
7	Consumer Packaged Goods	Beverages - Alcoholic
7	Retailing	Home Furniture and Housewares
7	Pharmaceuticals and Healthcare	Therapy Area
6	Technology and Services	Consumer IT
6	Financial Services	General Insurance, Property and Casualty
6	Communications	Network Infrastructure
6	Business and Consumer Services	Recruitment and Employment Services
5	Pharmaceuticals and Healthcare	Biotechnology
5	Business and Consumer Services	Accounting
5	Media	Motion Pictures and Sound Recording
5	Consumer Packaged Goods	Other Consumer Products
5	Financial Services	Life and Pensions
5	Pharmaceuticals and Healthcare	Medical Devices and Diagnostics

Number of occurrences of second-level	Industry Categorization	
	First-level	Second-level
4	Media	Printing and Publishing
4	Financial Services	Capital Markets and Trading
4	Energy and Utilities	Commodity
4	Paper and Packaging	Converted Paper Products
4	Industrial Goods and Machinery	Mining, Oil and Gas Field Machinery
4	Transport and Logistics	Passenger Transportation
4	Leisure and Arts	Travel Agencies
3	Technology and Services	IT Hardware
3	Consumer Packaged Goods	Beverages - Non-Alcoholic
3	Industrial Goods and Machinery	Construction Machinery
3	Industrial Goods and Machinery	Electrical Components and Equipment
3	Leisure and Arts	Hotels and Restaurants
3	Consumer Packaged Goods	Tobacco
2	Construction and Real Estate	Construction Materials
2	Pharmaceuticals and Healthcare	Healthcare
2	Consumer Packaged Goods	Household Products
2	Financial Services	Institutional Investment Management
2	Government and Non-Profit Organisations	Non-Profit Organizations
2	Automotive	Parts, Tires and Aftermarket
2	Industrial Goods and Machinery	Pump Manufacturing
2	Leisure and Arts	Sports and Recreation Instruction
2	Leisure and Arts	Theaters and Entertainment Venues
1	Media	Advertising
1	Aerospace and Defense	Aerospace Products and Parts Manufacturing
1	Industrial Goods and Machinery	Agricultural Machinery
1	Aerospace and Defense	Ammunition (Except Small Arms)
1	Industrial Goods and Machinery	Boilers, Tanks and Vessels
1	Financial Services	Cards
1	Business and Consumer Services	Conference and Exhibitions Organizing
1	Financial Services	Corporate and Investment Banking
1	Chemicals	Diversified Chemicals
1	Retailing	Electricals and Electronics
1	Retailing	Food and Drink Specialists
1	Agriculture and Forestry	Forestry and Logging
1	Leisure and Arts	Gaming and Casinos
1	Retailing	Other Specialist Retailers
1	Paper and Packaging	Paper Packaging
1	Industrial Goods and Machinery	Power Engineering
1	Metals and Mining	Primary Metal Manufacturing

Number of occurrences of second-level	Industry Categorization	
	First-level	Second-level
1	Financial Services	Private Equity and Venture Capital
1	Business and Consumer Services	Services to Buildings and Dwellings
1	Business and Consumer Services	Technical Services

Appendix 10 Company occurrences on lists and industry categorization

Company	Occurrences	First-level industry	Second-level Industry
Microsoft	9	Technology and Services	Software
ABB	7	Industrial Goods and Machinery	Automation and Process Controls
Accenture	7	Technology and Services	IT Services
ICA	7	Retailing	Hypermarkets, Supermarkets and Discounters
IKEA	7	Retailing	Home Furniture and Housewares
Bonnier	6	Media	-
Ericsson	6	Communications	Network Infrastructure
Google	6	Technology and Services	Software
Vattenfall	6	Energy and Utilities	Utilities
Arla Foods	5	Consumer Packaged Goods	Food
Bain & Company	5	Business and Consumer Services	Consultancy
Handelsbanken	5	Financial Services	Retail Banking and Lending
Hennes & Mauritz	5	Retailing	Clothing, Footwear, Accessories and Luxury Goods
IBM	5	Technology and Services	Software
McKinsey & Company	5	Business and Consumer Services	Consultancy
Procter & Gamble	5	Consumer Packaged Goods	Personal Care
SEB	5	Financial Services	-
Siemens	5	Technology and Services	IT Services
Unilever	5	Consumer Packaged Goods	Food
Carlsberg	4	Consumer Packaged Goods	Beverages - Alcoholic
Göteborgs Stad	4	Government and Non-Profit Organisations	-
Lantmännen	4	Consumer Packaged Goods	food
Nestlé	4	Consumer Packaged Goods	Food
Nordea	4	Financial Services	-
Regeringskansliet/ alla departement	4	Government and Non-Profit Organisations	-
Sandvik	4	Industrial Goods and	Mining, Oil and Gas Field

Company	Occurrences	First-level industry	Second-level Industry
		Machinery	Machinery
SAS	4	Transport and Logistics	Passenger Transportation
SAS Institute	4	Technology and Services	Software
Scania	4	Automotive	Vehicle Manufacturing
Spotify	4	Media	Motion Pictures and Sound Recording
Stockholms stad	4	Government and Non-Profit Organisations	-
Tele2	4	Communications	Consumer Services
Tetra Pak	4	Paper and Packaging	Converted Paper Products
The Boston Consulting Group	4	Business and Consumer Services	Consultancy
AstraZeneca	3	Pharmaceuticals and Healthcare	Pharmaceuticals
Capgemini	3	Technology and Services	IT Services
Coca-Cola Enterprise	3	Consumer Packaged Goods	Beverages - Non-Alcoholic
Danske Bank	3	Financial Services	Life and Pensions
Electrolux	3	Consumer Packaged Goods	Other Consumer Products
EU-kommissionen	3	Government and Non-Profit Organisations	-
Exportrådet	3	Government and Non-Profit Organisations	-
Försvarsmakten	3	Government and Non-Profit Organisations	-
Grontmij	3	Construction and Real Estate	Building Construction
Klarna	3	Technology and Services	IT Services
L'Oréal	3	Consumer Packaged Goods	Personal Care
Länsförsäkringar	3	Financial Services	General Insurance, Property and Casualty
NCC	3	Construction and Real Estate	Building Construction
Novo Nordisk	3	Pharmaceuticals and Healthcare	Pharmaceuticals
Saab	3	Automotive	Vehicle Manufacturing
Samsung	3	Technology and Services	IT Services
SCB, Statistiska Centralbyrån	3	Financial Services	-
Schibsted	3	Media	Printing and Publishing
SJ	3	Transport and Logistics	Logistics and Freight
Skatteverket	3	Financial Services	-
SKF	3	Industrial Goods and Machinery	Electrical Components and Equipment
Sony Mobile	3	Communications	Devices
Svenska Spel	3	Leisure and Arts	-
Sveriges Riksbank	3	Financial Services	-
Sveriges	3	Media	Broadcasting

Company	Occurrences	First-level industry	Second-level Industry
Television			
Swedbank	3	Financial Services	-
Trafikverket	3	Transport and Logistics	-
TV4	3	Media	Broadcasting
Vestas	3	Energy and Utilities	Utilities
Volvo Car Corporation	3	Automotive	Vehicle Manufacturing
Volvo Group	3	Automotive	Vehicle Manufacturing
A.P. Møller - Mærsk	2	Transport and Logistics	Logistics and Freight
Adecco	2	Business and Consumer Services	Recruitment and Employment Services
ÅF	2	Business and Consumer Services	Consultancy
Åhléns	2	Retailing	Clothing, Footwear, Accessories and Luxury Goods
ALK-Abello	2	Pharmaceuticals and Healthcare	-
Arbetsförmedlingen	2	Government and Non-Profit Organisations	-
Århus kommune	2	Government and Non-Profit Organisations	-
Atlas Copco	2	Industrial Goods and Machinery	-
ATP	2	Financial Services	Institutional Investment Management
Bang & Olufsen	2	Consumer Packaged Goods	-
Chr. Hansen	2	Pharmaceuticals and Healthcare	Biotechnology
Coloplast	2	Pharmaceuticals and Healthcare	Medical Devices and Diagnostics
Coop	2	Retailing	Hypermarkets, Supermarkets and Discounters
Cowi	2	Business and Consumer Services	Consultancy
Danfoss	2	Industrial Goods and Machinery	Automation and Process Controls
Danisco	2	Consumer Packaged Goods	Food
Danish Crown	2	Consumer Packaged Goods	Food
Dansk Industri	2	Government and Non-Profit Organisations	-
Dansk Supermarked	2	Retailing	Hypermarkets, Supermarkets and Discounters
Deloitte	2	Business and Consumer Services	Consultancy
DICE	2	Technology and Services	Consumer IT

Company	Occurrences	First-level industry	Second-level Industry
DONG Energy	2	Energy and Utilities	Utilities
E.ON	2	Energy and Utilities	Utilities
ECCO	2	Retailing	Clothing, Footwear, Accessories and Luxury Goods
Energinet.dk	2	Energy and Utilities	-
Epsilon	2	Business and Consumer Services	Consultancy
Ernst & Young	2	Business and Consumer Services	Accounting
FLSmidth	2	Industrial Goods and Machinery	Construction Machinery
FMV	2	Government and Non-Profit Organisations	-
FOI	2	Government and Non-Profit Organisations	-
Försäkringskassan	2	Government and Non-Profit Organisations	-
Forsvaret	2	Government and Non-Profit Organisations	-
Fortum	2	Energy and Utilities	Utilities
Fritidsresor	2	Leisure and Arts	Travel Agencies
GN Store Nord	2	Communications	Devices
Grundfos	2	Industrial Goods and Machinery	Pump Manufacturing
H. Lundbeck	2	Pharmaceuticals and Healthcare	Therapy Area
Haldex	2	Automotive	Parts, Tires and Aftermarket
Haldor Topsøe	2	Industrial Goods and Machinery	-
Investor	2	Financial Services	-
IO Interactive	2	Technology and Services	Consumer IT
Johnson & Johnson	2	Pharmaceuticals and Healthcare	Pharmaceuticals
KMD	2	Technology and Services	Software
Københavns Energi	2	Energy and Utilities	Utilities
Københavns Kommune	2	Government and Non-Profit Organisations	-
Københavns Universitet	2	Government and Non-Profit Organisations	Educational Services
KPMG	2	Business and Consumer Services	Consultancy
Kraft Foods	2	Consumer Packaged Goods	Food
Lego	2	Consumer Packaged Goods	Other Consumer Products
Leo Pharma	2	Pharmaceuticals and Healthcare	Therapy Area

Company	Occurrences	First-level industry	Second-level Industry
Lindex	2	Retailing	Clothing, Footwear, Accessories and Luxury Goods
LKAB	2	Metals and Mining	-
LM Wind Power	2	Energy and Utilities	Utilities
Malmö Stad	2	Government and Non-Profit Organisations	-
Miljøministeriet	2	Government and Non-Profit Organisations	-
Modern Times Group, MTG	2	Media	Broadcasting
NASDAQ OMX	2	Financial Services	Capital Markets and Trading
Nike	2	Retailing	Clothing, Footwear, Accessories and Luxury Goods
Niras	2	Construction and Real Estate	-
NNIT	2	Business and Consumer Services	Consultancy
Nokia	2	Communications	Devices
Novozymes	2	Pharmaceuticals and Healthcare	Biotechnology
Nykredit	2	Financial Services	Retail Banking and Lending
Orkla	2	Consumer Packaged Goods	Food
Oticon	2	Pharmaceuticals and Healthcare	Healthcare
PFA	2	Financial Services	Life and Pensions
Philips	2	Technology and Services	IT Hardware
Posten	2	Transport and Logistics	Logistics and Freight
Pressalit	2	Consumer Packaged Goods	Household Products
PwC	2	Business and Consumer Services	Accounting
Rambøll	2	Construction and Real Estate	-
Rockwool	2	Construction and Real Estate	Construction Materials
SAP	2	Technology and Services	Software
SATS Sports Club	2	Leisure and Arts	Sports and Recreation Instruction
SCA	2	Paper and Packaging	-
Scandic Hotels	2	Leisure and Arts	Hotels and Restaurants
Semcon	2	Business and Consumer Services	Consultancy
Shell	2	Energy and Utilities	Commodity
Sida	2	Government and Non-Profit Organisations	Non-Profit Organizations
Skanska	2	Construction and Real Estate	Building Construction
Statoil	2	Energy and Utilities	Commodity
Svenska Kraftnät	2	Energy and Utilities	-

Company	Occurrences	First-level industry	Second-level Industry
Sveriges Riksdag	2	Financial Services	-
Swedish Match	2	Consumer Packaged Goods	Tobacco
Systembolaget	2	Consumer Packaged Goods	Beverages - Alcoholic
TDC	2	Communications	Consumer Services
Teknologisk Institut	2	Government and Non-Profit Organisations	Educational Services
Telenor	2	Communications	Consumer Services
Terma	2	Aerospace and Defense	-
Tivoli	2	Leisure and Arts	Theaters and Entertainment Venues
Tobii	2	Technology and Services	Software
Udenrigsministeriet	2	Government and Non-Profit Organisations	-
Utrikesdepartementet	2	Government and Non-Profit Organisations	-
Velux	2	Construction and Real Estate	-
VING	2	Leisure and Arts	Travel Agencies
XDIN	2	Business and Consumer Services	Consultancy
Acando	1	Technology and Services	IT Services
adidas	1	Retailing	Other Specialist Retailers
Affecto	1	Technology and Services	Software
AkzoNobel	1	Chemicals	Diversified Chemicals
Alectia	1	Business and Consumer Services	Consultancy
Alfa Laval	1	Industrial Goods and Machinery	Boilers, Tanks and Vessels
Almi Företagspartner	1	Business and Consumer Services	Consultancy
Alstom	1	Industrial Goods and Machinery	Power Engineering
American Express	1	Financial Services	Cards
Apoteket	1	Pharmaceuticals and Healthcare	-
Apple	1	Technology and Services	IT Hardware
Arbetsgivarverket	1	Government and Non-Profit Organisations	-
ArlaFoods	1	Consumer Packaged Goods	Food
Atea	1	Technology and Services	Software
Atkins	1	Business and Consumer Services	Technical Services
Avalanche Studios	1	Media	Motion Pictures and Sound Recording
Avanza	1	Financial Services	-
Axfood	1	Retailing	Food and Drink Specialists
BAE Systems	1	Aerospace and Defense	Ammunition (Except Small

Company	Occurrences	First-level industry	Second-level Industry
		Arms)	
Banedanmark	1	Transport and Logistics	Logistics and Freight
BASF	1	Chemicals	-
BearingPoint	1	Business and Consumer Services	Consultancy
Betsson	1	Leisure and Arts	-
Biogen Idec	1	Pharmaceuticals and Healthcare	-
Blocket	1	Media	-
Boliden	1	Metals and Mining	-
Bombardier	1	Aerospace and Defense	-
Borås Stad	1	Government and Non-Profit Organisations	-
Boston Consulting Group	1	Business and Consumer Services	-
Botkyrka kommun	1	Government and Non-Profit Organisations	-
British American Tobacco	1	Consumer Packaged Goods	Tobacco
Business Sweden	1	Government and Non-Profit Organisations	-
byBrick	1	Business and Consumer Services	Consultancy
Carnegie	1	Financial Services	Capital Markets and Trading
Centiro Solutions	1	Technology and Services	Software
Cheminova	1	Pharmaceuticals and Healthcare	Biotechnology
Cinnober	1	Technology and Services	IT Services
Cisco	1	Communications	Devices
Clas Ohlson	1	Retailing	Electricals and Electronics
Combitech	1	Business and Consumer Services	Consultancy
Connecta	1	Business and Consumer Services	Consultancy
Cybercom	1	Technology and Services	IT Services
Danmarks Nationalbank	1	Financial Services	-
Dell	1	Technology and Services	IT Services
DGC	1	Technology and Services	IT Services
DSB	1	Transport and Logistics	Logistics and Freight
DTU	1	Government and Non-Profit Organisations	Educational Services
E. Pihl & Søn	1	Construction and Real Estate	Building Construction
EF	1	Business and Consumer Services	Educational Services
Egmont	1	Media	Printing and Publishing

Company	Occurrences	First-level industry	Second-level Industry
EMC	1	Technology and Services	Software
Enfo Sweden	1	Business and Consumer Services	Consultancy
Eskilstuna kommun	1	Government and Non-Profit Organisations	-
EVRY	1	Technology and Services	IT Services
Ferring Pharmaceuticals	1	Pharmaceuticals and Healthcare	Pharmaceuticals
Finansdepartementet	1	Financial Services	-
Finansinspektionen	1	Financial Services	-
Finansministeriet	1	Financial Services	-
Folksam	1	Financial Services	General Insurance, Property and Casualty
Force Technology	1	Government and Non-Profit Organisations	-
Försvarshögskolan	1	Government and Non-Profit Organisations	Educational Services
Foss	1	-	-
Framtiden	1	Business and Consumer Services	Recruitment and Employment Services
Frontit	1	Business and Consumer Services	Consultancy
Gävle Kommun	1	Government and Non-Profit Organisations	-
GE Healthcare	1	Pharmaceuticals and Healthcare	Medical Devices and Diagnostics
Genmab	1	Pharmaceuticals and Healthcare	Therapy Area
Goldman Sachs	1	Financial Services	Corporate and Investment Banking
Göteborgs universitet	1	Government and Non-Profit Organisations	Educational Services
Grant Thornton	1	Business and Consumer Services	Accounting
Halmstads Kommun	1	Government and Non-Profit Organisations	-
Helsingborgs Stad	1	Government and Non-Profit Organisations	-
Hilti	1	Industrial Goods and Machinery	Construction Machinery
HiQ	1	Technology and Services	IT Services
Högskolan Väst	1	Government and Non-Profit Organisations	Educational Services
HP	1	Technology and Services	IT Services
Huddinge	1	Government and Non-Profit	-

Company	Occurrences	First-level industry	Second-level Industry
kommun		Organisations	
Husqvarna	1	Industrial Goods and Machinery	Agricultural Machinery
IDG (International Data Group)	1	Business and Consumer Services	Conference and Exhibitions Organizing
IFS	1	Technology and Services	Software
ISS	1	Business and Consumer Services	Services to Buildings and Dwellings
J.P. Morgan	1	Financial Services	Private Equity and Venture Capital
JM	1	Construction and Real Estate	-
Jönköpings Kommun	1	Government and Non-Profit Organisations	-
Jysk	1	Retailing	-
Jyske Bank	1	Financial Services	Retail Banking and Lending
Karlstads Kommun	1	Government and Non-Profit Organisations	-
Karlstads universitet	1	Government and Non-Profit Organisations	Educational Services
Key Solutions AB	1	Business and Consumer Services	-
Know IT	1	Business and Consumer Services	Consultancy
Lernia	1	Business and Consumer Services	Recruitment and Employment Services
Linköpings Kommun	1	Government and Non-Profit Organisations	-
Linköpings universitet	1	Government and Non-Profit Organisations	Educational Services
Logica	1	Technology and Services	IT Services
Lunds Kommun	1	Government and Non-Profit Organisations	-
Lunds universitet	1	Government and Non-Profit Organisations	Educational Services
Maersk	1	Transport and Logistics	Logistics and Freight
Mälardalens högskola	1	Government and Non-Profit Organisations	Educational Services
Malmö högskola	1	Government and Non-Profit Organisations	Educational Services
Man Diesel	1	Automotive	Vehicle Manufacturing
Manpower	1	Business and Consumer Services	Consultancy
Mars	1	Consumer Packaged Goods	Food
Massive Entertainment	1	Technology and Services	Consumer IT
McDonald's	1	Consumer Packaged Goods	Food
Mittuniversitetet	1	Government and Non-Profit	Educational Services

Company	Occurrences	First-level industry	Second-level Industry
		Organisations	
Morgan Stanley	1	Financial Services	-
MQ	1	Retailing	-
MT Højgaard	1	Construction and Real Estate	-
Nacka kommun	1	Government and Non-Profit Organisations	-
Netcompany	1	Business and Consumer Services	Consultancy
Nets	1	Business and Consumer Services	Consultancy
Newsec	1	Financial Services	-
NNE Pharmaplan	1	Pharmaceuticals and Healthcare	-
Nordic Choice Hotels	1	Leisure and Arts	Hotels and Restaurants
Nordnet	1	Financial Services	-
Norrköpings Kommun	1	Government and Non-Profit Organisations	-
Nycomed	1	Pharmaceuticals and Healthcare	Therapy Area
Økonomi- og Indenrigsministeriet	1	Financial Services	-
Ongame	1	Leisure and Arts	Gaming and Casinos
Oracle	1	Technology and Services	Software
Orbicon	1	Business and Consumer Services	Consultancy
Örebro Kommun	1	Government and Non-Profit Organisations	-
Örebro universitet	1	Government and Non-Profit Organisations	Educational Services
Oriflame	1	Consumer Packaged Goods	Personal Care
Östersunds Kommun	1	Government and Non-Profit Organisations	-
PA Consulting Group	1	Business and Consumer Services	Consultancy
Peab	1	Construction and Real Estate	Building Construction
Pernod Ricard	1	Consumer Packaged Goods	Beverages - Alcoholic
Pfizer	1	Pharmaceuticals and Healthcare	Therapy Area
Piteå Kommun Städenheten	1	Government and Non-Profit Organisations	-
Polisen	1	Government and Non-Profit Organisations	-
Poolia	1	Business and Consumer Services	Recruitment and Employment Services
Pöyry	1	Business and Consumer	Consultancy

Company	Occurrences	First-level industry	Second-level Industry
Proffice	1	Services Business and Consumer Services	Recruitment and Employment Services
PRV (Patent- och Registreringsverket)	1	Government and Non-Profit Organisations	-
Qbranch	1	Technology and Services	IT Services
QlikTech	1	Technology and Services	IT Services
Quartz+Co.	1	Business and Consumer Services	Consultancy
Radiometer Medical	1	Pharmaceuticals and Healthcare	-
Ramböll	1	Construction and Real Estate	-
Riksrevisionen	1	Financial Services	-
Röda Korsets högskola	1	Government and Non-Profit Organisations	Educational Services
RUAG Space	1	Aerospace and Defense	Aerospace Products and Parts Manufacturing
Saxo Bank	1	Financial Services	Capital Markets and Trading
SBAB	1	Financial Services	-
Schneider Electric	1	Industrial Goods and Machinery	Automation and Process Controls
Sigma	1	Technology and Services	IT Services
SimCorp	1	Technology and Services	Software
Skandia	1	Financial Services	-
SKAT	1	Financial Services	-
SMHI	1	Government and Non-Profit Organisations	-
Södertörns högskola	1	Government and Non-Profit Organisations	Educational Services
Södra	1	Agriculture and Forestry	Forestry and Logging
Sogeti	1	Technology and Services	Software
Sollentuna kommun	1	Government and Non-Profit Organisations	-
Solna stad	1	Government and Non-Profit Organisations	-
SP Sveriges Tekniska Forskningsinstitut	1	Government and Non-Profit Organisations	-
SSAB	1	Metals and Mining	Primary Metal Manufacturing
St. Jude Medical	1	Pharmaceuticals and Healthcare	Medical Devices and Diagnostics
Stadium	1	Retailing	-
Starbreeze	1	Technology and Services	Consumer IT
Statens Serum Institut	1	Government and Non-Profit Organisations	-

Company	Occurrences	First-level industry	Second-level Industry
Stockholms universitet	1	Government and Non-Profit Organisations	Educational Services
Stora Enso	1	Paper and Packaging	Paper Packaging
Svensk Exportkredit	1	Financial Services	-
Sveriges Radio	1	Media	-
SWECO	1	Construction and Real Estate	Building Construction
Swerea	1	Government and Non-Profit Organisations	-
Sydbank	1	Financial Services	-
Systematic	1	Technology and Services	Software
Telia (Part of TeliaSonera)	1	Communications	Consumer Services
Tenant & Partner	1	Construction and Real Estate	-
Tieto	1	Technology and Services	IT Services
Toyota Material Handling	1	Technology and Services	IT Services
TradeDoubler	1	Media	Advertising
Tryg	1	Financial Services	General Insurance, Property and Casualty
Trygg-Hansa	1	Financial Services	General Insurance, Property and Casualty
Tyréns	1	Business and Consumer Services	Consultancy
Umeå universitet	1	Government and Non-Profit Organisations	Educational Services
Uppsala Kommun	1	Government and Non-Profit Organisations	-
Uppsala universitet	1	Government and Non-Profit Organisations	Educational Services
Västerås Kommun	1	Government and Non-Profit Organisations	-
Växjö universitet	1	Government and Non-Profit Organisations	Educational Services
Vectura	1	Business and Consumer Services	Consultancy
Vinnova	1	Government and Non-Profit Organisations	-
Visma	1	Technology and Services	Software
Volkswagen Group Sverige	1	Automotive	Vehicle Manufacturing
Volvo IT	1	Automotive	Vehicle Manufacturing
W.L. Gore & Associates Scandinavia	1	Pharmaceuticals and Healthcare	Medical Devices and Diagnostics
White Arkitekter	1	Construction and Real Estate	-
WSP	1	Business and Consumer	Consultancy

Company	Occurrences	First-level industry	Second-level Industry
		Services	

Source: MarketLine Advantage

Appendix 11 Survey Invitation E-mail – Translated

Hi [FirstName]!

As I previously explained I am now conducting a survey for my master's thesis. Your responses are highly appreciated.

Click on the link below to go directly to the survey:

[survey_link]

This link is unique to this survey and to this e-mail. Your e-mail can not be tracked to your answers and all answers are completely anonymous. Do you want to share the survey, please use the link at the end of the survey instead.

Is there anything you do not understand or if you wonder about something regarding the survey, please get in contact with me directly at niklas@hjuvik.net.

Thanks for your participation!

Regards,

Niklas Johansson